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DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE

ANNUAL REPORT

1939

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YELLOWSTONE NATIONAL PARK

EDMUND B. ROGERS, SUPERINTENDENT

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UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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ARNO B. CAMMERER,
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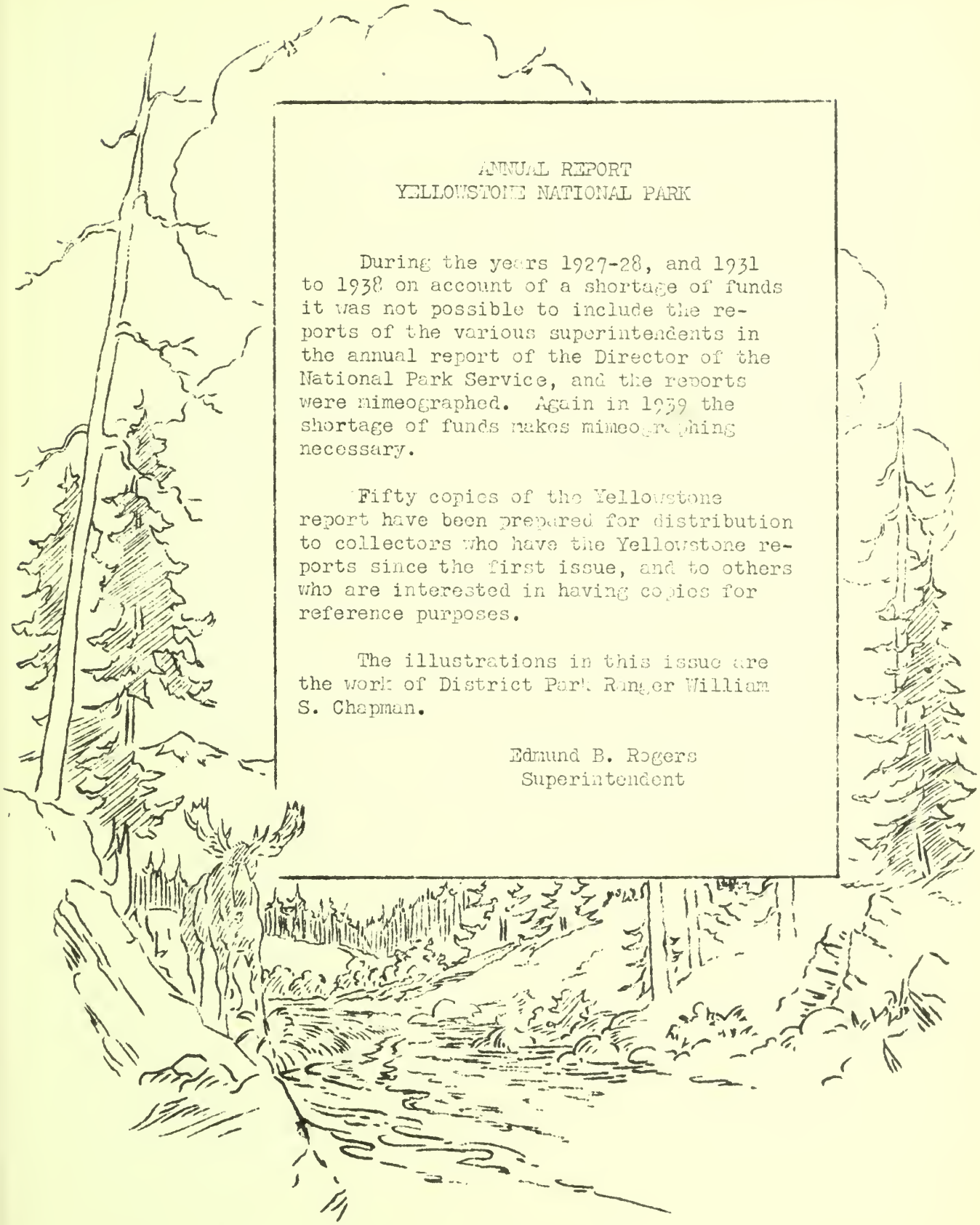

ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-28, and 1931 to 1938 on account of a shortage of funds it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1939 the shortage of funds makes mimeographing necessary.

Fifty copies of the Yellowstone report have been prepared for distribution to collectors who have the Yellowstone reports since the first issue, and to others who are interested in having copies for reference purposes.

The illustrations in this issue are the work of District Park Ranger William S. Chapman.

Edmund B. Rogers
Superintendent

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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1939 -

Edmund B. Rogers, Superintendent

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GENERAL

Up to 1934 the reports of the Superintendent of Yellowstone National Park have covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933 to June 30, 1934 and subsequent reports have covered the fiscal year periods. This report, therefore, for 1939 covers the fiscal year July 1, 1938 to June 30, 1939.

While not reaching the record travel for 1937, when the figures were compiled at the end of the 1938 travel season on September 30 they showed 466,185 persons as having visited the park as against 499,242 in 1937, a decrease of 6.6 percent. Despite the loss the travel exceeded the highest expectations at the beginning of the season due to the unsettled conditions throughout the country. The rail travel suffered worse in the decrease, there being only 18,308 persons having come by this method of transportation as against 20,506 persons the previous year. A division of the 1938 travel showed 18,308 rail visitors, 439,776 automobile visitors, 631 motorcycle visitors, 451 persons on foot or horseback and 7,019 visitors into the Bechler River, Beula Lake and Cave Falls areas. There was a decrease in travel at all park gateways except the south entrance which showed an increase of 832 visitors, or 1.3 percent over the previous travel year. The east entrance showed the largest decrease in travel, the west entrance the second largest decrease, the north entrance third largest and northeast entrance fourth largest.

The 1939 travel season got off to an auspicious start and despite unusually cold and rainy weather throughout most of June the travel for the month exceeded all previous Junes and by the end of the month 110,781 persons had been registered at the various gateways as against 96,820 to the same date last year and 96,117 in 1937, an increase of 14.4% over 1938 and 16.5% over 1937. While pre-season travel was considerably higher than 1938 and 1937, the month of June alone showed an increase of 3.2% over 1938 and 6% over 1937. The record year for travel to the park was 1937 when the final figure was just short of the half-million mark and with the present rate of travel for 1939 it is likely that the half-million mark will be passed for the first time. The two great fairs in New York and San Francisco are having a material effect on the travel to the national parks and should be responsible for a new record being set for the Yellowstone.

The Western Air Express, which company serves the park at the west entrance, reported having carried 1102 passengers in and out West Yellowstone which was a 30% increase over the 1937 season. The regularly scheduled flights over the Yellowstone and Grand Teton Parks on Saturdays and Sundays only attracted 116 air passengers. These scheduled flights were discontinued for the 1939 season but the company continued to bring in and take out passengers from the flying field at West Yellowstone.

A survey of trailers entering the park was taken during the month of August in 1936, 1937, and 1938, the 1938 figures showing a loss of 15% from August, 1937 but an increase of 20% over August, 1936. Five hundred ninety-seven trailers were checked in for August, 1938, 777 in 1937 and 436 in 1936.

The business of the operators during the 1938 season kept pace with the travel, nearly all of the operators reporting practically the same percentage of decrease in revenue as the decrease in travel. Despite the decrease the operators enjoyed a good business in all departments. To the end of June, 1939 the business of the operators showed a considerable loss despite the fact that the travel was showing an increase.

The Mammoth beautification project was completed during the summer of 1938 and resulted in a much improved appearance at park headquarters. The construction of 100 new cabins in the rear of the Mammoth Hotel added a new type of accommodation with running water and baths and should aid in again popularizing the Mammoth region. A program was inaugurated at the beginning of the 1939 season to improve the lodge and cabin groups throughout the park by adding running water, the first step in this direction being undertaken at Old Faithful. Electric gasoline pumps, hoists, new tanks and high pressure greasing equipment was installed at various filling stations to improve this service.

A careful check was made throughout the summer on hours of labor and wages of employees of operators and the curtailing of prices. Auditors from the park operators division in Washington were in the park throughout most of the summer and maintained a close check on operators and investigated complaints regarding prices and services. A strenuous effort was made to keep prices comparable to those in communities immediately adjoining the park and in cutting down complaints.

The 1938 season was unusual for the small number of accidents. No serious accidents occurred in either July or September, all serious accidents occurring during the month of August. However, as has been the case following the close of practically every season, a serious accident occurred in October which resulted in the death of one and injury to two other persons. No serious accidents occurred during the winter but an employee of the Bureau of Public Roads, William Nelson of Gardiner, Montana, died on June 27 from gas poisoning while digging a test hole on a bridge site over the Yellowstone River in the Tower Falls area.

The 1938 season was free from any large fires but strict vigilance was maintained throughout the summer. A fire of considerable proportions occurred near Chico between Gardiner and Livingston on September 19 on the Absaroka National Forest on which the National Park Service aided with some 100 CCC fire fighters.

For the first time the road from Gardiner to Cooke was kept open throughout the winter with funds especially appropriated by Congress. This resulted in our being able to encourage winter visitors and on several occasions residents in and around the park made trips to the Buffalo Ranch to see the wildlife and to partake of winter sports. This also made it possible for the residents of Cooke to get in and out from their homes throughout the winter.

An Easter sunrise service was held for the first time on the Mammoth terraces on Easter morning with a chorus of 75 people and music rendered on a Hammond organ. The services were unique in that the entire affair was conducted throughout a snow storm. It is planned to conduct similar services in the future.

An appropriation of $30,000 from Public Works was made available in April to acquire property and remove improvements in the area added to the park west of Gardiner in 1932 which area included several private properties. The additional land is desired to improve the winter feeding facilities of the park's wildlife. The properties for which negotiations are under way are those of Anton Stermitz, Roy Armstrong, Lena Bassett Ross, and the H. W. Child estate.

With the opening of the 1939 season and the collection of the motor vehicle license fee on May 16, an additional fee of $1.00 for house trailers was charged for the first time. As a fee of $1.00 is now being charged from Grand Teton National Park, the Yellowstone permits include a trip also to Grand Teton. Persons paying the $1.00 motor vehicle license fee for Grand Teton Park and then visiting the Yellowstone are allowed a $1.00 credit on the $3.00 fee for the Yellowstone visit.

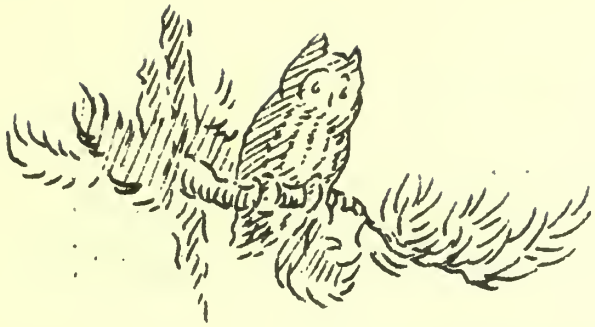
The year saw the passing of several old time park employees and friends. Rev. J. F. Pritchard, who conducted religious services in the park for many years, died in Seattle on August 2, 1938. J. D. Powell, a member of the old firm of Shaw and Powell, early day transportation and camp operators, died in Livingston on August 13, 1938. Chester A. Lindsley, clerk, assistant superintendent and postmaster in the park for 41 years, died on October 8, 1938 following closely the death of his wife which occurred in Livingston the previous month. Judge H. J. Miller of Livingston, Montana, an early resident of that community and for many years keenly interested in Yellowstone activities and operations, died in October in Livingston. Mrs. Anna J. Cowan, one of the

early Yellowstone visitors and Montana pioneers, died in Spokane, Washington on December 20 at the age of 85. As a bride Mrs. Cowan was a member of the first tourist party to visit the park. She was captured by hostile Nez Perce Indians here during Chief Joseph's retreat across the park in 1877. Another old-time Yellowstone character passed away on May 25, 1939 with the death of former Chief Buffalo Keeper Joseph Douglas who retired January 1, 1935.

Efforts were continued to secure free Government schools for the children of the Mammoth community but although several bills were contemplated for introduction in Congress no definite action had been taken toward relieving the situation in which the parents of the children must provide schooling and make the arrangements for employing and paying the school teachers. High school pupils must go to Livingston, Montana, 63 miles away, requiring the parents in some cases to move out of the park to meet the situation.

Two stained glass windows were designed and prepared by Miss Jessie Van Brunt of Brooklyn, New York, and donated for the Chapel at Mammoth Hot Springs. Miss Van Brunt arrived in the park late in June with the windows and they were immediately placed in the Chapel. The ceremonies accepting the donation were to be held at the Chapel July 7.

Of particular interest in special visitors was the visit of Crown Prince Olav and Crown Princess Martha of Norway and their party which arrived at the north gate on May 30, 1939. The Royal party remained in the park until June 2, making trips to Old Faithful, Canyon, Tower Falls and the Buffalo Ranch.



ADMINISTRATION

Personnel: The permanent personnel consists of Edmund B. Rogers, superintendent; John W. Emmert, assistant superintendent; Joseph Joffe, assistant to the superintendent; Keith P. Neilson, chief clerk; Fred G. Bussey, agent cashier; Boyd N. Larsen, senior clerk; Virginia J. Goettlich, clerk (files and personnel); Alice L. Harris, clerk; Catharine L. Harris, clerk; Annie Marie Dudley, clerk; Loustalet J. Quinn, clerk (chief ranger's office); LeRoy B. Van Cott, clerk (naturalist department); Ladd S. Shorey, clerk (timekeeper); Glenn D. Williams, clerk (warehouse); Verna R. Somerville, clerk-stenographer; Fred J. Bertagnolli, clerk-stenographer (chief ranger's office); Glenn F. Muchow, clerk-stenographer; Merritt M. Grant, clerk-stenographer (engineering office); Morey L. Sher, senior purchasing clerk; and Toni R. Rulli, Jr., assistant clerk-stenographer.

Senior Clerk Boyd N. Larsen was transferred to the Division of Grazing of the Department of the Interior on June 8, 1939 and Miss Alice L. Harris was recommended for promotion to this position. The clerk position in the files and personnel office filled by Annie Marie Dudley was changed from seasonal to permanent on September 8, 1938. Clerk Loustalet J. Quinn was transferred to the office of the Regional Director, Region II, Omaha on March 2, 1939 and her position was filled by the permanent appointment of LeRoy B. Van Cott, who entered on duty in this position on June 1, 1939 and was assigned to the naturalist department. Fred J. Bertagnolli was transferred from the Bureau of Reclamation, Cody, Wyoming, to the clerk position occupied by Glenn F. Muchow, who had been selected under Section 2 of Rule VIII pending the establishment of a register, and was assigned to the chief ranger's office. Senior purchasing clerk Sher resigned on February 9, 1939 and his position was not filled for the remainder of the fiscal year. Papers were submitted to transfer Richard J. Smith of General Grant Park, a former Yellowstone clerk, to this vacancy. The permanent position of assistant clerk-stenographer occupied by Mr. Rulli was established December 28, 1939.

The permanent force is augmented during the summer season with two assistant clerks, two assistant clerks (statistical), one assistant clerk-stenographer and comptometer operator, one assistant clerk for publicity and one messenger boy. Judge T. Paul Wilcox served as United States Commissioner.

Appropriations: Appropriations for the 1939 fiscal year were as follows:

1491000.331	All Other Expenditures	$ 431,750.00
1491000.332	Passenger Carying Equipment.	4,400.00
1491000.333	Maintenance of Roads in National Forests	8,540.00
	Total 1491000 Yellowstone National Park	$ 444,690.00
1491000.041	Big Hole Battlefield National Monument .	1,395.00
1491000.051	Emergency Reconstruction and FFF in National Parks	1,818.38
14x408/00514	Public Works Administration, Act of 1938 (Allotment to Interior, National Park Service) 1938-40	220,575.00
14-403/10762	Public Works Administration, 1935-41 .	5,000.00
14-1010	Roads and Trails, National Park Service. . .	1,168,820.00
14-1130	Roads and Trails, National Park Service, Big Hole B attlefield National Monument	500.00
GA 91-236 P-99 A-0100-9	Civilian Conservation Corps.	101,655.04
GA 91-236 P-99 A-0100-9	Civilian Conservation Corps Morrison Cave State Park . .	31,938.00

Revenues: Revenues for the 1939 fiscal year, aggregating $413,119.62, were received from the following sources during the fiscal year and were deposited in the Treasury to the credit of the United States as miscellaneous receipts:

M.R. 140350	Rental of Telephone Facilities	$ 1,267.15
M.R. 140520	Permits to Enter National Parks.	346,971.50
M.R. 140590	Business Concessions	52,474.43
M.R. 142310	Violation of 8-Hour Law of 1912	205.00
M.R. 144260	Refund on Empty Containers.	179.85
M.R. 144350	Government Property Lost or Damaged. . .	119.32
M.R. 144871	Donations	5.14
M.R. 145050	Sale of Electric Current	2,518.84
M.R. 145109	Sale of Water.	5,039.80
M.R. 145160	Sale of Scrap and Salvage Materials. . .	187.15
M.R. 145255	Sale of Quarters	66.88
M.R. 145310	All Other Services (Garbage Disposal). .	4,084.56
	Total Revenues	$413,119.62

It will be noted that this is a drop from the revenue collections for the 1938 fiscal year, which totalled $454,488.15. The greatest single item of reduction was reflected under the heading of business concessions, In 1938 there was a total of $79,720.08 collected from this source. The next largest drop was experienced in the sale of permits to enter National

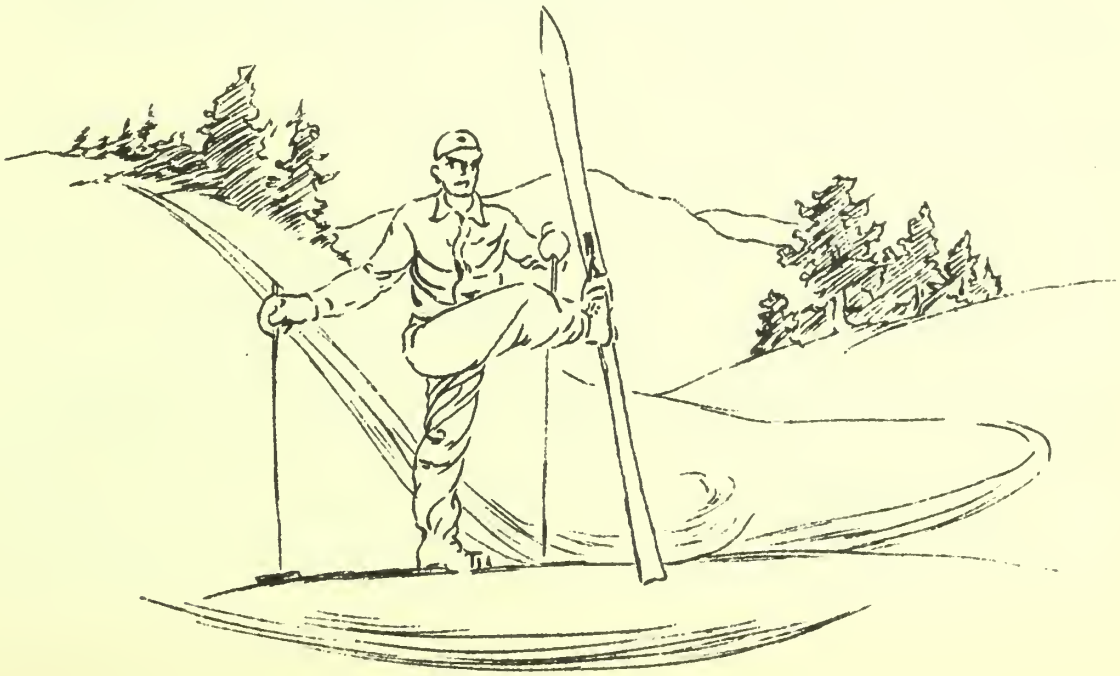
Parks, which for the 1938 fiscal year totalled $365,712.00.

As a general rule, the collection of revenue in Yellowstone National Park is closely related to the volume of travel. While the revenue collections for the 1939 fiscal year fell off more in proportion than was expected, it is believed that the total collections for the next fiscal year will show a material increase.

In November, 1938, the Montana State Procurement Office, handling the procurement work for the Montana State Parks, was transferred from Helena, Montana, to Yellowstone Park, Wyoming. One state park, Morrison Cave, was affected in the transfer and considerable difficulty was experienced in endeavoring to bring the records and accounts up to date on the CCC camp located at that park.

A teleprinter was installed during the spring of 1939 and operated quite successfully during the spring months. However, when the Yellowstone Park Company resumed operations in June, our telegraphic business was handled through that company as usual and the teletype was not to be used again until after the close of the hotel operations.

Considerable difficulty was experienced in endeavoring to apply the annual and sick leave regulations to all our per diem employees. A great many questions arose about which we were unable to find any definite instructions regarding their proper handling, and it was not until after Assistant to the Superintendent Joffe and Chief Clerk Neilson returned from the Chief Clerks' Conference at Washington, D. C., that sufficient information was available to compute the annual leave thus earned and to prepare the necessary payrolls. The last payrolls on per diem annual leave were completed during the month of May.



NATURALIST DEPARTMENT

For this fiscal year there were four permanent members of the Naturalist staff in Yellowstone National Park. However, one of the members, Mr. Kearns, was on furlough for about 8-1/2 months during which time he was National Park Service Fellow at Yale University. At the close of the fiscal year the staff consisted of:

Park Naturalist	C. Max Bauer
Assistant Park Naturalist	William E. Kearns
Assistant Park Naturalist	Frank R. Oberhansley
Clerk-Stenographer	LeRoy Van Cott

The summer staff consisted of 20 ranger naturalists and three museum caretakers. During the first part of the travel season for 1939, twenty ranger naturalists were also placed on the rolls. We have had an extension in our season for ranger naturalists, due to the demands of travel, from 90 to 100 days and we are now authorized to employ ranger naturalists for 100 days providing funds are available to do so.

One change in our season program has been to discontinue the "Geyser Chasing" caravan at Old Faithful. This activity had become so unwieldy because of the large numbers of cars during the summer of 1938 that it was decided to place two men in the Upper Geyser Basin to contact the public rather than to conduct an afternoon caravan. The change worked out very satisfactorily inasmuch as more people were contacted in the basin than by the use of the caravan and the problem of parking and handling the large number of autos was greatly relieved.

We have also had a ranger naturalist stationed at Camp Roosevelt and Tower Falls for the seasons of 1938 and 1939. This has improved the service to the public in this area.

The closing dates for the museums for the 1938 season were as follows:

Fishing Bridge Museum	Close of September 12
Madison Junction Museum	Noon of September 6
Norris Museum	Close of September 15
Mammoth Museum	Close of September 16
Old Faithful Museum	Close of September 18

The opening dates for these museums in the spring of 1939 were as follows:

Old Faithful Museum	May 14
Norris Museum	June 15

Madison Museum	June 15
Fishing Bridge Museum	June 15
Mammoth Museum	June 4

The daily hours of each museum were the same as the previous year.

Each museum has an information desk to which ranger naturalists are assigned during the open hours. At these attended stations a very large number of contacts are made. Many questions are answered and other services to the public are performed. It is not unusual for the attendance at one of the museums to reach 2,000 per day.

Six outdoor amphitheaters are used in Yellowstone for the camp fire programs during the season and this year an evening program was held at Camp Roosevelt at Tower Falls and six days each week a talk was given in the Lake Hotel Lounge.

Each one of the camp fires had illustrated lectures except the ones at Madison Junction and West Thumb where no electricity was provided for the projectors.

In addition to the above, two talks were given each night at the Grizzly Bear Grounds on Otter Creek. The attraction of the grizzly bears at this point made the number in attendance very large, running from 1200 to 1500 persons at each talk.

The other activities of the Naturalist Department consisted of nature walks, guided caravans game stalks, etc. and were carried on without much change from previous seasons. Groups of people were also met at the Norris Museum, Madison Museum, and at West Thumb at certain times during the day when the busses arrived and short guided trips were made to acquaint the visitor with these areas.

The routine work of winter consisted of developing and filing negatives and photographic prints, classification of specimens for study, continuation of the work in cataloguing the library, checking museum accessions, repairing lantern slides and files, filing newspaper clippings, pamphlets, and other material.

The library project took a major place in the program during the winter. An ERA White Collar Project was set up and assistants in library work, history and stenographic work were employed. Although expert help was difficult to get a great deal of work was accomplished after we employed, through the Yellowstone Library and Museum Association, Miss Margaret Smith, who is a trained librarian. The project consisted of inventorying the library and pamphlet file, completing shelf list cards, author and title card files, and a large number of subject cards were added. Errors in classification were corrected and by June, 1939, the

library was in very good condition. One small project in connection with library work was a historical study of the Mammoth Hot Springs area, including the development of utilities at headquarters, by William Bartlett. This study was not completed but a large number of notes were taken and it is hoped to arrange these notes in logical order and have them typed next winter.

Nature Notes were issued six times during the year. One group of articles by the members of the ranger staff on the American elk or Wapiti added materially to these Notes.

A preliminary paper on the Study of Trumpeter Swan was submitted by Assistant Park Naturalist Frank R. Oberhansley in March, 1939.

An intensive study of Old Faithful Geyser was made by Park Naturalist Bauer and Ranger Naturalist George Marler, who after collecting a large number of observations on the intervals and durations of eruptions together with the barometric record of air pressure decided that the effect of air pressure and air temperature upon the geyser is practically nil. Their study of the geyser together with the sinter being deposited about the cone reveals some very interesting information which was published in the "Northwest Science Quarterly" in a paper entitled "Old Faithful - An Example of Geyser Development in Yellowstone National Park." Their conclusions indicate that Old Faithful Geyser has experienced many changes in its history. Although the hot spring in this location has been intermittently active in excess of 10,000 years there has been a period of inactivity only several hundred years ago during which time lodgepole pines grew over the cone and to the very apex. Therefore, as a geyser Old Faithful is comparatively young being in its present stage for only a couple of hundred years or so.

The pre-season activities of the ranger naturalists and temporary rangers were carried on as usual. This consists of a three to four day training course for the new men and as many of the old men as can participate in the activities. It is a very important means of preparing the men for the travel season.

As mentioned above Assistant Naturalist Kearns had the National Park Service Fellowship to Yale University during the winter of 1938 and 1939 for work there in Adult Education, Museum Technique, and other research. This has greatly broadened his outlook and usefulness for the National Park Service. Since returning he has been assigned to develop plans for the revision of the exhibits in the Madison Junction historical museum. He has also carried on the activity in connection with the sale of books and maps on the information desks in the park and has accomplished much in bringing this activity up to a very high standard.

With the proposed transfer of Mr. Oberhansley to Sequoia National Park, Assistant Naturalist Condon will be assigned the work of carrying

on the study of the Habits of the Trumpeter Swan.

The Yellowstone Library and Museum Association has been active throughout the year having purchased some photographic equipment and added materially to the library. This Association has also reprinted the Trailside Notes #2 which was edited by the Park Naturalist. It has also provided for the publication of a book entitled "Yellowstone Fishes" by James R. Simon. Assistance for the publication of this book was obtained from Superintendent Edmund B. Rogers, Assistant Chief Ranger Maynard Barrows, and members of the Naturalist Staff. The book is a splendid contribution to the subject of Fish and Fishing in Yellowstone.

During the year one CCC enrollee has been employed most of the time. For a while two were employed in the museum darkroom and in filing clippings and other materials.

The following table shows the statistics of the Naturalist activities for the year July 1, 1938 to June 30, 1939:

NATURALIST DEPARTMENT

Activities from July 1, 1938 to June 30, 1939, inclusive

PLACE	Field Trips		Auto Caravans			Lectures		Museum	Misc.	Total
	No.	Att.	No.	Cars	Att.	No.	Att.	Att.	No.	Contacts
Canyon	178	4611				235	146017		100648	251276
Fishing Bridge	75	1608	80	781	3313	291	52966	70680		128572
Madison	5	159				338	18606	44546		63311
Mammoth	77	3214	211	1244	12377	240	22793	76970	120	115474
Mt. Washburn (1)									21337	21337
Tower Falls	72	379				77	8289		39873	48541
Norris	402	18233				73	1133	55965		75331
Old Faithful	184	19493	63	4073	13032	1124	387033	125847	78415	623820
West Thumb	282	16023				69	7630			23653
TOTAL	1275	63720	354	6098	28727	2447	644467	374008	240393	1351315
Unattended trailside exhibits (Estimated)(2)										3500
										1354815

TOTAL CONTACTS, July 1, 1937 to June 30, 1938, inclusive 1,550,745
TOTAL CONTACTS, July 1, 1938 to June 30, 1939, inclusive 1,354,815
PARK VISITORS, July 1, 1938 to June 30, 1939, inclusive 480,146

(1) Mt. Washburn road closed for most of the day during travel season of 1939 because of construction of new lookout tower.

(2) Estimated figures for unattended trailside exhibits not included until June, 1939.

PROTECTION DEPARTMENT

General: Protection Department activities included the varied phases of park protection, winter and summer patrols, forest and building fire detection, pre-suppression and suppression work, forest insect surveys and control, law enforcement, wildlife studies, range studies, range revegetation, fish studies (stream survey), fish planting, regulation of traffic and general policing of the park. In addition, the Protection Department was responsible for all trail maintenance, care of stables, horses and grounds, operation of the Buffalo Ranch, control and disposal of surplus animals, investigation of hours and wages for operators' employees, investigation of operators' rates, prices, services and general practices, operation of entrance checking stations and the collection and handling of all entrance fees, maintenance of travel and park-use statistics, public contact work, investigation of accidents, supervision of wood cutting and clearing operations, investigation, appraisal and optioning of alienated lands, and immediate supervision of the Big Hole Battlefield National Monument.

Personnel: The Protection Department personnel includes Chief Ranger Francis D. LaNoue; four assistant chief rangers, Maynard Barrows, Curtis K. Skinner, Albert E. Elliott and Hugh Peyton; nine district park rangers, fourteen permanent park ranger positions; forty-four temporary ranger positions; one chief buffalo keeper; one assistant chief buffalo keeper; one buffalo herder; one packmaster; one night watchman, assigned to park headquarters; one clerk-stenographer; two part-time statistical clerks; and 20 to 25 per diem lookouts, fireguards, irrigators and laborers employed during the summer season.

Two new part-time park ranger positions were established during the year and certificates have been requested for filling these new positions.

These rangers will be selected from the Civil Service register and employed from eight to nine months each year to augment the seasonal force during the summer period and to assist with much needed protection work during the early spring and late fall periods.

The following transfers of Yellowstone Protection Department personnel were made during the year:

District Ranger Jack J. McNutt to U. S. Forest Service
District Ranger George A. Walker to N.P.S. Region II Office
Park Ranger Robert P. Beal to U. S. Forest Service
Mrs. Loustalet Quinn, clerk-stenographer to N.P.S. Region II Office.

District Ranger F. Sheldon Dart resigned on October 2, 1938, to accept a position with the U. S. Biological Survey.

The following park rangers entered on duty in Yellowstone during the fiscal year 1939: Clyde E. Gilbert, Aubrey L. Haines, Hugh B. Ebert, Robert K. Weldon and DeLyle Stevens. Weldon was transferred from Mammoth Cave National Park and Ebert was promoted from Yellowstone Park personnel. The others were selected from the civil service register.

Fred J. Bertagnolli, formerly employed with the U. S. Reclamation Service, was appointed clerk-stenographer to succeed Mrs. Loustalet Quinn.

Forestry:

Insect Control: Two insect control projects were continued during the year, one for the control of Mountain Pine Beetle in the vicinity of Mammoth and the Mammoth Hot Springs Terraces, and the other for the control of Douglas Fir Beetle in the vicinity of the Game Ranch. Previous control measures appeared to have been successful to a marked degree in the Douglas fir stands. Over a hundred infested trees were cut and treated during 1938 but in the early spring of 1939 between twenty and thirty infested trees were all that could be found in the epidemic area. These carried comparatively light infestations and in quite a number of instances it was found that the insect broods had been attacked and almost entirely killed by parasites. From these indications it appears that the threatened epidemic condition, in the Douglas fir in the vicinity of Mammoth and the Game Ranch, has been at least temporarily stopped.

There seemed to be but little decrease in the severity of the Mountain Pine beetle infestation in the vicinity of Mammoth and the Hot Springs Terraces. About fifty infested trees were removed for treatment during the spring of 1939, which corresponds closely with the number that have been removed annually for the past three years.

A survey of forest insect conditions, over the entire park, was completed in the fall of 1938. The survey was conducted by representatives of the Bureau of Entomology and Plant Quarantine, in cooperation with the National Park Service. The survey revealed that in some sections of the park Mountain Pine Beetle infestations were decreasing due to the exhaustion of desirable host trees. This condition prevailed in some of the stands of whitebark pine where the older infestations exist. On the other hand, the infestation is spreading into new areas but for the most part is confined to stands of whitebark pine at high elevations and in isolated sections of the park. No conclusive evidence of the spread of infestations, in epidemic proportions, from whitebark pine to lodgepole pine was found, even though practically all whitebark pine host trees had been killed in some areas.

The Engelmann spruce bark beetle infestation, covering the northwest corner of the park, appeared to be declining due to the exhaustion of desirable host trees. Spruce, in this area, occurs in mixed stands with lodgepole pine and alpine fir so that the damage from insect depredations is not outstandingly evident except upon close examination.

Forest Nursery: The forest nursery was operated and maintained during the year as a CCC project. The annual stock inventory was as follows:

1-0 seedlings	157,000
2-0 seedlings	370,000
3-0 seedlings	83,000
2-1 transplants	206,000
1-0 cuttings	1,441
Large transplants	5,303
TOTAL	822,744

Almost all of the 5,303 large transplants were planted in the field early in the spring of 1939. A large percentage of the stock went to the newly-developed auto campground area at Mammoth. The forest nursery is just now beginning to reach a productive stage and there will be some 500,000 trees and shrubs ready for field planting within another year. From this point the operation can be readily expanded to its maximum capacity of 1,000,000 trees per year within a few years time.

Forest Fire Protection: The 1938 fire season was a comparatively easy season with only twelve Class A fires occurring during the entire season. No fires were reported up until June 30 of the 1939 fire season. A fire training school for CCC supervisory personnel and park rangers was held in May and CCC enrollees were given fire suppression training at every opportunity and at regularly appointed periods.

Ten forest fires were reported in the park during the year covered

by this report, five of which were man-caused and five of which were started from lightning. National Park Service personnel assisted with the suppression of two Class C, man-caused fires which occurred on land outside of and adjacent to the park which is under the administration of the U. S. Forest Service.

Building Fire Protection: The regular annual fire inspection of all buildings in the park revealed that many of the more serious fire hazards which had previously been reported have been eliminated. There was a general tendency on the part of everyone concerned toward better housekeeping conditions in government-owned and operators' buildings and increased comprehension of the factors creating hazardous conditions. A new municipal fire truck, equipped with a 750 gallon pumping unit, was added to the fire equipment at Mammoth. Fire drills were held at unannounced intervals and building fire suppression training classes were held for the employees at Mammoth who are expected to respond to fire alarms.

Seven fires in government buildings, one fire in an operator's building and one fire on a construction project were reported during the year. Two of the fires in government-owned structures caused considerable damage but the other fires were quickly extinguished and the entire damage was negligible. The total costs of damages to government buildings were approximately $361.00.

Wood Cutting & Clearing Operations: Approximately 1,000 cords of fuel wood and 200,000 linear feet of building timber were cut in the park during the year. It has heretofore been the practice to permit cutting of both dead and green standing trees, in designated cutting areas, where such practice was not considered detrimental to the forest but this practice discontinued at the beginning of the 1939 season. Requests for fuel and building materials were granted with the understanding that only dead standing and down timber was to be taken. In most instances this worked to the advantage of the contractor engaging in the cutting operations. Where clearing operations were necessary for improvements and developments the felled trees were utilized, either for fuel wood or construction purposes. The installation of coal and oil burning heating plants in the hotels and lodges has materially reduced the demand for fuel wood. It has also been found that satisfactory building timber can be secured more economically from contractors outside the park than it can be cut from designated cutting areas within the park and this has greatly reduced the number of requests for building material from the park forests. All wood cutting operations were supervised to insure the least damage to the forest in the area where the operations were conducted.

Trail Maintenance: Trail work accomplished during the 1939 fiscal year included minimum maintenance of approximately 950 miles of horse

trails and 25 miles of foot paths. Limited trail funds in the regular allotment were used for general maintenance only; however, 18 miles were reconditioned by E.R.A. and C.C.C. workers as follows: Mt. Norris, 1 mile; Old Faithful-Mallard Lake, 1 mile; Blacktail-Elk Creek, 7 miles; Mammoth-Golden Gate, 3 miles; Gardiner-Blacktail, 5 miles; and Beaver Lake-Norris, 1 mile.

Wildlife in the Park: The observation and study of wildlife in its natural habitat continued to be one of the major attractions in Yellowstone and the increase in winter travel is indicative of the growing popularity of this park feature. The vast numbers of birds and animals that find sanctuary in the park have an educational and inspirational value that cannot be estimated and in addition surplus animals overflow to the surrounding states and provide big game hunting equaled by few other areas in the United States. Fish life is also abundant and there is every indication that careful management will preserve the Yellowstone as one of the few places where the Waltonian can find superlative angling.

During the winter of 1938-39 the snow remained loose and powder-like and the large grazing and browsing animals utilized more of the range than during the preceding winter. The wider distribution was helpful to the range and winter losses were low, due both to favorable snow condition and to the abundant forage crop. The spring months were cold and although precipitation was ample it is anticipated that the volume of forage will be lowered next year and that only slight increases in plant densities will be noted.

Census - Large Animals: The numbers of black and grizzly bears were obtained during the summer months while the antelope, bighorn, bison and deer were counted during the winter. No elk census was attempted as these animals were widely scattered due to light snow conditions and it was evident that reliable figures could not be obtained. The actual counts and estimates for the fiscal year 1939 are as follows:

Species	Actual Count	Estimate
Antelope	741	800
Bears, Black	166	450
Bears, Grizzly	63	270
Bighorn Sheep	228	250
Bison	811	850
Deer	935	1,000
Elk - Northern Herd	No count	9,000
Gallatin Herd	No count	2,600
Interior of Park	No count	700
Moose		700

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Counts and estimates for antelope, bighorn, bison, deer and elk indicate animal numbers during the spring months before the young are born. Figures for the other animals include the current reproduction.

Bears: An effective campaign was instituted to eliminate the park visitor-bear problem. The words "FEEDING BEARS IS PROHIBITED" were stamped on permits and park literature. Posters and signs were displayed throughout the park and newspaper and magazine articles and a general program of warning the public had a noticeable effect in reducing accidents. It is evident that visitors are using more caution in feeding roadside bears but additional effort is necessary in warning the public against molesting bears, in taking close-up pictures and in allowing the animals to climb up on automobiles. During the fiscal year 1939 there were 171 bear accidents reported of which 90 were injuries and 81 damages.

Practically all of the injuries and damages are caused by black bears. Fortunately the grizzly bear does not fraternize with the unwary visitor and is seldom seen except at the Canyon Grizzly Bear Ground. The popularity of this area continues although an atmosphere of regimentation prevails as it is necessary to conduct two lectures and park two groups of cars each evening in order to handle the crowds.

Bison: During the past winter the distribution of bison in the park by actual count was found to be as follows: Lamar Valley - 582, Pelican Valley - 157, Hayden Valley - 51, Fountain Flat - 21. The Hayden Valley and Fountain Flat herds were planted in 1936 and remain in the general areas of release. The Lamar Valley herd is often seen during the spring and fall months near the Tower Falls-Cooke road and in the winter more visitors are traveling to the Buffalo Ranch to observe and photograph the more than five hundred animals in that area.

In order to hold the number of buffalo within the carrying capacity of the range, 67 animals were removed from the Lamar Valley herd. Several live animals were shipped to zoos and parks while 60 were slaughtered and distributed to five Indian agencies. The Lamar Valley herd was fed 366 tons of hay during the winter and spring months and no losses were noted. The small herd held at the Antelope Creek pasture was popular during the past year and many favorable comments were received regarding the method of display in a large enclosure which simulates natural conditions.

Elk: The reduction of the Northern Yellowstone elk herd was carried on for the fifth consecutive winter with 3,811 elk being taken from the overstocked range. The reduction was accomplished by live shipments to zoos and areas in need of restocking and by hunters' kill in areas outside the park boundaries. Natural and miscellaneous mortality of the elk herd was also included in the total reduction figure.

The 1938-39 elk reduction may be summarized as follows:

Killed by hunters	2,910
Live Shipments.	296
Miscellaneous Deaths	605
Total Reduction -	3,811

Range studies were continued during the summer months and in addition to the reading of permanent plots, surveys or transects over representative areas of the winter range were made. The data so obtained were used to formulate management plans and were also most valuable in our cooperation with other agencies and sportsmen's groups. The range data and technique developed will, we believe, be a valuable contribution to the science of wildlife management.

Other Animals: The antelope are increasing while the numbers of deer and moose remain about the same as in past years. Additional numbers of bighorns were located during the winter in remote sections of the Lamar district which increases the number in the park by about 40 but is not indicative of increase in reproduction rate. It appears that these animals have been in this high area for a number of years without being observed.

The control of rodents has been carried on in utility areas during the spring months.

Birds: No material changes in bird population, species observed, or conditions affecting bird life have been noted.

A trumpeter swan census taken in August resulted in 44 trumpeters being counted in the park as compared with 60 in 1937. Only 4 cygnets were observed and swan nesting activities in general were unsuccessful. This spring a number of cygnets were observed and already the young birds are disappearing. It is expected to continue the study of trumpeter swans until a thorough understanding of their habits and best methods of protection may be developed.

Fish Planting: With the cooperation of the Bureau of Fisheries and the Fish and Game Departments of Montana and Idaho, 12,281,000 trout were planted in Yellowstone waters during the summer season which covers the period May to September, 1938. Fish figures have not been broken down to conform with the fiscal year as this data is not significant. During the travel season 163,859 fish were reported as being taken which is an increase of 11% over that recorded the previous year.

The number of fish, by species, planted during the 1938 season was as follows:

Blackspotted trout	8,762,076
Montana Grayling	2,608,210
Rainbow trout.	595,270
Loch Leven trout	257,742
Eastern Brook trout	57,960
TOTAL -	12,281,258

Law Enforcement: One hundred and eleven law enforcement cases were handled during the fiscal year 1939, as compared to 112 cases the previous year. Convictions were secured in all cases presented before United State Commissioner T. Paul Wilcox with the exception of two cases dismissed and one paroled. A total of 146 persons were involved in these law violation cases. The following tabulation shows law enforcement cases classified according to violations, with the number of persons involved, jail sentences and fines imposed:

VIOLATIONS	No. of Cases	Persons Involved	Jail Sentences	Fine Imposed
Speeding	*46	48	2 das. 15½ hrs.	$ 437.00
Reckless driving	20	20		345.00
Driving while intoxicated	4	4	20 das. 4 hrs.	155.00
Operating vehicle for hire	3	3		45.00
Operating vehicle without permit	1	1		50.00
Exceeding fish limit	**9	19		122.50
Fishing in closed waters	#6	17		77.00
Fishing with live minnows	1	2		30.00
Fishing with sein	1	1		50.00
Defacing formations	6	8		42.00
Hunting in Park	4	7		225.00
Trapping in Park	1	2	120 days	200.00
Drunken or disorderly conduct	3	4	30 days	70.00
Possession of unsealed firearms	1	2		10.00
Destruction & removal of trees	1	2		75.00
Feeding or molesting bears	1	1		1.00
Building campfire without permit	1	2		30.00
Obtaining food unlawfully	1	2	15½ days	
Petty larceny	1	1		5.00
TOTALS	111	146	188 das. 7½ hrs	$1969.50

* 1 violator paroled **1 case dismissed
# 1 case dismissed

NOTE: Some fines were later reduced so total shown does not represent actual collections.

Accidents: Automobile accidents reported and investigated during the year totaled 158, as compared with 115 during the fiscal year 1938. Accidents resulting in fatalities totaled 4, 6 persons dying from injuries. In 1938 were 3 fatal accidents resulting in the death of 3 persons. One of the fatal accidents occurred when a CCC truck ran off the edge of the road and plunged down an embankment, killing two enrollees. Extensive property damage resulted from 7 accidents and government-owned vehicles were involved in 24 accidents.

Aside from automobile accidents, one fatality occurred as the result of gas poisoning. William LeRoy Nelson, employee of the Public Roads Administration, was overcome by poisonous gases while engaged in digging a test hole for bridge foundations near Tower Falls on June 26, 1939, and died from the effects of the poisoning a short time later.

Complaints: There were 134 complaints registered with the National Park Service. Of these the principal ones concerned the quality and rates of housekeeping cabins. Steps are being taken by the operator to replace old cabins with new and more modern structures. Other complaints concerned the roads and road conditions. The roads are being brought to standard as rapidly as funds become available and complaints of this nature should decrease. Lack of information, discourtesy of employees, rates of entrance fees, working conditions and wages, and damage by bears were among the other complaints received. In all cases these complaints were either taken up with the operators or investigated by the service. All complainants were either written to or contacted and acquainted with the disposition of each complaint. With the exception of bus and accommodation rates practically all complaints were settled to the satisfaction of all parties concerned. A study is now being made of all operators' rates and it is believed that adjustments will be made that will lessen the number of complaints from this source.

Investigation of Operators' Practices: During 1938 a study was made of the working conditions of operators' employees. It is found that they were out of line in many instances but as a result of this investigation and better cooperation from employers no complaints were received from employees. This was undoubtedly due to the improved conditions. Due to the obsolete and inefficient type of gasoline delivery pumps used throughout the park many visitors were being given short measure on gasoline deliveries. These pumps were sealed by the rangers and new and standard pumps were installed by the operators. A study was also made of grocery prices and these were leveled at the start of the 1939 season to conform to approved prices. No complaints were received regarding the price of groceries during 1939. Other operators' practices investigated included the methods of handling hospital cases and transportation provided for employees in case of illness or accident, and service rendered by the cafeterias. The medical facilities have been improved but the cafeterias need further regulation to enable the visitor to receive reasonably-priced and better quality food.

Campgrounds: Work on the Mammoth campground proceeded throughout the winter of 1938-39 and 42 campsites were ready for use during 1939. Electric current meters were installed as an experiment in this campground so as to provide current for trailers. At Fishing Bridge campground it was necessary to clear-cut part of the west end because of the danger to visitors by falling trees. Studies were made and plans were prepared by the Branch of Planning for the rehabilitation of this area. At West Thumb two roadways were built and this campground was extended to take care of 30 additional sites. The old type wooden guard rails were replaced in the old section with rock work for better and more permanent campground protection. Studies were made and plans were prepared for the Old Faithful and Canyon campgrounds. The vegetative cover at Lake campground has suffered from over-utilization and it is likely that this area will be abandoned as soon as facilities are developed to carry the load elsewhere.

ENGINEERING DEPARTMENT

The Engineering Department is under the direction of Park Engineer C. A. Lord with Assistant Engineer Frank A. Lucas and General Foreman Deate T. White as permanent assistants and a varying number of seasonal engineers and assistants, as the volume of engineering and construction may require. All CCC engineering is under the direction of the Park Engineer, such engineers as may be assigned to the park working under his supervision.

The Engineering Department activities include the organization and direction of all road and trail maintenance, preparation of plans and engineering charge of minor road and trail construction, design and construction of water and sewer installation and other physical improvements, and all general engineering work required by other departments in the park.

Park forces maintain a highway system of 390 miles, made up of 350 miles within the park boundaries and 40 miles of approach road leading to the various entrances. This work is carried on by seasonal crews located at permanent section camps during the travel season and by one or more patrol crews during pre-season and post season periods. Maintenance items include snow removal, slide removal and the repair of washouts, general surface maintenance and oiling, and roadside protection. Snow removal for the period totaled approximately one and three quarter million cubic yards, not including work on the section between Mammoth and Cooke, which was maintained free of snow and open for traffic throughout the winter. A very considerable mileage of road oiling was carried out during the period although adverse weather conditions delayed this time until late in the season. This work varied from light dust preventative mats on the unimproved sections to a more intensive treatment on the improved sections. Twenty-two miles of the Gallatin section were completely retreated, providing a three inch mat and one mile of the Artist Point road was stabilized with an asphalt treated sand cushion and the oil mat surface re-laid. An additional fifty miles of oiling was completed, covering short sections in various areas as follows: East Entrance to Lake, South Entrance to West Thumb, Old Faithful to West Thumb, Lake to Canyon, and Tower Junction to the Northeast Entrance. Oiling on the east, south, and southwest approach roads totaled approximately fifteen miles.

Major road construction under the supervision of the Public Roads Administration included completed projects of two concrete bridges to replace steel structures across the Gibbon River between Norris and Madison Junctions, grading of approximately ten miles of the Old Faithful-West Thumb road between Isa Lake and West Thumb, and the Mammoth Esplanade with its connecting roads. Active and uncompleted projects included surfacing and oiling of the northeast entrance road between the entrance

and Lamar Canyon, surfacing and oiling of a portion of the south entrance road between the entrance and Lewis River, grading of Project B of the east entrance approach road including approximately one half mile of betterment within the park boundary, surfacing and oiling of the ten mile section between Isa Lake and West Thumb on which reconstruction was completed last season, surfacing and oiling of approximately seventeen miles of the east entrance road between Lake Butte and Lake Junction, and construction of the upper Gardiner River bridge, together with the necessary approaches.

An ERA program was approved for Yellowstone Park and allotments set up to maintain a two hundred man camp. Under this program three four-room employees cottages were constructed, maintenance and betterment of approximately fifty miles of administrative trails completed, construction of an observation platform of concrete and native stone at Artist Point on the Canyon Rim, renovation of several of the frame residences at Mammoth, and remodeling of the second floor of the stone barracks building at Mammoth to provide offices for the Engineering and Landscape divisions and the Government telephone exchange. Landscaping, consisting of the obliteration of several old buildings, obliteration of old roads and borrow pits, and spreading and seeding of top soil was carried out at several points in the headquarters area.

A small allotment from the Minor Roads and Trails appropriation was given the park for the betterment of trails and lookout points on the Canyon Rim. Accomplishments with these funds consisted of the construction for a standard type hard-surfaced trail to the observation point constructed under the ERA program and listed above, the construction of a second observation platform at Lookout Point, on the opposite side of the Canyon from Artist Point, together with the necessary trail approach, and the betterment of the Red Rock trail on the south side of the Canyon. The trail to Artist Point and the observation platform at Lookout Point were practically completed during the period with the additional work listed well under way, possibly to be completed during the coming season.

A public works allotment was made available for the construction of utilities at Old Faithful, West Thumb, and Lake-Fishing Bridge areas, consisting of light and power installation at all three locations, and water and sewer systems at West Thumb and Lake-Fishing Bridge. These projects are in the course of construction and in various stages of completion from 30 to 50 per cent. Also, included under the Public Works Program were three secondary fire lookouts and a primary lookout tower on the summit of Mt. Washburn, but due to the high altitude at which these structures are located it is impossible to start work until late in June and only about ten per cent of their construction is completed.

SANITATION DEPARTMENT

The Sanitation Department is in charge of Master Plumber William Wiggins, who works in close cooperation with Mr. H. B. Hommon of the U. S. Public Health Service. The permanent personnel consists of Master Plumber Wiggins, Foreman Plumber Herman R. Biastoch, Wyman P. Benson, plumber, which position was established as permanent October 28, 1938, Arnold G. Quist, janitor, Selmer J. Logeland and Ray C. Smuin, Plumber's helpers, and Joe J. Way, motor truck driver. During the summer season this force is augmented by a number of additional plumbers, plumber's helpers, sheet metal workers, truck drivers and laborers.

The work of this department includes the maintenance, operation and construction on sewer and water systems and incinerators and garbage hauling; also all heating systems, stoves, refrigeration plants and sheet metal work.

During the fiscal year this department installed the plumbing and furnaces in three 3-room cottages and one 4-room cottage at Mammoth; installed complete six piece plumbing fixture at Lake Ranger Station and five piece plumbing fixture at the Lamar Ranger Station; installed new toilet, bath and sink in building #40; installed new oil heating plant in north end of building #36; installed nine new toilets, six new wash basins, one urinal, four hot water heaters, one combination shower and bath, six toilets, three frost-proof hydrants, two new four inch water meters and strainers for transportation company; water meter for Old Faithful Lodge, housekeeping cabins and cafeteria and one for Fishing Bridge housekeeping cabins and cafeteria; installed 280 feet of 8 inch sewer, 820 feet of 6 inch sewer and constructed 400 feet of sewer filtering ditch; installed two chlorinating machines and one amoniator; installed 150 feet of 3/4 inch water pipe, 250 feet of one inch water pipe, 1000 feet of two inch water pipe, 100 feet of four inch water pipe and 220 feet of six inch water pipe; installed twenty seven underground garbage cans and six dry toilets; replaced 400 tin shingles and 260 tile shingles; installed plumbing in eight-stall comfort station and constructed septic tank and spraying systems, as well as numerous miscellaneous items at all points throughout the park.

ELECTRICAL DEPARTMENT

All of the electrical work, power plants and radio activities are under the supervision of Chief Electrician Lloyd W. Seasholtz. In addition to Mr. Seasholtz the permanent personnel in the electrical department consists of electricians Eri A. Allan, Robert E. Book, Charles M. Rector and George McMullin, all of whom act as power plant operators, and the force is augmented during the summer season by a junior radio engineer and a number of linemen, electricians, helpers and laborers.

Approximately one mile of over-head 2300 volt power service, one ten-kilowatt and one five-kilowatt transformers were installed for light service to the Mammoth incinerator and Mammoth temporary employees camp. The five new residences below the Mammoth power plant were all wired in conduit, all have service for electric water heaters and two for ranges. All necessary wiring and installations of controls for the operation of the new oil burner furnace in the north side of the barracks was completed. Approximately 320 feet of 3/c, number 6, 600-volt cable and 90 feet of 2/c, number 14, cable were installed along with three no-fuse switch boxes and three trailerhouse coin meters in the new campground area at Mammoth to supply electric service for a limited number of trailers. The four-family residence, building number 7, and the first floor of building number 50 were completely rewired to meet the underwriter's standard and all new fixtures were installed. The new sixteen-stall garage, built by the CCC at Mammoth, was wired in conduit for light service. All government residences and shops were inspected for electrical defective equipment, wiring, etc. and repairs made where necessary. During the year all residences not having electric water heaters and automatic thermostatic controls were supplied with same, consisting of thirteen 1000-watt, 115-volt heaters, two 2000-watt, 115-volt heaters and twenty-two clamp-on thermostatic controls. Three-wire, underground electric service cable was installed and connected into service for the Weather Bureau, Administration Building and building number 50, approximately 350 feet of 3/c, number 4, trenchlay cable being used. The water level indicator in the power house and reservoir were returned to the factory for remodeling. Two new 10 k.v.a. transformers, 90 feet of 3/c, number 6, cable and 90 feet of 2/c, number 12, cable were installed to furnish three-phase and single phase lighting service to the plumbing shop. The overhead service was removed. The Lake and Old Faithful ranger stations were rewired and new fixtures installed. The new comfort station at Tower Falls was wired for lights and an automatic clock and watt-hour meter installed. A new 32-volt, 750-watt windcharger was installed at Bechler River ranger station. One new primary junction box, one secondary distribution box and 25 k.v.a. transformer and necessary cabling were installed in the new campground power vault. A new primary junction box and a primary oil switch were installed in the Utility Building power vault. The new underground street lighting system around the Esplanade was put into service on August 15 and all old overhead service removed. Twelve new indirect lights and three pendant globe-type fixtures were installed in the park engineer's new office quarters. Two power vaults, 900 feet, 3/c, number 4, trenchlay cable and approximately 800 feet of 4-duct tile were installed at Old Faithful to enable the removal of the old unsightly aerial service wires.

Approximately 800 feet of 26-pair, number 19, lead-covered cable and 400 feet of 26-pair, number 19, lead-covered and steel-armored cable, along with one 26-pair, two 11-pair and one 6-pair terminal cans were installed at Old Faithful where two new telephone vaults and

four-duct tile were installed to enable the removal of the overhead service. The Canyon-Mt. Washburn telephone line was rebuilt and all poles replaced with new tank-treated cedar poles. Steel armored telephone cable was purchased by the Yellowstone Park Company and installed by the Park Service. With the installation of this cable all overhead telephone service across and in the vicinity of the Esplanade was removed. A teletype machine was installed in the chief clerk's office to take care of all government telegrams during the winter season. Underground service was provided for all new residences below the power plant. Approximately 100 feet of 26-pair, 22-gauge, lead-covered cable were installed between the administration building and the new telephone vault and was connected into service in May. The new 26 mile telephone line between West Yellowstone and Gallatin ranger station was completed and put into service on October 3. This line was built by the CCC crews and required two seasons for completion. The Forest Service built the line from West Yellowstone to Duck Creek and the Park Service from Duck Creek to Gallatin. The telephone line between Fishing Bridge and the ten-mile post on the east entrance line was rebuilt with new tank-treated cedar poles and a new number 8 copperweld metallic circuit was added.

New radio aerials were installed at Tower Falls, Canyon, Old Faithful and Thorofare ranger stations. A new 15-watt, 32-volt, radiophone set was installed in the Bechler River ranger station, along with a 32-volt home made gas-driven generator for charging the batteries. The park's radio equipment has given very good and dependable service throughout the year.

BUILDING, MAINTENANCE AND CONSTRUCTION

All carpenter work is under the general supervision of Master Carpenter T. A. Bowman while the painting is under Master Painter Thomas M. Thompson. These departments are augmented during the summer by several carpenters and carpenter helpers, painters and laborers.

MECHANICAL DEPARTMENT

The Mechanical Department is under the supervision of Master Mechanic Robert R. Robinson, Jr. and besides Mr. Robinson the permanent personnel consists of 6 automobile mechanics, 1 blacksmith, 1 general mechanic, 3 motor truck drivers and 1 warehouseman-truck driver. This latter position was changed from that of motor truck driver effective February 14, 1939. During the summer season this force is augmented by the addition of a number of motor truck drivers, two or three handyman-mechanics, one blacksmith-horseshoer and two or three automobile mechanics.

The work carried on by this department consists of the maintenance, repairing, and overhauling of all fixed and motorized equipment, which includes trucks, graders, tractors, cars, and fixed equipment such as electric power plant equipment, water and sewage pumping plants, farm machinery, etc. In addition, the above-mentioned equipment and hundreds of small tools such as shovels, axes, picks, saws, forest fire pumps, etc. are reconditioned each year.

During the year one 5-passenger convertible sedan, one 2-passenger convertible coupe, three ½-ton pickup trucks, one 750 GPM combination fire truck, two 1½-ton dump trucks, three 1½-ton freight trucks, one 3½-ton freight truck, and one motor patrol grader were purchased. Three International 2-ton freight trucks were transferred to Yellowstone from Region II for ERA use.

Due to the large amount of freighting in conjunction with the power and water developments in the park, it was necessary to run a night shift with six of the larger trucks for two months. Removable cartridge type oil filters were installed on all of our heavy equipment and has effected a considerable saving in oil costs. The night shift in the repair shop, consisting of two handyman mechanics to do minor repairing, washing, and greasing, proved to be a success.

Classes in auto mechanics and machine shop practice for CCC enrollees from the two Mammoth camps were held in the shops during the winter months.

The Safety Committee is composed of Robert R. Robinson, Deate T. White and Curtis K. Skinner and has been functioning throughout the year with the fullest cooperation from all departments. Safety-first activities were carried on for the men in the shops as well as in other departments.

As our equipment replacement funds have been limited for the past several years, a great many of our trucks and graders have reached the age and condition where they can no longer be operated economically, and their upkeep and operating costs are almost prohibitive.

STOREHOUSE OPERATIONS

Storehouse operations during the 1939 fiscal year were handled very satisfactorily. Due to the large increase of transactions through the Storehouse, because of ERA operations and an allotment for Public Works construction, it was necessary to augment the force in the Storehouse. One additional warehouseman was employed and additional laborers were used. An average inventory of approximately $65,000.00 was carried throughout the year, with approximately

one-half of the sales going to agencies other than the National Park Service, such as the Public Roads Administration, Bureau of Fisheries, United States Army, etc.

MESS OPERATIONS

Fourteen messes were operated during the fiscal year, and due to the increase in the number of employees at certain areas in the park, considerable difficulty was experienced in endeavoring to handle all employees in our mess houses. The capacity of some of the larger ones, such as at West Thumb, Lake, and Canyon, was greatly exceeded and in some places it was necessary to double shift the employees for meals, while in others a tent extension on the dining room was made to accommodate the overflow of employees. The meal rate of $1.05 per day or $31.50 per month was used throughout the entire season.

CIVILIAN CONSERVATION CORPS

Considerable difficulty was experienced in obtaining adequate qualified supervisory personnel to take charge of the various CCC jobs. With the 1939 season well advanced at the close of the fiscal year our full quota is still considerably short, although some improvement has been experienced this year over previous years. Progress on the various jobs during the summer months of this fiscal year was considerably retarded due to the lack of supervisory personnel. However, during the winter months a full quota of personnel was available and the results in accomplishments was very satisfactory.

Following is a resume of the accomplishments of the CCC for the fiscal year:

Building Construction: Six thousand three hundred and eighty nine man days were used in building construction and with this amount of effort expended eleven different buildings were brought to completion, as follows: five employee cottages, one garage storage (16 stall), one fire tool cache (metal), one gauging station on Blacktail Deer Creek, and three modern comfort stations. Work was started on three fire lookout houses.

Other Construction Work: Nineteen thousand eight hundred and eighty two man days were spent on other construction jobs which brought to completion the following in addition to the partial completion of one boat dock at Yellowstone Lake, one water storage tank and one mile of underground power lines: 120 rods of guard rail for auto camps and parking areas, one sewer system at Tower Falls, thirty miles of telephone lines, Fishing Bridge to east entrance and the Gallatin telephone line, 4625 feet of water lines, Mammoth auto camp area, 44 fireplaces for auto camps, 74 campground tables and one platform on terraces at Mammoth for Easter program.

Maintenance Work: Thirteen thousand six hundred and sixty one man days were expended for maintenance work, which consisted of the following: 1.6 miles of truck trails, 34 miles of horse trails, 12 miles of foot trails and paths, operation of forest nursery (2,914 man days), cleaning roadsides of bottles, boxes, papers, tree stumps and debris thrown from autos of passing visitors (7908 man days), and removal of snow from sidewalks around government buildings, office and utility buildings and excluding residences (244 man days).

Only 456 days were required on fighting forest fires during the fiscal year compared with 2,137 man days spent for fire pre-suppression work. The value of fire pre-suppression work is reflected in the small amount of time required in actual fire fighting. The fire pre-suppression work consists of stationing boys at all ranger stations as smoke

chasers and the training of all enrollees in the methods of fire fighting.

Six thousand three hundred and thirty three man days were used on the removal of undesirable structures and obliterations. This work consisted of removal of buildings and structures throughout the park which were deemed as no longer of value and which were impairing the landscape together with the obliteration of unsightly scars in the landscape.

Miscellaneous Work: Other efforts expended amounted to 32,871 man days and included the following miscellaneous work: 975 square yards of bank sloping on Gardiner road; insect pest control in Mammoth area (201 man days); planted 2670 trees and shrubs at nursery and Mammoth; developed and maintained 16 acres of auto camps; soil preparation at Mammoth (18 acres); contact work in museums and helpers at entrances (2024 man days); laboratory work on wildlife, elk disposal program and fish planting (780 man days); preparation of 1500 cords of fire wood for ranger stations, entrances, museum, messes and Mammoth use; marking north boundary (94 man days); helpers to engineers for making surveys (227 man days).

The following CCC approved jobs were completed during the year: Metal fire tool caches at Tower Falls; alteration of bunkhouse at Buffalo Ranch; garage storage at Mammoth; three gauging stations at Blacktail, east fork of Lupine Creek and Gardiner river; miscellaneous structures at Mammoth, three of which were for Easter program; eleven miles of telephone line from Lake to East Entrance; sewer disposal tank, comfort station and water line at Tower Falls; water storage at Fishing Bridge.

PARK OPERATORS

Activities carried on by the various operators follow:

Yellowstone Park Company: This company, which was organized near the end of the 1936 fiscal year, operates all hotels, lodges, cabins, boats, transportation, horseback trips and most of the cafeterias and also has the wood selling concession. Following is a report on new construction work and new equipment purchases made by this company in connection with its various activities:

At Gardiner construction of a new warehouse was completed. Purchased oil burning hot water tank, oil tank controls and hot water tank for transportation bunkhouse. For the transportation division purchased ten new 14-passenger White buses, one Ford pick-up truck and two Ford dump trucks.

At the Mammoth hotel purchased and installed in part underground lead-sheathed steel tape telephone cable serving the Mammoth area. Bought oil burning boiler, oil tanks, controls, vacuum pump and radiation for new transportation bunkhouse and mess. Completed cabin area; completed inside painting of hotel; completed 90 percent of landscaping; purchased beds, springs, mattresses, et cetera for fifty cottages completed last year; painted cocktail room; re-finished counter in cocktail room; recovered floor in cocktail room; laid floor covering on recreation hall floor and painted walls and ceiling; painted walls and ceiling of auditorium; installed draperies; draped back-stage and placed traverse curtains on stage; purchased 24 new night lamps for bedrooms, one new vacuum and 30 bedroom rugs for girls dormitory. Minor repairs and replacements made on the Mammoth lodge and tourist cabins.

At Old Faithful Inn purchased seven 230-volt direct current motors complete with starters in changing motor equipment from 115 to 230 volt DC; purchased one new single range, one new vegetable steam table, one floor polishing machine, new carpeting for second floor of old house, one 260-foot hall runner, 10 dozen new window shades and 12 large bronze ash trays. Considerable replacement and repair work was done throughout the entire Old Faithful lodge area. Purchased and installed Ridgeway 50 KW engine generator set complete with generating panel and alterations to switchboard at Old Faithful lodge, one steam-connected 3-bucket egg boiler installed, one 4-compartment cream and juice dispenser. Ninety-four tent tops were moved to new location; 14 cabins were moved from the lodge to housekeeping cabin area and the addition to the cafeteria was 85 percent complete. Work in the tourist cabin area consisted mostly of replacements and repair.

At the West Thumb work consisted mostly of renewal and repair of tourist cabins and cafeteria.

At Lake hotel purchased and installed new ammonia expansion coils to ice plant; installed new ranges and coffee urns in kitchen; rebuilt two oil burning furnaces in power plant. Purchased one new 3-oven range, one new 2-oven range, one battery for coffee urn, new curtains for lounge, two new electric signs, four new lounge lights, ten new chenille bedspreads. Re-upholstered and painted all lobby and lounge furniture and completed painting of outside of hotel. At the lodge work consisted mostly of replacements and repair; repaired boiler setting for power plant. Purchased and installed one steam-connected 3-bucket egg boiler. Three new motor launches and 24 rowboats were purchased for the boat division.

At Fishing Bridge work consisted of replacements and repair of tourist cabins and cafeteria. The boat house was painted on the outside.

At the Canyon hotel installed two new Zarmo air presses and air compressor in laundry; fire prevention 50 percent complete and re-shingled girls and boys dormitory and mess house. Purchased and installed three Klearfax runners, dining room to lobby; two new baggage trucks, one new hair dryer, one small piano, 15 upholstered armchairs for rooms, 12 dozen chenille bedspreads and 150 bathroom side chairs. At the lodge moved hot water heater tank to power plant and purchased and installed copper exhaust steam hot water heating coils; installed steam-connected, 3-bucket egg boiler; installed one 4-compartment cream and juice dispenser; purchased complete new set of decorated china; placed new floors in two different dormitories; constructed new cement loading platform in rear of kitchen and employees dining room; considerable replacement and repair work. Work in the tourist cabins and cafeteria consisted of replacements and repair.

At Camp Roosevelt constructed new comfort station in tourist cabin area and completed sewer system; placed new floors in a large number of cabins; replacement and repair work.

Installed electric gasoline pumps, hoists, tanks and high-pressure Lincoln greasing equipment in the Pryor and Hamilton filling stations at Mammoth, Old Faithful, Thumb, Lake, Fishing Bridge and Canyon.

Hamilton Stores, Inc.: This company operates the general stores and gasoline filling stations at Old Faithful, West Thumb, Lake and Fishing Bridge and the curio shops in all of the lodges of the park.

At Old Faithful a modern rest room was installed at the Basin No. 1 gas station, a number of new electric gas pumps were added at Old Faithful, West Thumb, Lake and Fishing Bridge. As soon as sufficient power is available additional electric pumps will be installed at the various stations. There has been ordered and ready for installation two hydraulic hoists to be installed at the Fishing Bridge and Basin auto filling stations to enable the furnishing of better greasing jobs. Mr. Hamilton also operates the bathhouse at Old Faithful.

Haynes, Inc.: This company operates all the picture shops throughout the park including those in the hotels and lodges, and operates the general stores at Tower Falls and Camp Roosevelt.

The picture shop at West Thumb was moved to a new location next to the ranger station. Hangman signs were installed in front of the picture shops at Fishing Bridge and Canyon, new outside signs were installed at several shops, a new water heater was installed at Fishing Bridge and a shower stall was put in the photo finishing dormitory at Mammoth. Part of the headquarters building at Mammoth was winterized and shop interiors at Canyon and Tower Falls were partly remodeled to improve facilities for serving the public. The interiors of the picture shop at Canyon and general store at Camp Roosevelt were redecorated.

Pryor Stores: The Pryor Stores in the park, operated by Pryor & Trischman, consist of general stores at Mammoth, Canyon and in the auto camp at Mammoth as well as a cafeteria in the Mammoth auto camp and a coffee shop in the Mammoth headquarters area.

The general store at Mammoth was painted. A large water-cooled ammonia plant was removed from the refrigerator room at Mammoth. In its place an up-to-date air-cooled coil unit was installed. The new dormitory for men at the general store was completed.

A new roof was placed on the front porch of the coffee shop. The interior of the coffee shop was painted and venetian blinds installed. Additional wiring was done in the kitchen to give power for new electric cooking equipment. The boys dormitory at the coffee shop was re-wired, the old wiring having created a fire menace.

A new foundation and floor were put in the general store at the Mammoth auto camp, shelves were rebuilt, large windows were installed, painting was done and the interior greatly improved. A new cash register was purchased for this operation.

At the auto camp cafeteria the floor was sanded and refinished and minor repairs were made.

At the Canyon store general repair work was done, consisting of oiling floors, laying linoleum in the dormitory and adding shelves. A cash register was installed in the meat department.

Minor repairs were made at the gasoline filling stations, including some painting at Mammoth.

MEDICAL SERVICE

The medical service in the park was under contract with Dr. G. A. Windsor of the Park Hospital, Livingston, Montana. Dr. R. E. Fallis, of Chicago, who arrived in the park in January, 1937, carried on the duties of the park physician under Dr. Windsor. The park hospital closed on September 14 and all hospital cases were then handled in the Livingston hospital where Dr. Windsor was assisted by Dr. Russell O. Spittler. The Mammoth hospital was re-opened on June 10, 1939.

Two hundred forty-eight cases were handled in the Mammoth hospital during the fiscal year, which includes 101 sick, 3 bear bites, 40 major injuries, 48 minor injuries, 8 pool burns, 26 major surgical, 12 minor surgical, 2 pneumonia, 4 cardiac, 1 measles, 1 confinement, 1 Erysipelas and 1 diptheria. Fifteen hundred forty-two patient days were rendered at the Mammoth hospital, which does not represent patients taken care

of in Livingston, the latter including all cases before and after the park season and heart and lung cases necessarily removed from high altitude during the season. Dr. Windsor traveled 13,500 miles while his assistants traveled 10,500 miles. The ambulance covered 6,200 miles. There were 375 park calls made and 11 tours of the park while 3,500 office calls were attended to, which does not include the personal contacts made in Livingston during the winter months. Six thousand three hundred and thirty-five calls were handled by the nurses in the dispensaries. A total of ten deaths was recorded, 3 at the Mammoth hospital from car accidents, 1 en route to the Livingston hospital from gas poisoning and 6 in the park, outside the hospital, 3 from heart failure and 3 from car accidents.

COOPERATING BUREAUS

The Public Roads Administration (formerly Bureau of Public Roads), U. S. Public Health Service, Bureau of Entomology, National Reemployment Service, Bureau of Fisheries, Forest Service, Post Office and War Departments and the U. S. Weather Bureau have all cooperated to the fullest extent with officials of the National Park Service during the fiscal year.

Weather Bureau: Activities of the Weather Bureau Office in Yellowstone Park this year in charge of Charles L. Howard, Meteorologist, were a continuation of routine duties of a first order city station plus continued snow research work.

Three daily weather observations are taken and filed with the local telegraph office throughout the year, so that the Yellowstone Park weather may be obtained by the public upon inquiry at any of the principal cities of the country. These weather reports are given country wide distribution over the Airways Teletype system and this is one of the many stations that show the presence and progress of storms across the network of government airways in the U. S.

Newspapers in the principal cities usually publish local weather and the temperatures prevailing at a few other places of interest to local readers; usually Yellowstone Park is included in even the shorter lists printed. Many newspaper readers watch for the coolest city listed during the summer and find that Yellowstone Park has lower temperatures than any other listed.

In addition to a monthly summary of climatic data issued at the end of every month an Annual Summary of weather data for Mammoth was printed during the past year; this six page leaflet is available to anybody on request.

In co-operation with the rangers of the Park Service the high and low temperatures and daily precipitation are observed at ten stations over the Park. This data is tabulated at Mammoth and sent to Cheyenne for publication with Wyoming Climatological Data.

Snow research conducted by the Weather Bureau has been directed toward more accurate measurements of snowfall. Early indications have been so favorable for a new type of wind-shielded storage gage for snow that arrangements have been made for installation of this type at the several ranger stations in the park. In addition to more accurate accumulated snow mositure reports of keen interest to irrigation interests, these gages will provide better annual comparisons in forest fire hazard studies. The snow gage has strips of sheet iron baffles which break and sheer off the flow of wind around the top of the precipitation can so that a true sample of the snowfall is caught in the receiver. Calcium chloride salt is used as an anti-freeze in the receiver can into which snow flakes sink and change to liquid. Thin oil prevents evaporation. The increase in weight of can gives the amount of precipitation.

Fifteen of these experimental gages were installed on three small basins in Yellowstone Park in the fall of 1937. Duplicates were soon set up in Utah and New Mexico by Weathermen. As a result of the favorable tests in three states a large number of the improved snow gages are being installed over the western states wherever snow water for irrigation is of importance.

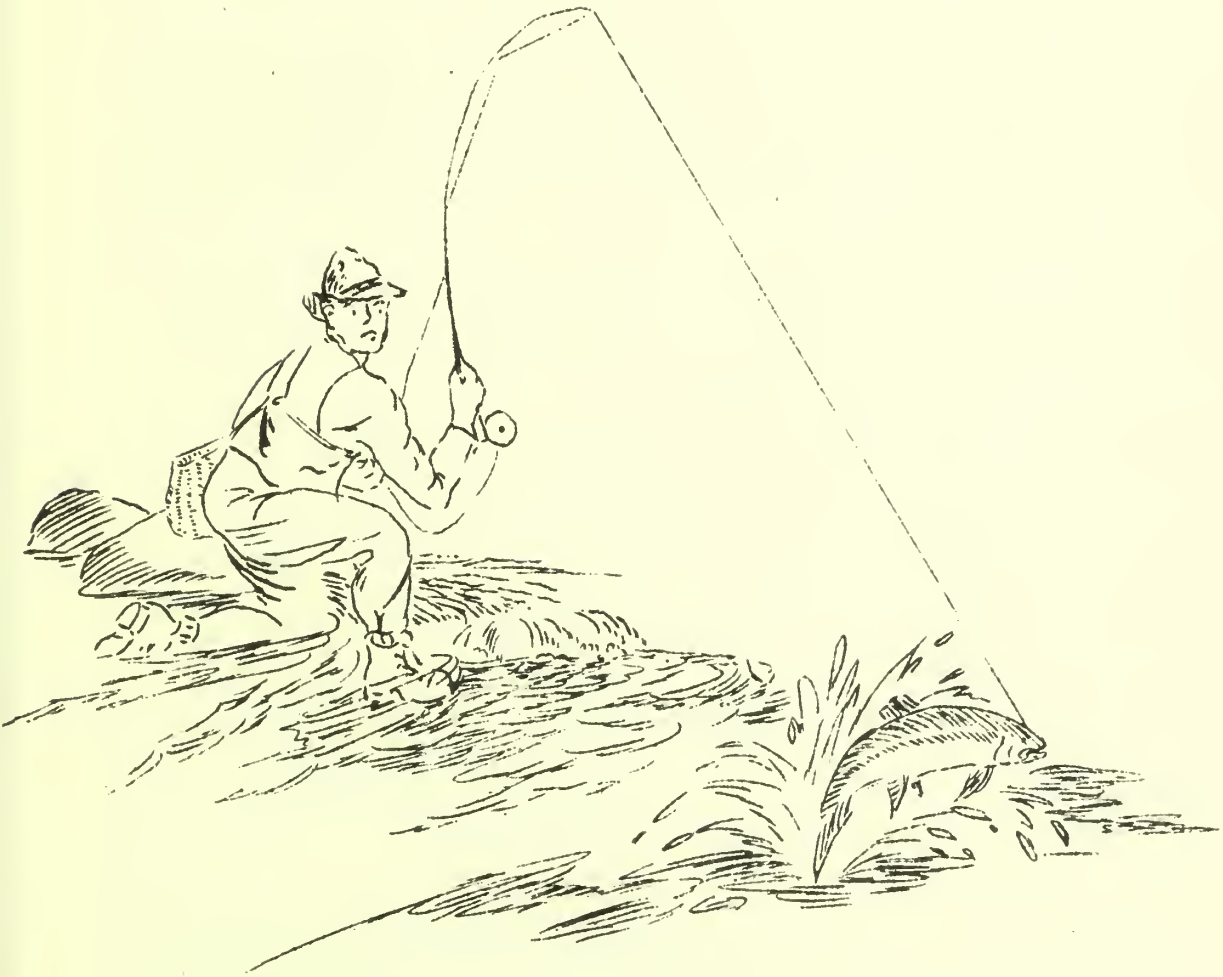
Public Roads Administration: The activities of the Public Roads Administration were confined to the construction of new roads and bridges and was under the direction of Resident Engineer C. Fred Capes of the district office in Denver.

Major road construction included the completion of two bridges over the Gibbon river, grading of approximately ten miles of the Old Faithful-West Thumb section between Isa Lake and West Thumb and the Mammoth Esplanade with its connecting roads. In addition to the completed projects work was under way on surfacing and oiling of the northeast entrance road between the entrance and the Lamar Canyon; surfacing and oiling of the south entrance road from the entrance to Lewis River; grading of the east entrance approach, including one-half mile of betterment within the park boundary; surfacing and oiling of the ten mile grading section completed last season from Isa Lake to West Thumb; surfacing and oiling approximately 17 miles of the east entrance road between Lake Butte and Lake Junction; and construction of the upper Gardiner River bridge, together with the necessary approaches.

Post Office: The post office in Yellowstone National Park is in charge of Postmaster Claude W. Anthony who is assisted by one regular clerk and a number of temporary clerks during the summer.

Receipts for the Post Office at Yellowstone National Park for the fiscal year just ending showed a 3% decrease over the corresponding period last year. The six branch offices throughout the park showed a decrease with the exception of the Lake Postal Station, which had the best business in the history of that office.

Postmaster General James A. Farley paid this office a visit in August of this year. Mr. C. T. Hansen, Postal Inspector in charge, also made an official visit.



MISCELLANEOUS

Deaths: Automobile accidents in the park accounted for six deaths during the fiscal year. The first serious accident occurred on August 6, 1938 when a car ran off the road in the new campground at Mammoth killing Louis Burchette, 20, and Duane Ebert, 19, of Livingston, Montana. The second accident occurred the following day when a car driven by Mabel Croonquist of Billings ran off the road into the Lamar Canyon killing Marie Frieburg, 25, and Marlyn Dahlen, 25, of Minneapolis, Minnesota. Four days later Eugene Ricks, 25, of Cody, Wyoming, died from an accident which occurred on August 10 when he was run into by a truck driven by his brother. On October 10 Miss Helen Mongovis, of Newark, New Jersey, was killed in an automobile accident on the Continental Divide road between Old Faithful and West Thumb.

Heart attacks were responsible for three deaths. George M. Strong, 72, of Portland, Oregon, died at Old Faithful Lodge on August 16, Ernest Bassi, 38, of Hennepin, Illinois, died at the Mammoth housekeeping cabins on August 17 and George Havashida, 62, of Worland, Wyoming at West Thumb on the eighteenth of August. Mr. Havashida had been rowing a boat shortly before he was stricken.

William Nelson, 20, Gardiner, Montana, an employee of the Bureau of Public Roads, died en route to the hospital in Livingston on June 27 from the effects of gas asphyxiation received in a test hole for the Yellowstone bridge near Tower Falls.

Births: The park's population was increased by eleven during the year due to the new arrivals in the families of park employees. A daughter was born to Mr. and Mrs. William Wade on August 5, Mrs. Wade being the daughter of Park Engineer C. A. Lord; a daughter to Assistant Chief Ranger and Mrs. Maynard Barrows on August 16; a son to Park Ranger and Mrs. Verde Watson, on September 10; a daughter to Automobile Mechanic and Mrs. Rufus Cramer on December 6; a son to District Park Ranger and Mrs. Wayne Alcorn on February 5; a son to Truck Driver and Mrs. Lester C. Abbie on February 23; a son to Truck Driver and Mrs. Howard Kocher on April 25; a son to CCC Superintendent and Mrs. William Sheridan on April 26; a son to B.P.R. Engineer and Mrs. O. Van Buskirk on May 4; a daughter to Resident Park Physician and Mrs. R. E. Fallis on May 14 and a daughter to Electrician and Mrs. George McMullin on May 17. All of these births occurred in the Park Hospital in Livingston.

Marriages: Three Park Service employees and one operator employee were married during the year, the culmination of Yellowstone romances. Harry Trischman, Jr., son of Chief Buffalo Keeper Harry Trischman, and Miss Louise Mohar, were married in Livingston on October 25; Clerk Verna M. Roe of the Superintendent's Office and James Somerville, of Gardiner, in Deer Lodge, Montana on November 12; District Park Ranger

Frank Anderson and Miss Patti Hopkins, of Lewistown, Montana, in Butte on November 28; and Chief Clerk Keith Neilson and Miss K. Mervine Fisher in St. Paul, Minnesota on February 8. Miss Mohar and Mr. Trischman were both employed at the Pryor Store at Mammoth, Miss Hopkins had been a seasonal employee of the C. A. Hamilton store at Canyon Lodge and Miss Fisher was the secretary to J. E. Haynes, park photographer.

Visitors: The list of distinguished visitors during the 1938 season included former President Herbert Hoover; Postmaster General and Chairman of the National Democratic Committee, James A. Farley; a dozen United States Senators: Gerald P. Nye of North Dakota, Claude Pepper of Florida, James E. Miller of Arkansas, Joseph C. O'Mahoney of Wyoming, James E. Murray of Montana, Guy M. Gillette of Iowa, Key Pitman of Nevada, Herbert E. Hitchcock of South Dakota, A. E. Reames of Oregon, Charles O. Andrews of Florida, Lynn J. Frazier of North Dakota, and Burton K. Wheeler of Montana; ten United States Congressmen: Charles H. Leavy of Washington, J. Mark Wilcox of Florida, J. Hardin Peterson and Millard F. Caldwell of Florida, Francis H. Case of South Dakota, Paul Greever of Wyoming, Abe Murdock of Utah, Joe Starnes of Alabama, Fred H. Hildebrandt of South Dakota, and Jed Johnson of Oklahoma; three Governors: Teller Ammons of Colorado, Henry H. Blood of Utah, and Roy E. Ayres of Montana; E. K. Burlew, First Assistant Secretary of the Interior and Nathan R. Margold, Solicitor for the Department; Francisco Marseillon, Director of Rotary International, Buenos Aires, Argentina; Prince (Poland) and Princess (Greece and Denmark) Dominique Rodziwill; Demetrios Sicilianos, Minister from Greece; Resid Anamur, First Secretary of the Turkish Embassy; Dr. Karol Ripa, Consul General for the Republic of Poland, Pittsburgh, Pennsylvania; Dimitri Naoumoff, Minister from Bulgaria; and Dr. Gilbert Rahm, University of Fribourg, Switzerland. Other distinguished visitors during the 1938 season included: Harlean James, Executive Secretary of the American Planning and Civic Association; Judge William W. Arnold, member of the U. S. Board of Tax Appeals; Judge Vincent L. Leibell of the U. S. District Court, New York City; Mr. and Mrs. Henry F. Pringle, authors and special feature writers for the Saturday Evening Post and Ladies Home Journal; Smedley D. Butler, Major General, U. S. Marines (retired); W. H. Jackson, Pioneer photographer of the 1871 Hayden Survey party; Martin S. Garritson, Secretary of the American Bison Society; James Thomas Taylor, Director of the National Legislative Committee of the American Legion and Phil Conley, National Vice Commander; and Dr. F. E. Townsend, organizer of the Townsend Plan.

Shortly after the roads were open for the 1939 season among the first visitors were Governor Nels Smith of Wyoming and the Crown Prince and Princess of Norway and party. June visitors included former President Herbert Hoover and Stephen F. Chadwick, National Commander of the American Legion.

DEPARTMENT OF INTERIOR

NATIONAL PARK SERVICE

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ANNUAL REPORT

1940

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YELLOWSTONE NATIONAL PARK

EDMUND B. ROGERS, SUPERINTENDENT

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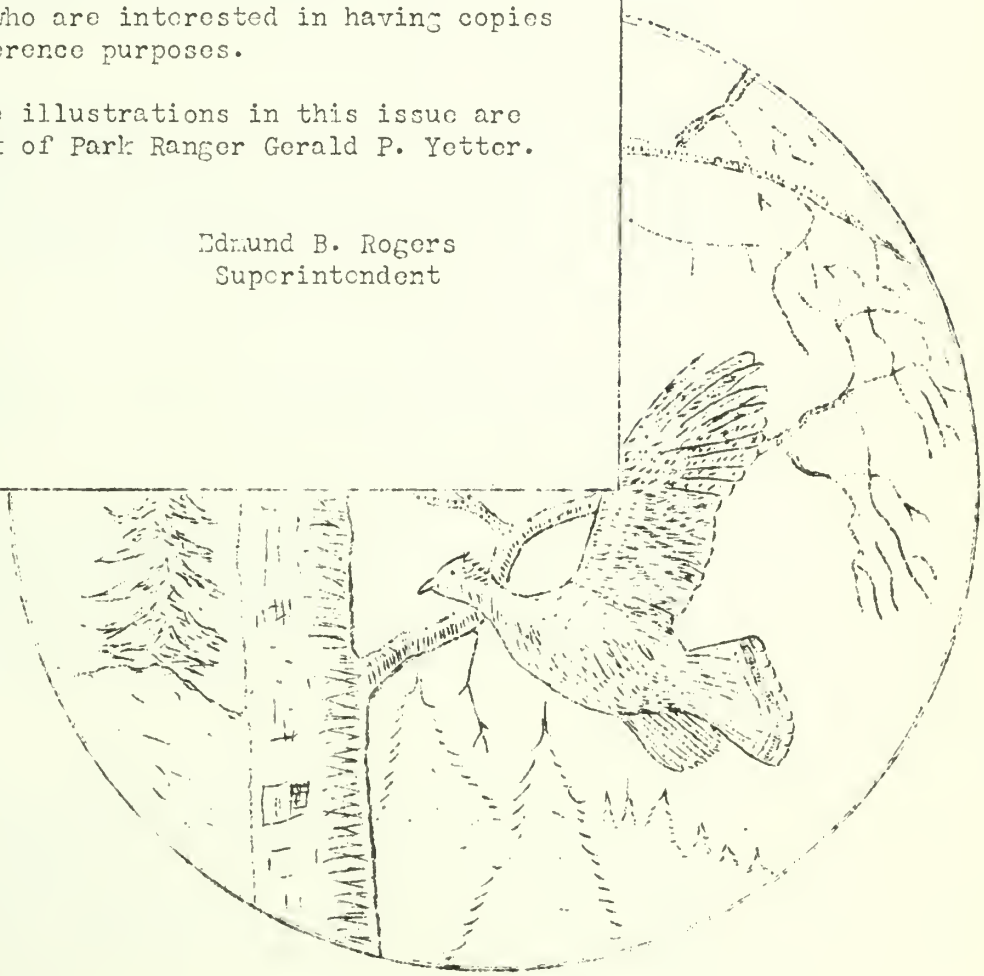
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-28, and 1931 to 1939 on account of a shortage of funds it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1940 the shortage of funds make mimeographing necessary.

Fifty copies of the Yellowstone report have been prepared for distribution to collectors who have the Yellowstone reports since the first issue, and to others who are interested in having copies for reference purposes.

The illustrations in this issue are the work of Park Ranger Gerald P. Yetter.

Edmund B. Rogers
Superintendent



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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1940 -

Edmund B. Rogers, Superintendent

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GENERAL

Up to 1934 the reports of the Superintendent of Yellowstone National Park have covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933, to June 30, 1934, and subsequent reports have covered the fiscal year periods. This report, therefore, for 1940 covers the fiscal year July 1, 1939, to June 30, 1940.

Yellowstone's travel season ending September 30, 1939, showed a total of 486,936 people visiting the park as compared to 466,185 in 1938 and 499,242 in 1937, an increase of 4.5 per cent over 1938, but a decrease of 2.5 per cent compared with 1937, the 1937 season being the record-breaker in the park's history. The travel at the beginning of the 1939 season started off considerably in excess of the previous year, but began to decline in August, and this decline continued to the end of September. With an open fall with very little snowfall, the roads were kept free of snow until late into December, permitting later travel than usual; and with the early opening of the roads in the spring, the travel showed a marked increase by the end of May, 1940. June travel also showed an increase, 5,555 persons more than June, 1939, and by the end of the fiscal year on June 30, a total of 131,572 visitors had come in the five gateways as compared with 110,731 for the same period the previous year, an increase of 18.8 per cent. Rail travel for the start of the 1940 season was somewhat behind for the month.

The business of the operators in the park during the 1939 season showed a decrease as compared with 1938, but this decrease was slight and all operators enjoyed a good season. The business at the start of the 1940 season to June 30 showed an increase for most of the operators, the business of the hotels and for the transportation line being behind due to the fact that there was a decrease in rail travel.

The Yellowstone Park Company is engaged in a program for modernizing and bringing up to date their present facilities. It is the intention of the company to either replace or rehabilitate every lodge and tourist cabin which it operates. A substantial start had already been made with the completion of the unit on the hotel site at Mammoth Hot Springs and the near completion of the unit at Old Faithful. Work started last fall on the lodge and tourist cabin group at Old Faithful and by the start of the 1940 season most of the cabins were ready for occupancy. Visitors readily accepted the improved accommodations at Old Faithful and the reaction of the public to them has already been very favorable. The next developments contemplated by the company are at Yellowstone Lake and Fishing Bridge, to be followed by like improvements at

Canyon and Camp Roosevelt. All the facilities in the lodge and tourist cabin groups at Old Faithful are now provided with running water. Work on the Lake development will start in July. The project calls for the building of roads and the installation of water mains, laterals, sewer and plumbing facilities in all cabins, hot and cold running water in the lodge cabins, and cold running water with sinks in tourist cabins. A typical new cabin such as those recently constructed at Old Faithful is complete with plumbing, metal beds, inner spring mattresses, furnishings and fixtures. The older cabins furnished as above are modernized with plywood lining and complete new plumbing furnishings and fixtures.

The Mammoth Lodge was closed on August 14 and tourists seeking lodge accommodations at Mammoth after that date were accommodated at the cottages in connection with the Mammoth Hotel at the same rates as at the lodges. Many of the cabins from the lodge area were later moved to other locations in the park, and it is the intention of the company to entirely dismantle this unit. It was not operating for the 1940 season.

Due to an open fall, travel continued well into December and the C. A. Hamilton General Store at Old Faithful remained open until December 4 to accommodate late visitors. None of the roads were closed to travel until December 18, the latest in all park history.

The snowplows started to open the roads in the park beginning March 11, which is the earliest in the park's history. This early opening was an effort on the part of the park to fulfill demands made by the Tri-State--Yellowstone Park Civic Association and other organizations for a longer Yellowstone season. An effort will be made to keep the park roads open from at least May 1 to October 15, and the assurance has been given in publicity and park publications that the longer season will now pertain in the Yellowstone for motorists. The collection of the motor vehicle license fee started on May 10.

About the middle of the 1939 season a serious fire hazard existed in the park and on July 15 a fire broke out on the Mirror Plateau near White Lake which reached serious proportions. The fire considerably disrupted the entire organization right at the height of the season, requiring some 700 men from CCC camps and ERA crews on the fire line and necessitating detailing of key men from important stations to the fire in supervisory capacities. Fortunately the fire was located in an isolated section of the park where there was no interference with travel. Several other fires occurred simultaneously with the Mirror Plateau conflagration but these were extinguished before they reached large proportions.

Hardly had the 1940 season gotten well under way when a fire broke out June 15 on Chipmunk Creek, near the extreme southern end of the South Arm of Yellowstone Lake, which again disrupted the organization by requiring some 400 CCC enrollees and ERA men with the supervision of a number of rangers and others from important stations. Because of the location, transportation on this fire was a difficult item, as it

was necessary to transport men and supplies across Yellowstone Lake, which at times becomes quite rough. Like the White Lake Fire, this fire started from lightning. It was under control on June 23. No rain occurred to assist the fire fighters in its suppression.

Winter activities are becoming increasingly popular in the park and an attempt has been made to bring more visitors in during the winter season to see and photograph the wildlife and to enjoy winter sports. The road from Mammoth to Cooke was kept open throughout the winter for the convenience of Cooke residents and to encourage winter travel. A buffalo show was held at the Buffalo Ranch on January 14 which brought in quite a few visitors from the nearby communities, and the weekend crowds were somewhat larger than usual. Sunday, February 11, was designated as "Montana Day" and considerable publicity was given to inviting visitors into the park to see and photograph the wildlife and partake of the winter sports. The crowd was somewhat disappointing but a severe snowstorm the previous day was no doubt responsible for the reduced attendance.

For the second year Easter Sunrise Services were held on the terraces at Mammoth Hot Springs on Easter Sunday, March 24. The location was identical with that of the previous year but the weather was in direct contrast. While last year's services were conducted throughout a blinding snowstorm the weather this year was ideal, with a bright, warm sun shining. The services were broadcast over Station KWYO, Sheridan, Wyoming. The attendance was almost double that of the previous year.

Considerable pressure was brought to bear in Washington by Congressional representatives from the State of Wyoming to secure appropriations to keep open the roads in the park the year around. The press of the various states around the park joined the movement, while a number of civic organizations were very emphatic in their desire to make the Yellowstone a year-round park. A special meeting of the Tri-State--Yellowstone Park Civic Association, comprising the states of Wyoming, Montana, and Idaho, was held in Livingston on February 11 to discuss this matter. However, the attendance at the meeting was somewhat disappointing, but those who were present went on record as opposing the year-round opening of the park at this time because of its economic unsoundness and because there did not appear to be sufficient travel to warrant such an expenditure. The opposition of the Tri-State--Yellowstone Park Civic Association, as expressed at the meeting, caused the matter to become dormant for the present.

On February 20 advice was received that the Acting Secretary of the Interior on February 7 had approved a fee of $1 for power boats used on the waters of Yellowstone Lake and a fishing license of $3 per season or $1 per week. Upon the release of a press item on these new fees a storm of protests arose from civic organizations, sportsmen's clubs, dude ranchers and others, and from the Congressional delegations from Montana and Wyoming. Because of the unpopularity of these new fees and the protests sent in to Washington, the Secretary announced on February 22 that the order invoking these fees had been rescinded.

Two distinct earth tremors were reported at Old Faithful on the afternoon of October 3. The buildings in the area were shaken considerably and some furnishings and equipment were moved, but no particular damage was done. Six distinct earth shocks were felt at Old Faithful on May 24, 1940, but no damage was done and there was no noticeable interference with geyser activity. The shocks were described as mere adjustments in the outer crust. Some residents in the Canyon area reported one shock on May 22 and one light shock on the 24th, but neither of these was felt by the ranger on duty at the Canyon Ranger Station.

Mrs. Bernice Yotter, wife of Park Ranger Gerald P. Yotter, was appointed census enumerator for Yellowstone National Park and was responsible for taking the census in the park. She entered on duty April 2.

Miss Jessie Van Brunt, of Brooklyn, New York, donated two specially designed and prepared stained glass windows for the Mammoth Chapel. Dedicatory services in connection with the installation of the windows were held in the Mammoth Chapel on July 2, 1939.

On May 4 the Tri-State--Yellowstone Park Civic Association held one of its regular meetings in the Old Faithful Cafeteria, to which were invited the Governors of Idaho, Wyoming, Montana, and Utah. The Governors of Idaho and Wyoming, as well as some 150 representatives from the states of Idaho and Montana, participated in the meeting. The following day a good will tour and celebration was held at the Old Faithful Lodge porch, at which the Governors of Idaho and Wyoming were the principal speakers. The celebration was held in an effort to stimulate early travel into the park which had received considerable publicity and to make known to the general public that the park season for motorists was to extend from May 1 to October 15.

On March 6 condemnation proceedings were started at Helena to acquire 220 acres along the north line of the park, including the properties of the Child Estate, Roy Armstrong, Anton Stormitz and Lena Bassett Ross, valued at $11,647. On March 4 the United States Attorney's office at Billings filed with the District Court of the United States declarations of taking on the four properties and deposited check in the amount of $11,647 in the District Court at Helena. The hearing on the condemnation was held in Helena, on June 13, before the United States District Judge. District Judge Baldwin ruled that Mr. Armstrong would have twenty days to file brief and that the Government would have ten days to answer said brief. The matter will be handled by the United States Attorney at Billings.

For the 1940 season the Western Air Express inaugurated scenic flights to the park from Salt Lake City over the Tetons, as well as a half-hour scenic tour over the Yellowstone Falls and Grand Canyon, to be conducted each evening.

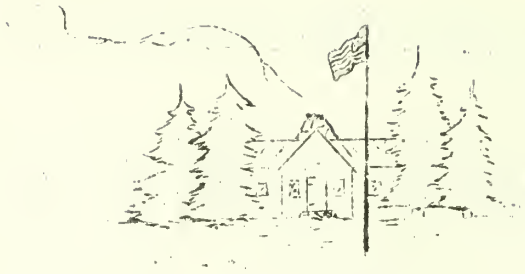
One serious accident occurred on the Chipmunk Creek fire on June 20, when two CCC enrollees were struck by a falling burned snag. One

of the enrollees, James Hester of Norwood, Ohio, died a few hours after the accident while the other enrollee was brought to the Mammoth Hospital for immediate treatment. Memorial services were held in the Mammoth Chapel for enrollee Hester on June 30.

Three deaths occurred in the park during the month of July, 1939, one Mrs. Fannie Hobson of Washington Courthouse, Ohio, who died of a heart attack on July 15; Myrtle Heffner of Lexington, Illinois, who died of apoplexy at Old Faithful on July 29; and Julia Eldred, age 3, of Gardiner, Montana, who died while being rushed to the hospital at Mammoth from Gardiner following an accident in which she was hit by a car in the streets of Gardiner outside the park.

On August 12, 1939, a CCC truck carrying 25 enrollees ran off the road into the Firehole Canyon about two miles from Madison Junction toward Old Faithful, killing two enrollees and injuring 19 others. Rocco B. Martello, 17, of Brooklyn, New York, and Norman Montero, 19, of New York City, were the two enrollees killed. Another death resulted on August 27 with the drowning of Wesley Hunt of Dacoma, Oklahoma, while fishing in the Yellowstone River near Mud Geyser. David Roman, one-day old son of Mr. and Mrs. I. Roman of Spokane, Washington, died at the park hospital August 10, and Charles Glazier, 65, of Livingston, Montana, an employee of the Yellowstone Park Company, died at Canyon Lodge of a heart attack on August 24. The first death of the 1940 season occurred on June 20 when Oscar A. Carlson of Los Angeles, California, died at Fishing Bridge of a heart attack.

Samuel T. Woodring, former Chief Ranger of the Yellowstone, and Superintendent of Grand Teton National Park, one of the Service's "old timers" died at Butte, Montana, on October 13, at the age of 61 and was buried at Butte. Daniel W. Greenburg, 63, of Cheyenne, Wyoming, one of the best friends and champions of the Yellowstone, died on New Years Day at Cheyenne of a heart attack.



ADMINISTRATION

Personnel: The permanent personnel consisted of Edmund B. Rogers, Superintendent; J. W. Emmert, Assistant Superintendent; Joseph Joffe, Assistant to the Superintendent; Keith P. Neilson, Chief Clerk; Fred G. Bussey, Agent-Cashier; Richard J. Smith, Senior Purchasing Clerk; Alice L. Harris, Senior Clerk; Virginia J. Goettlich, Clerk (files and personnel); Toni R. Rulli, Jr., Clerk (Chief Ranger's Office); Catharine L. Harris, Clerk; Annie Marie Dudley, Clerk; LeRoy B. Van Cott, Clerk (Naturalist Department); Ladd S. Shorey, Clerk (Timekeeper); Glenn D. Williams, Clerk (Warehouse); Verna R. Somerville, Clerk-Stenographer; Fred J. Bertagnolli, Clerk-Stenographer; Merritt M. Grant, Clerk-Stenographer (Park Engineer's Office); Rose C. Christenson, Assistant Clerk; and John G. Macbeth, Assistant Clerk-Stenographer.

Agent-Cashier Fred G. Bussey was loaned to Rocky Mountain National Park in May, 1940, his transfer to that park to take effect on August 3, 1940, following the termination of the services of the Chief Clerk of Rocky Mountain National Park, Mabel Shaffer. Richard J. Smith entered on duty as Senior Purchasing Clerk September 11, 1939, by transfer from General Grant National Park. Clerk Virginia J. Goettlich transferred to Death Valley National Monument on January 21, 1940, and the file and personnel clerk duties were taken over by Clerk Annie Marie Dudley. Miss Dudley transferred to Yosemite National Park on June 5, 1940. Clerk Rulli was assigned to the Chief Ranger's Office on January 3, 1940, from the fiscal office. Rose C. Christenson received a permanent appointment as assistant clerk on March 11, 1940, and was assigned to the files and personnel office. John G. Macbeth received a permanent appointment as assistant clerk-stenographer on January 3, 1940.

The force is augmented during the summer season with two assistant clerks, two assistant clerks (statistical), one assistant clerk-Stenographer and comptometer operator, one assistant clerk for publicity and one messenger boy. T. Paul Wilcox served as United States Commissioner.

The Superintendent was ordered to report to Washington early in January to assume the duties of Acting Superintendent of the National Capital Parks. He remained in this position until the middle of April when he again returned to the Yellowstone. He also attended a conference

of park superintendents which was held at Santa Fe, New Mexico, the early part of October.

Appropriations: Appropriations for the 1940 fiscal year were as follows:

1401000.331 All Other Expenditures	$ 440,244.22
1401000.332 Passenger-Carrying Equipment	3,178.25
1401000.333 Maintenance of Roads in National Forests	9,081.53
Total 1401000 Yellowstone National Park	$ 452,504.00
1401000.041 Big Hole Battlefield National Monument	$ 1,585.00
1401000.051 Emerg. Reconst. and FFF in National Parks	*28,542.06
149/01000.061 Forest Protection & Fire Prevention, 1939-1940	4,750.00
14X1010 Roads and Trails, National Park Service	400,230.58
CC 92-936 Civilian Conservation Corps, YNP	86,590.84
CC 92-936 Civilian Conservation Corps, Morrison Cave	30,100.00
Total all appropriations	$1,004,302.48

*Does not include costs of fires 110.15, 110.16 and 110.17, which will approximate $17,000 to $20,000.

Revenues: Revenues for the 1940 fiscal year, aggregating $406,378.70, were received from the following sources during the fiscal year and were deposited in the Treasury to the credit of the United States as Miscellaneous Receipts:

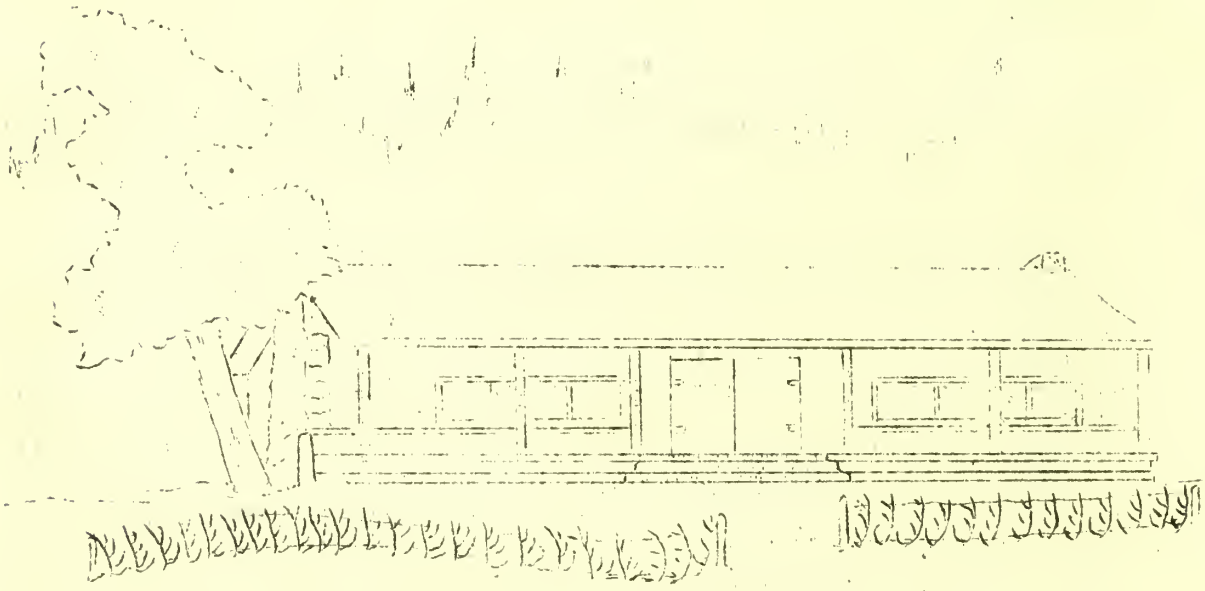
MR-140350 Rental of Telephone Facilities	$ 4,964.85
MR-140520 Permits to Enter National Parks	361,255.50
MR-140590 Business Concessions	27,154.25
MR-144260 Refund on Empty Containers	461.60
MR-144330 Government Property Lost or Damaged	35.19
MR-144871 Donations to the United States	10.90
MR-145050 Sale of Electrical Current	3,098.15
MR-145109 Sale of Water	4,631.86
MR-145160 Sale of Scrap Salvage	455.40
MR-145255 Sale of Quarters	204.12
MR-145310 All Other Services (Disposal of Garbage)	4,106.88
Total revenues	$ 406,378.70

It will be noted that this is a decrease from the revenue collections for the 1939 fiscal year, which totalled $413,119.62. The greatest single item of reduction was reflected in the "Business Concessions" which, in 1939 amounted to $352,474.43. There is an increase in the revenues from all other sources with the exception of MR-144330 and MR-145109 which show very slight decreases.

The marked drop in revenues from business concessions was occasioned by the Yellowstone Park Company, by far the largest operator in the park, as this company paid no franchise fee in the 1940 fiscal year. This accounts for

the large decline in park revenues during the past fiscal year and was apparently due to the company's new contract, the franchise fee of which is computed on a profit-sharing basis rather than a percentage of the gross receipts.

An improvement in the business organization of the fiscal office was made by consolidating all accounting functions and personnel into one unit or section. A further improvement was made in the method of remitting gate receipts (revenues) to the federal depository. Heretofore all gate receipts had been forwarded from each of the five park entrances to the Agent-Cashier's office at park headquarters where the funds were counted, checked, and forwarded to the federal reserve bank. Five additional remitting stations have now been established, one for each park entrance, and the gate receipts from each can now be forwarded directly to the federal reserve bank for deposit, with the control being kept at the park headquarters remitting office. This has increased the safety factor in the handling and safeguarding of Government funds since they are in transit one one-half of the previous time and are handled only once instead of twice as heretofore.



NATURALIST DEPARTMENT

At the close of the fiscal year the staff of the Naturalist Department consisted of Dr. C. Max Bauer, Park Naturalist; William E. Kearns, Assistant Park Naturalist; David DeL. Condon, Assistant Park Naturalist, and LeRoy Van Cott, Clerk-Stenographer. At the beginning of the fiscal year Mr. Francis R. Oberhansley had been notified of his transfer to Sequoia National Park. He left Yellowstone on July 2 and Mr. Condon took over the duties of Assistant Park Naturalist on July 5, 1939.

The summer staff consisted of twenty ranger-naturalists and three museum caretakers for the 1939 season and in June, 1940, there were four museum caretakers.

No changes in the general program of the naturalist work were made during the year although the season of 1940 showed considerable increase in numbers of people attending museums and other activities. Madison Junction Museum was closed on September 4, Norris on September 10, Fishing Bridge on September 11, Mammoth on September 18, and Old Faithful on September 25. For the 1940 season, Old Faithful Museum was opened on May 12, Mammoth on June 5, Fishing Bridge, Norris and Madison Junction on June 16.

Through the Yellowstone Library and Museum Association books and maps relating to Yellowstone National Park which have been approved by the National Park Service are sold to the visiting public. This service adds materially to the educational value of the museums and the naturalist service.

During the beginning of the year six outdoor amphitheatres were used and during the 1940 season seven outdoor amphitheatres were used and programs were held in the lodge at Camp Roosevelt each evening. During July and August of 1939 a nature talk was given each evening in the Lake Hotel lounge for six days each week. The amphitheatre at Madison Junction and the one at West Thumb did not have electricity during the last fiscal year and therefore the lectures were not illustrated. In addition to the campfire programs described above, two lectures were given each night at the Grizzly Bear Grounds on Otter Creek. The seating capacity at the Grizzly Bear Grounds is approximately 1,100 people and it is not uncommon to have this filled twice each evening.

Other activities of the Naturalist Department, although not attended in such large numbers, were well received by those who took part in them. These consisted of morning nature walks at each one of the principal points on the grand loop, guided auto caravans, game stalks and museum talks. At Norris, Madison Junction and West Thumb, ranger-naturalists arranged their daily program so that museum talks could be given when the bus parties arrived.

Six issues of Nature Notes were published throughout the year, one issue every two months.

Some equipment was purchased, the most important of which was projection

screens for Fishing Bridge, West Thumb and Canyon amphitheatres.

An ERA project devoted to photographic work was approved for the Naturalist Department. It consisted of revising negatives and print files, developing films for the various departments, enlarging pictures for publicity work, and preparing prints of the films submitted for the regular file as well as for publicity purposes. Considerable work was also done on the lantern slides and kodaslides. These files were revised largely by the permanent members of the staff, although some help was given by ERA in labeling and filing.

Research during the summer of 1939 was carried on by a number of individuals connected with universities and other institutions of higher learning. One party, headed by Ray Wilcox, studied the basalt-rhyolite contact on the Gardiner River and prepared a report for publication. This same party returned in 1940, and will carry on its research work throughout most of the summer. Their studies extend to the areas of "mixed rocks" particularly on the shores of Grizzly Lake. Some airplane photographs have been taken and considerable field mapping has been done to determine the relationships of these lava sheets.

The Yellowstone Library and Museum Association has sponsored a project to revise the pamphlet on "Fossil Forests of Yellowstone". This will include a study of the fossil leaves and petrified trees of the north side of the park with some attention being given to the problem of petrification as illustrated in the silicified plant remains which are found in the geyser basins. This project will be carried on during this coming year by Dr. Charles B. Read of the National Museum in collaboration with the Yellowstone Library and Museum Association. Also, the Association has made a study of the proposition of sponsoring a reasearch "Fellow" who could be assigned special problems in the park and carry on much-needed research.

A continuation of the study and life habits of Trumpeter Swan is being carried on by Assistant Park Naturalist Condon who is also making numerous observations on other forms of wildlife and doing photographic work.

Assistant Park Naturalist William E. Kearns prepared a report on a "Suggested Plan for the Revision of the Madison Junction Historical Museum". This was submitted at the close of the fiscal year.

Although the Yellowstone Library and Museum Association has not published any items during the year, from November 30, 1939, to April 6, 1940, it employed Mr. Clyde Stewart to prepare a card file of "Place Names in Yellowstone Park", listing both the names in use at the present time and those which have been discarded for one reason or another but appear in the literature of the park. Each card shows in addition to the name itself the official name where approved by the United States Board on Geographic Names, references to the liberature and other interesting information. In this file up to the present two thousand two hundred

and sixty names have been listed.

During the early part of the year several CCC enrollees were assigned to museum work, but since the first of April none has been used on this kind of work due to the difficulty in obtaining anyone who would remain long enough to be trained and thereby be able to carry on any project.

The table on the following page shows the statistics of the Naturalist Department from July 1, 1939, to June 30, 1940.

NATURALIST DEPARTMENT

Activities from July 1, 1939, to June 30, 1940, inclusive

PLACE	Field Trips No.	Field Trips Att.	Auto Caravans No.	Auto Caravans Cars	Auto Caravans Att.	Lectures No.	Lectures Att.	Museum Att.	Misc. No.	TOTAL CONTACTS
Canyon	137	4316				232	136455		72411	213182
Fishing Bridge	83	1550	71	511	2355	216	28444	43148	8340	83837
Madison	9	422				376	20630	42931		63983
Mammoth	80	2467	309	2597	13384	367	29505	87939	832	134127
Mt. Washburn (1)										
Tower Falls	66	379				81	7890		46664	54933
Norris	388	17367				6	92	72969		90428
Old Faithful	171	20883				1131	385701	136077	79471	622132
West Thumb	205	17109				71	8655			25764
TOTALS	1139	64493	380	3108	15739	2480	617372	383064	207718	1288386
Unattended trailside exhibits (Estimated)										110800
TOTAL CONTACTS										1399186

TOTAL CONTACTS July 1, 1938, to June 30, 1939, inclusive 1,354,815
TOTAL CONTACTS July 1, 1939, to June 30, 1940, inclusive 1,399,186
PARK VISITORS July 1, 1938, to June 30, 1939, inclusive 480,146
PARK VISITORS July 1, 1939, to June 30, 1940, inclusive 507,727

(1) Mt. Washburn road closed for most of each day to June 30, 1940, because of construction of new lookout tower.

PROTECTION DEPARTMENT

General: The Protection Department conducted all operations connected with the general protection of the park, including law enforcements, forest and building fire detection, pre-suppression and suppression, traffic control, forest insect survey and control projects, trail maintenance, fish, wildlife and range studies and year-round patrols of all park areas. Other functions consist of control and disposal of surplus animals, fish planting, operation of the Buffalo Ranch, collection and compilation of travel and park use statistics, investigations of the operators' services to the public, rates, prices and employees' hours, the sale of permits, collection of fees and remittances of funds received, investigation, appraisal and other work connected with the acquisition of alienated lands, supervision of wood-cutting and clearing operations, care of grounds, stables and horses, and supervision of the Big Hole Battlefield National Monument.

The Astringent Creek Fire which occurred in July, 1939, and the Chipmunk Creek Fire which occurred during the middle of June, 1940, required the services of a large number of the Protection Department personnel during the travel seasons. The emergencies created by these large fires seriously handicapped the rangers in the performance of regular duties by leaving all districts short of personnel during periods when routine work was at its peak.

Personnel: The Protection Department personnel includes Chief Ranger Francis D. LaHue, four Assistant Chief Rangers, Maynard Barrows, Curtis K. Skinner, Albert E. Elliott and Hugh Peyton, nine District Park Rangers, fourteen permanent park ranger positions, two permanent part-time park ranger positions, forty-four temporary ranger positions, one chief buffalo keeper, one assistant chief buffalo keeper, one buffalo herder, one packmaster, one night watchman, assigned to park headquarters, one clerk-stenographer, two seasonal statistical clerks, and twenty to twenty-five per diem fire lookouts, fireguards, irrigators and laborers employed during the summer season.

Harry Trischman, Chief Buffalo Keeper, Yellowstone's oldest employee in length of service, tendered his resignation on June 11, to take effect July 2. Mr. Trischman first entered the employ of the government in Yellowstone National Park in 1907 and served for 33 consecutive years.

Thomas D. Phillips, Assistant Buffalo Keeper, suffered a fractured ankle on November 10. Complications which developed from this injury have prevented him from returning to duty to the end of the fiscal year.

William A. Nyquist, John C. Fullerton, Robert Baughman and Lloyd J. Astle

entered on duty as park rangers during the year, selection having been made from the civil service register for park rangers. Baughman was terminated when he failed to report for duty at the beginning of the travel season, after being furloughed during the winter months.

Forestry:

Insect Control: One forest insect control project was carried on during the year for the control of mountain pine beetle in the limber pine stand in the vicinity of Mammoth and the Mammoth Hot Springs. It is gratifying to note that only seven infested trees were found in this locality this year, while in the several preceding years an average of 53 infested trees have been removed annually. The control work was done in the spring and no new attacks of any consequence have been observed this season. It is believed that the infestation in this area comes from a source outside of the immediate locality and it appears that the danger of further damage has somewhat abated.

No systematic surveys of forest insect conditions over the remainder of the park were attempted, but casual observations indicate that there has been little change in the status of mountain pine beetle infestations in whitebark pine and that there is no noticeable tendency for the beetles to spread into lodgepole pine. Heavy infestations, amounting to epidemic conditions, exist in practically all mature whitebark pine stands and in a number of areas the majority of mature trees have been killed.

An epidemic of alpine fir beetles is evident over the entire park but the heaviest concentration appears to be in the northwest corner. Most of the damage has occurred in areas of high elevation which are some distance from roads and regularly traveled trails.

The Douglas fir stands on the Lamar River and Soda Butte Creek drainages, near the Buffalo Ranch and the old Soda Butte Ranger Station, have suffered severe damage from an epidemic of Douglas fir beetles. The infestation is spread over an area some ten miles long and four to five miles wide and the damage is apparent from the highway.

An extensive infestation of lodgepole pine needle tier was found along the Mesa Road and on the north end of the Madison Plateau. The extent of the infestation is not known and the damage inflicted is not of critical severity. It was noted that most of the attacked trees were recovering but were rather ragged in appearance.

Forest Nursery: The forest nursery was operated as a CCC project during the year. The annual inventory of nursery stock shows approximately 700,000 seedlings and transplants on hand. About 75,000 trees were removed from the nursery in the spring and planted in the vicinity of Mammoth and Old Faithful. Improvement work consisted of the construction of a lath house for sheltering potted transplants, the construction of a large sand bin and a large compost bin, construction of walks and roads and graveling of walks and roads, and the development of additional water for irrigation purposes. Experimental work consisted of planting several thousand conifers

and shrubs in tin cans in an effort to raise them to a size suitable for ornamental planting before they are removed from the nursery.

Forest Fire Protection: A deficiency in precipitation and abnormally high temperatures caused a high fire hazard to exist during the latter part of the 1939 season and the early part of the 1940 season. The following is a tabulation of the fires which occurred during the year:

Man Caused			Lightning Caused		
Class A	Class B	Class C	Class A	Class B	Class C
17	2	1	12	5	5

Nine of the Class A man-caused fires were of incendiary origin. Seven of them occurred in the vicinity of the Lake development area and two were near Biscuit Basin in the Old Faithful area. They were obviously set fires but it was apparent that the individual responsible for starting them was an amateur at the business. The largest fire during the 1939 season was the Astringent Creek Fire which started about the middle of July, while the Chipmunk Creek Fire, which started on June 17 and burned over 1,189 acres before it was controlled, was the largest of the early 1940 season. Several other fires occurred during the month of June, due to the unseasonably high fire danger. A two weeks fire training school was conducted for all Yellowstone personnel during the month of April. The school was also attended by representatives of Rocky Mountain National Park, Regions I, II and III, and several representatives from the surrounding forests and Region I of the U. S. Forest Service. This was the most extensive fire school ever attempted by this Service, and it was agreed by all concerned that it was highly successful. Fire protection training was given to all CCC personnel as a part of their regular training program.

Building Fires: Three fires occurred in government buildings during the year, none of which involved more than minor property damage. Regular inspections were made for fire hazards in all buildings in the park and frequent special inspections were made of reported or suspected hazardous conditions in government-owned buildings.

Wood Cutting and Clearing Operations: Approximately 1,000 cords of fuel wood were cut for use by park operators during the year. Fuel wood needs for the National Park Service were taken care of by utilizing wood accruing from right-of-way clearing.

Trail Maintenance: During the 1940 fiscal year a minimum amount of maintenance was accomplished on approximately 950 miles of horse trails and 40 miles of foot paths by rangers, CCC smoke chasers and a small trail crew. In addition, heavy maintenance or construction was accomplished as follows: ERA Projects, Beaver Lake-Norris Junction, 7 miles; Bunsen Peak, 4 miles; CCC Projects, Mt. Norris, 4 miles; Observation Peak, 3 miles; Mallard Lake, 3 miles; NPS trail crew, Mt. Sheridan, 2 miles; Mallard Lake, 1 mile; Lone Star-Shoshone Lake, 1.3 miles.

Wildlife in the Park: Unusual opportunities afforded in Yellowstone Na-

tional Park for close observation, study and photography of a great variety and abundance of wildlife continued to be one of the leading attractions for park visitors. In addition to the park's black bears, which were widely distributed along the highways and which never cease to provide a high degree of thrill and adventure for the traveler, all interested visitors were able to observe and study the rare grizzly bears at Canyon, moose at Willow Park and at other points along the loop road, bison at the Antelope Creek range, antelope along the northern side of the park, Rocky Mountain bighorn on Mt. Washburn, and deer, elk, and numerous smaller animals around the park generally.

Many species of waterfowl and other birds provided an added attraction to the scientist and casual visitor alike, and abundance of fish in varied types of streams and lake lured the usual hordes of fishermen.

Census - Large Animals: Annual census of black and grizzly bears was obtained during mid-summer of 1939. Antelope, bighorn, bison and deer were enumerated in the winter and early spring of 1940. Due to light snowfall and other unfavorable conditions, no reliable figures could be obtained regarding the elk population and no census was attempted for moose. The following table shows counts and estimates of large animals for the fiscal year 1940:

Species	Actual Count	Estimate
Antelope	811	900
Bears, black	228	500
Bears, grizzly	104	300
Bighorn sheep	272	300
Bison	868	970
Deer	1,114	1,200
Elk - Northern Herd	no count	12,000
Gallatin Herd	no count	2,600
Interior of Park	no count	700
Moose	no count	700

Bears: Although the number of park visitors materially increased this year and the normal number of black bears frequented the roadways and campgrounds, the number of personal injuries from these animals decreased from 90 in 1939 to 74 in 1940. As during the past two years special effort was made to warn visitors against the dangerous practice of feeding bears or approaching them too closely, it is likely that a reduction in personal injuries was due to these efforts. Property damages due to bears, however, increased from 81 in 1939 to 92 in 1940. Total bear incidents decreased from 171 in 1939 to 166 in 1940.

Grizzly bears, as usual, were not seen along the roadways, although some occasionally visited the campgrounds during the night. In cases where grizzlies were found frequenting campgrounds they were trapped as a safety precaution and transported to more isolated areas. Thousands of visitors attended the evening exhibition at the Canyon Grizzly Bear Grounds and during the height of the season it was necessary to divide evening crowds into

two groups and schedule two exhibitions at different hours in order to handle park of automobiles and accommodation of people. A male grizzly was shipped to Memphis, Tennessee, on September 26.

Bison: Bison are now distributed geographically in four relatively distinct areas and size of each herd is shown in the 1940 census figures following: Lamar Valley herd, actual count 630; estimate 675; Pelican Valley herd, actual count 122, estimate 165; Hayden Valley herd, actual count 88, estimate 100; Fountain Flat herd, actual count 28, estimate 30. Winter feeding of the Lamar Valley herd extended from January 19 to March 18, 36¼ tons of hay being used. Thirty animals were held in corrals at the Buffalo Ranch during the spring months before being transported to the summer display pasture on Antelope Creek.

Two young bison, a bull and a cow, were shipped to the city zoo at Idaho Falls, Idaho, on March 12, and on February 22 an old steer was slaughtered for the Crow Indian Agency at Hardin, Montana. No other disposals were made during the year.

Elk: As in former years, plans were made to reduce the Northern elk herd by approximately 3,000 animals through live shipments for restocking purposes and hunters' kills in Park County in the State of Montana to the north of the park. Weather conditions, however, were such that only minor elk migrations occurred and it was impossible to capture more than a very small number of animals for shipment and very few drifted out of the park into legal hunting territory. Reductions during the fiscal year 1940 consisted of 122 killed in Montana by hunters, 16 live shipments and 68 miscellaneous deaths, making a total of 206.

Due to unfavorable spring weather conditions it was not feasible to make an elk census. Since a complete census has not been possible since the spring of 1938, it is hoped that conditions will be favorable for securing some reliable figures next year. Range studies were continued during the summer months and data compiled which will be of value in planning future management of the Northern and Gallatin elk herds.

Other Animals: Conditions during the late winter of 1939 were favorable for counting bighorn, deer and pronghorn. Census results show material increases in each of these groups. It is particularly encouraging to note that marked increases in the number of bighorn have been observed in each of the past three years.

Birds: A trumpeter swan census was made on August 15 and 16, 1939, covering Yellowstone Park and immediate vicinity. The Fish and Wildlife Service made an enumeration of trumpeter swan on the Red Rock Lakes Refuge and adjacent waters at the same time. Results of these counts are given below:

Location	Adults	Cygnets	Totals
Yellowstone Park and vicinity	53	17	70
Red Rock Lakes and vicinity	70	59	129

Fish Planting: During the 1939 season a total of 12,836,033 fish were planted in the waters of Yellowstone Park. Plants included eyed eggs, advanced fry and No. 1 and No. 2 fingerlings and are shown by species as follows: Blackspotted trout 10,021,978; Montana Grayling 2,061,590; Rainbow trout 472,565; Loch Leven trout 273,900; Eastern Brook trout 6,000.

Law Enforcement: One hundred forty-eight law enforcement cases were presented before United States Commissioner T. Paul Wilcox during the 1940 fiscal year as compared with 112 for the preceding year. The following summary is classified according to various types of offenses:

VIOLATIONS	No. of Cases	Persons Involved	Jail Sentences	Fine Imposed
Speeding	59	59		$ 611.50
Reckless Driving	22	22	10 days	330.00
Driving while intoxicated	8	8	6 days	200.00
Exceeding fish limit	8	14		175.00
Defacing natural features	8	9	2 susp.	29.00
Disorderly conduct*	4	4	10 ds. 30 min.	50.00
Assault	4	4	13 mos.	220.00
Molesting property	4	7	1 susp.	40.00
Poss. of unsealed firearms	3	6		115.00
Petty larceny	3	6	10 mos.	25.00
Molesting wild animals	3	3		60.00
Feeding bears	2	2		4.00
Engaged in private business	2	4		215.00
Fishing in closed waters	2	4	1 susp.	15.00
Taking fish by illegal means	2	2		50.00
Grazing animals in park	2	4		30.00
Trapping in park	1	1	1 month	---
Building camp fire without permit	1	1		2.50
Leaving campfire unattended	1	2		50.00
Dumping burning material in forest	1	1		5.00
Transportation of game without permit	1	1		25.00
TOTALS.....	141	164	24 mos. 26 ds.	$2,252.00

*Includes drunkenness. Note: Some fines and jail sentences were later reduced by the Commissioner.

Accidents: Rangers investigated a total of 153 automobile accidents during the year as compared with 158 during the 1939 fiscal year. On August 13, 1939, a CCC truck returning from a recreation trip plunged down an embankment near the Firehole Cascades, fatally injuring two enrollees, while 22 others suffered less serious injuries.

On May 19, 1940, a CCC truck on a recreation trip overturned between Lake and West Thumb, injuring 16 enrollees.

Five other persons sustained serious injuries from automobile accidents.

On June 20, two CCC enrollees were struck by a falling snag as they were walking to work on the Chipmunk Creek Fire. Enrollee James Hester died a

short time later, but Clifford Otey recovered.

Government-owned vehicles were involved in 28 accidents as compared to 24 during the 1939 fiscal year.

Investigation of Operators' Practices: As a follow-up of improvements made by the operators as a result of 1938 investigations, prices of all grocery items for sale in the park were checked and a comparison made with stores in five cities and towns outside the park. As a result of this check, prices were set in June, 1940, to a level approximately 15 per cent below those prices charged in 1939. This was due to wholesale prices being lower and the park visitors were given this benefit.

A constant check was continued to ascertain if operators were conforming to the wages and hours prescribed by the Secretary. During the fiscal year 1940 we received no complaints from employees. The cafeterias continued to be a source of some complaint, due to alleged poor food and too-high price levels. Several of these complaints were investigated and improvements made. The improvement of the cabins in the tourist cabin and lodge areas at Old Faithful resulted in numerous favorable comments on these accommodations, and when similar improvements are provided at the other areas in accordance with the Yellowstone Park Company's present plan, many of the complaints on cabin accommodations will have been eliminated.

Campgrounds: Public campground facilities are still inadequate for the load of campers. Work continued during the fall of 1939 and spring of 1940 on the Mammoth Public Campground. Trees from the park nursery were planted on this site and maintained by the CCC contingents.

During 1939 the blow-down area at Fishing Bridge was completely cleared and house trailer sites installed. A total of 26 were placed during the fiscal year 1940.

At Old Faithful the new campgrounds were laid out and work started during the fall of 1939. Only three sites were completed when the CCC workers were taken for other construction projects. No work was accomplished in 1940 to the end of June.

Surveys were made and plans drawn up for Canyon, Old Faithful and Fishing Bridge Campgrounds during the year.

ENGINEERING DEPARTMENT

The Engineering Department has general supervision of all park projects involving questions of engineering practice and design. It is responsible for the organization and direction of road construction and maintenance carried on by force account or day labor, and, in cooperation with the Protection Department, directs similar work on trail projects. Other projects include topographic surveys, preparation of maps, plans, and estimates for water, sewer, and power installations, and the design and construction of buildings and numerous other physical improvements.

The department is under the direction of Park Engineer C. A. Lord, with Assistant Park Engineer Frank A. Lucas and General Foreman Deate T. White as permanent assistants. Temporary engineers and assistants are added during the working season as the volume of engineering and construction may warrant. All CCC engineering and supervision of CCC work projects is carried on under the direction of the Park Engineer.

Highway maintenance consists of snow removal, slide and washout removal, general surface maintenance, and roadside protection, covering a mileage of 401 miles, 350 miles of which is within the park boundaries and 51 miles comprising approach road sections. Work starts with snow plows and snow removal crews late in March or early in April, followed up with general patrol maintenance as the roads are open and the establishment of 13 to 15 permanent section camps as the season progresses and travel increases. Early in September section crews are disbanded or reduced and the patrol system again employed until snow closes the park to traffic. Snow removal for the period totaled very nearly three million cubic yards, including the twice-weekly clearing of the Gardiner-Cooke section and some work beyond Tower Junction and on Swan Lake Flat to accommodate weekend visitors. Road oiling was carried on over approximately 60 miles of roadway, varying from dust palliative treatment on unreconstructed sections to more intensive road-mix jobs on sections which have been improved only to the stage of grading or the addition of base course material. Approximately one-half of this mileage was also sealed or armored with a treatment of rapid curing road oil and an application of native pit-run sand or rhyolite. Improved sections were under surface maintenance with patching and sealing where necessary.

A considerable amount of construction work was under way with funds set up from Public Works allotments, Minor Roads and Trails funds, and a 200-man ERA project. Public Works funds made possible light and power installations at Old Faithful and Lake-Fishing Bridge areas with a capacity of 150 kilowatts each and a 11 kilowatt installation at West Thumb. Under this same allotment was included improvements to water and sewer systems at Lake and West Thumb. The work at West Thumb included the construction of an entirely new collecting tank and pumphouse with a septic tank and disposal beds at a distance from any further proposed developments. A second Public Works allotment provided funds for a primary lookout tower on the summer of Mt. Washburn and three secondary

fire lookouts. These projects are all practically completed with a small balance of funds being held for minor contingencies that might arise before the expiration of the allotment.

The balance of the Roads and Trails allotment available from the previous year's funds for the betterment of trails and observation points in the Canyon area was also programmed for continuation of improvement of the Red Rock trail and the observation point at its terminus. At the end of the fiscal year the project was approximately 75 per cent complete, and will be finished by the close of the 1940 working season.

An ERA project was approved for the park with a 200 man quota. Under this project there was constructed in the new Canyon utility area a mess house with the necessary water and sewer facilities, roadways, and compounds. A rehabilitation and renovation of quarters in the Mammoth area was continued from the previous project as was the construction of road signs, general landscaping, and considerable road and trail betterment. Since it was impossible to obtain full quotas of manpower through the fiscal year for which the projects were approved, extension of time was allowed equivalent to the labor and material funds unexpended, and the projects will be continued throughout the 1940 work season, probably to close about the latter part of September.

Major road construction under the supervision of the Public Roads Administration included the completion of the surfacing of 12 miles on the South Entrance road, grading of ten miles of the East Approach road, together with the construction of one bridge on this section, completion of the Gardiner River bridge on the Mammoth-Tower Junction section, and the final bituminous mat on approximately 21 miles of the Northeast Entrance road. Construction projects under way but not completed during the period consisted of bituminous surfacing between West Thumb and Isa Lake and the bituminous surfacing of the East Entrance road from Lake Butte to Lake Junction and shorter stretches from Lake Junction for about four miles toward Canyon and south toward West Thumb for about three miles. Programmed under fiscal year 1940 funds, but not undertaken until late in the spring of 1940, was the grading of 5½ miles of the Tower Junction-Northeast Entrance section together with the construction of the Lamar River Bridge.

SANITATION DEPARTMENT

The Sanitation Department is in charge of Master Plumber William W. Wiggins, who works in close cooperation with Mr. H. B. Hommon, of the U. S. Public Health Service. The permanent personnel consists of Master Plumber Wiggins, Foreman Plumber Herman R. Biastoch, Plumber Wyman P. Benson, Janitor Arnold G. Quist, Plumber's Helpers Selmer J. Logeland and Ray C. Smuin, and Truck Driver Joe J. Way. During the summer season this force is augmented by a number of additional plumbers, plumber's helpers, sheet metal workers, truck drivers and laborers. The work of this department consists of the maintenance, operation and construction of sewer and water systems and incinerators and garbage hauling; also all heating systems, stoves, refrigeration plants and sheet metal work.

During the fiscal year this department installed one hot air furnace in cottage No. 10, one hot air type furnace heater in the commissary, three new steam radiators, four heating stoves, ten kitchen stoves, one oil burning hot water heating system, complete with twelve radiators and 2,500 gallon fuel oil tank; installed one hot water heating plant with four radiators at paint shop; installed 480 square feet of galvanized iron for fireproofing, also covered 11 doors and casings with galvanized iron for same, buildings No. 18 and No. 29; fumigated north end of Barracks Building; installed one fire hydrant and ten frost-proof hydrants at Mammoth Campground; installed 870 feet 3/4 inch galvanized water pipe, 810 feet 1 inch galvanized water pipe, 200 feet 4 inch galvanized water pipe, 140 feet 1 inch galvanized pipe for air line, 1,225 feet 6 inch sewer tile and 350 feet 8 inch sewer tile.

Installed nine new dry toilets with metal steels; installed at Old Faithful 2,000 gallon gas tank, 1,400 feet 8 inch sewer tile, and completed plumbing at power house; installed at West Thumb one 2,000 gallon gas tank, one 3 inch electric sewerage pump complete, one 2 inch electric sewer pump complete, 60 feet 6 inch cast iron pipe, 1,540 feet 6 inch galvanized pipe, 150 feet 8 inch tile and 1,050 feet of 1 inch galvanized water pipe; completed plumbing at power house.

Installed at Lake one 2 inch water pump, 600 feet 6 inch cast iron water pipe, 4,500 feet 8 inch cast iron water pipe, 240 feet 10 inch cast iron water pipe, 300 feet 1 inch water pipe, 100 feet 4 inch sewer tile, 500 feet 6 inch sewer tile and completed plumbing at Lake and Fishing Bridge power house.

Installed at Canyon one 2,000 gallon gasoline tank. Installed at Mt. Washburn 100 feet of tin cornice, 53 feet 1/2 inch copper tubing and 65 feet 3/4 inch copper tubing; installed refrigerator, gas lines and tanks and cabinet at Tower Falls mess house; installed at Buffalo Ranch 1,268 feet 6 inch cast iron water pipe and 100 feet 4 inch cast iron pipe; installed three 5,090 gallon fuel oil tanks at Old Faithful, West Thumb and Lake power houses.

ELECTRICAL DEPARTMENT

All of the electrical work, power plants and radio activities are under the supervision of Chief Electrician Lloyd W. Seasholtz. In addition to Mr. Seasholtz, the permanent personnel in the electrical department consists of Junior Radio Engineer Clyde P. Elliott, and Electricians Eri A. Allan, Robert E. Book, Charles M. Rector and George McMullin, all of whom act as power plant operators. The force is augmented during the summer season by a number of linemen, electricians, helpers and laborers. The position of Junior Radio Engineer was made permanent on November 30, 1939.

During the year three new Diesel electric power plants were constructed, one two-unit, 2400 volt, 60 cycle, 75 K.V.A. plant at each Old Faithful and Lake, and one two-unit, 2400 volt, 60 cycle, 50 K.V.A. plant at West Thumb. These power plants were constructed and installed

with PWA appropriations. The Old Faithful plant was put into service on May 10, 1940, Lake plant on May 16, and West Thumb plant on May 21.

Approximately 1½ miles of overhead power line, consisting of #8 W. P. triple braid wire, on 30-foot tank-treated poles, three phase, 2400-volt and 115/230 volt service was constructed at Old Faithful, along with the installation of 600 feet of #6, 3/c Parkway cable, 3500 volts, and 925 feet of #4, 3/c Duraseal cable, 600 volts.

Two power and telephone combination vaults were constructed at Old Faithful, one back of Haynes Studio and one near the Museum. The equipment in these two vaults consists of one 10 K.V.A. transformer, one 25 K.V.A. transformer, one five way and one seven way secondary distribution box, one four way primary sectionalizing box, two potheads, one time clock, and three watt-hour meters. The number of transformers in the Old Faithful area, not including the two in vaults, consists of three 15 K.V.A., five 10 K.V.A. and one 5 K.V.A.

The pump motors and starting equipment installed around Lake consists of one 7½ horsepower, 3-phase, 220 volt motor at the spring water pumphouse, one 15 horsepower, 3-phase, 220 volt motor at the Lake water pumphouse, one 7½ horsepower, 3-phase, 220 volt motor at the Fishing Bridge sewer pumphouse and one 7½ horsepower, 3-phase, 220 volt motor at the Fishing Bridge spray pumphouse. All motors are slip ring motors and have three point magnetic starters.

The total number of watthour meters connected to the new Diesel power systems at present is eighteen. All street lights and comfort station lights are shut on and off by automatic electric clocks at Old Faithful, West Thumb, Lake and Fishing Bridge.

Thirty-two government buildings, not including pumphouses and power plants were wired for electric service within the park interior. The basement of T. Paul Wilcox's residence was wired for lights, outlets and his new heating system. A new electric range and water heater was also installed in his kitchen. Building 6B was completely rewired and all new fixtures, outlets, switches, etc., installed. Apartments A and B in the Bachelor Building were rewired, with new fixtures and larger service wires installed. The new Canyon mess house was wired, using rigid conduit throughout and all the latest type fixture and protection equipment installed.

A new Kellogg universal type telephone switchboard was installed in the northwest end of the Barracks Building and placed in service on March 19, 1940. This new board has an ultimate capacity of 800 lines when one more position is added. The number of lines available at present on the new board is as follows: 100 common battery, 140 universal, 20 magneto and 10 trunk lines. The board is equipped for automatic, two-party, or private line ringing on the common batter circuits.

During the spring months 186 new common battery masterphones of the latest design were installed in Mammoth and all the old magneto phones removed for use within the park interior.

Between the Apartment House and the Condon residence below the power plant

plant, the following material was installed: 1,200 feet of #19 gauge, 51 pairs; 600 feet of #19 gauge, 26 pairs; 310 feet #19 gauge 11 pairs; all lead encased steel armored cable.

The telephone circuits between Mammoth, Old Faithful and Lake were brushed out and all dead trees cut down that leaned toward the lines.

All radio equipment through out the year has given very satisfactory service. During the Chipmunk Creek Fire early in June, one 15-watt set, four 3-watt, and one 15-watt set on the patrol boat and the 10-watt set in the Lake Ranger Station were used to very good advantage.

BUILDING, MAINTENANCE AND CONSTRUCTION

All carpenter work is under the general supervision of Master Carpenter T. A. Bowman while the painting is under Master Painter Thomas M. Thompson. These departments are augmented during the summer by several carpenters and carpenter's helpers, painters and laborers.

MECHANICAL DEPARTMENT

The Mechanical Department is under the supervision of Master Mechanic Robert R. Robinson, and the permanent personnel consists of six automobile mechanics, one blacksmith, one general mechanic, three motor truck drivers and one truck driver-warehouseman. During the summer season this force is augmented by the addition of several motor truck drivers, two or three handyman-mechanics, one blacksmith-horseshoer and two or three automobile mechanics.

The work carried on by this department consists of the maintenance, repairing and overhauling of all fixed and motorized equipment, which includes trucks, graders, tractors, cars, power boats and fixed equipment such as electric power plant equipment, water and sewage pumping plants, farm machinery, etc. In addition, the above-mentioned equipment and hundreds of small tools such as shovels, axes, picks, saws, forest fire pumps, etc., are reconditioned each year.

During the year one five-passenger sedan, one quarter-ton coupe pickup, three three-quarter ton pickups, two one-half ton pickups, and six three-ton dump trucks were purchased. One armored limousine was secured by transfer from the Procurement Division for use in the Yellowstone.

Classes in auto mechanics and machine shop practice for CCC enrollees from the two Mammoth camps were held in the shops during the winter months.

As our equipment replacement funds have been limited for the past several years, a great many of our trucks and graders have reached the age and condition where they can no longer be operated economically, and their upkeep and operating costs are almost prohibitive.

STOREHOUSE OPERATIONS

Storehouse operations as a whole during the 1940 fiscal year were very satisfactory. Approximately $400,000 in materials and supplies were handled through the warehouse, approximately $250,000 of which were handled through storehouse stock, the balance being issued or charged out directly to the various projects. The storehouse cards were reconciled several times with the Statement of Control and the difference brought down to less than $100 each time. Additional plans have been prepared by the Branch of Plans and Design looking toward the improvement of our warehousing facilities which will be accomplished by providing a separate receiving room in order that supplies and materials will not have to be received and issued through the same entrance. This will simplify considerably storehouse operations and will result in a much better all around efficiency.

MESS OPERATIONS

Fourteen regular National Park Service messes were operated and two ERA messes during the 1940 fiscal year. The new mess house at Canyon was completed by the ERA construction crews and was available for occupancy in July. This new mess house has a capacity of sixty employees and it is anticipated that the full capacity will be needed during the 1942 fiscal year. As usual, a great number of employees from other agencies were subsisted at the Service messes, those including PRA, Bureau of Fisheries, Weather Bureau and the Post Office.

CIVILIAN CONSERVATION CORPS

Personnel: Again this year much difficulty has been experienced in obtaining adequate qualified supervisory personnel to take charge of the CCC jobs. To the end of the fiscal year the full quota of personnel had not been obtained. The progress on jobs was retarded to a certain extent during the summer months due to the lack of supervisory personnel. However, during the winter good progress was made as a full quota of personnel was on the jobs.

Camps: Construction started on two new CCC camps, one named "Yellowstone" between Fishing Bridge and Lake, and the other named "Old Faithful" in the Old Faithful area. During the summer of 1939 four CCC camps operated in the park and during the 1940 working season, the number was increased to five.

Following is a resumé of the accomplishments of the CCC for the fiscal year:

Building Construction: One thousand eight hundred sixty mandays were used on building construction and with this amount of effort expended the following was accomplished: constructed garage at Buffalo Ranch; worked on dwellings in Power House area at Mammoth but no new ones completed, 98 mandays; worked on three lookout houses, 689 mandays; worked on pumphouse at Canyon, 73 mandays.

Other Construction Work: Thirty-six thousand five hundred ten mandays were expended on other construction jobs, which brought to completion the

following, in addition to partial completion of two sewer systems: minor road at Old Faithful; concrete curbing at Old Faithful; water and sewer lines at Canyon; one sewer and waste disposal system at Old Faithful; 6,443 feet of water lines; 17 garbage cans and stands; 12 table and bench combinations; 26 fireplaces; 15 miles telephone lines; 1 elk trapping corral; 2 Easter sunrise service platforms; 1.1 miles minor roads; 30 acres campground construction.

Maintenance Work: Six thousand seven hundred thirty-four mandays were used on maintenance work. Five thousand four hundred twenty-four mandays of this amount were spent in operating the forest nursery at the Game Ranch. Other work consisted of: campground maintenance; repair of elk corrals; maintenance of Mammoth Hospital; and trail and walk maintenance.

Miscellaneous work: Twenty-six thousand one hundred sixty- six mandays were expended on the following miscellaneous work: 900 square yards of bank sloping accomplished on Gardiner road; 7,319 mandays spent on fighting forest fires; 3,016 mandays spent as smoke chasers stationed at different points throughout the park and in training CCC enrollees in methods of fighting forest fires; 50 acres treated for tree insects, pest control; 43,730 trees planted; 3,404 mandays used in cleaning roadsides of boxes, papers, bottles and other debris left by park visitors; 4,003 mandays used in obliterating undesirable structures, dumps, gravel pits, etc.; 1,646 mandays used on contact work, mostly at the North Gate; 8 miles of park boundary marked; 6,259 mandays used in sawing and preparing wood for the Park Service utilities and in crushing gravel for construction of roads and concrete work; 519 mandays used by the Engineer's office assisting in surveys.

PARK OPERATORS

Activities carried on by the various operators follow:

YELLOWSTONE PARK COMPANY

This company operates all hotels, lodges, cabins, boats, transportation, horseback trips and most of the cafeterias and also has the wood selling concession. Following is a report on new construction work and new equipment purchases made by this company in connection with its various activities:

Gardiner: Purchased and installed 25 kilowatt motor generator set and switchboard panel together with controls. Purchased and installed telephone instruments on the telephone line from Gardiner to Mammoth, changing over all the Gardiner Company telephones from magneto type to common battery operation. For the transportation division there was installed at the Union Pacific tracks at West Yellowstone two 15,000 gallon storage tanks, together with a cyclone steel fence surrounding the lot. There was purchased one Ford sedan and one 1-ton Ford truck.

Mammoth: Cut out 50 per cent of dry trees along the route of telephone lines and cleared right-of-way jointly owned by the Government and the company on lines reaching all park locations. Thirty-six new rugs were placed in cottages; ten rooms recarpeted, kitchen and all ice boxes painted, barber and beauty shop air conditioned in connection with the Mammoth Hotel. The only Mammoth Lodge activity was repair work on the swimming pool. There was renewal and repair work only on the tourist cabins.

Old Faithful: At Old Faithful Inn one hundred new chairs were purchased for front porch; all logs in lobby scraped and treated; new curtains for log portion of hotel in halls and mezzanine; repaired and remodeled Art Shop; base outlets placed in all east wing rooms with bath and new night lamps installed; 20 rooms recarpeted and hall carpets from Lake installed in east wing of Inn; new cushions made for room chairs in east wing; one Hammond Organ purchased and installed. At Old Faithful Lodge the following work was accomplished: twenty-one 4-room cabins, new work, 95 per cent completed; forty-five 2-room cabins, new work, 95 per cent completed; eleven 1-room cabins, new work, 95 per cent completed; resetting and remodeling forty-three 2-room cabins completed; resetting and remodeling 16 single cabins completed; new girl's dormitory completed; hot and cold water, sewer and fire lines 95 per cent completed; electric wiring 95 per cent complete for entire lodge area; painting of entire lodge area 95 per cent completed; new screen doors; two new comfort stations 85 per cent completed; dishwashing machine from Mammoth Lodge remodeled and installed; 102 new metal bedsteads purchased; 176 double-size innerspring mattresses and 45 twin-size innerspring mattresses purchased; over 100 complete single beds transferred from Lake Hotel; 202 double-size bedspreads purchased; 202 single-size bedspreads purchased; 504 new floor rugs purchased; 102 new metal firewood holders purchased; new curtain rods and curtains ordered for practically all cabins; purchased and installed hot water heaters and one section switchboard feeder panel, moved location of boiler feed pump; purchased steam pipes and fittings for girl's dormitory. At Old Faithful Tourist Cabins

the following work was accomplished: remodeling and resetting of camp 90 per cent completed of all cabins; sewer and cold water installed and completed in 95 per cent of cabins; sinks installed; 90 per cent of cabins painted; dormitory addition to office; large number of new blankets purchased; interior of office rooms and linen and storage rooms re-arranged with additional counter space, etc. At the Old Faithful Cafeteria the following work was accomplished: boy's dormitory addition to Cafeteria completed; purchased and installed oil burning high pressure boiler, fuel tank, oil burner, hot water tank and heater; service counter extended approximately 14 feet; new three-rail nickel pipe tray slide installed; new additional 6-foot steam table purchased and installed; new additional cold Baine-Marie installed; new drinking fountain installed; steam pressure cooker, steam roasting kettle installed; new pantry installed with new sink and work table, shelving, etc.; inside of building remodeled to make more desirable space for guest tables; five new guest tables added; more modern guest wash and toilet room placed in new location with new fixtures; employees' dining room enlarged, providing more and ample seating capacity; new cooler installed to take care of fruit juices.

West Thumb: At West Thumb a large number of new blankets and pillows were purchased. Work consisted mostly of renewals and repairs.

Lake: The old wing of the Lake Hotel was torn down. At the Lake Lodge a new floor was laid and reinforcement for floor provided in employees' dining room, commissary, beauty shop, vegetable pantry and part of kitchen. Installed refrigerator for storage of ice to sell to the public; purchased complete set of new decorated china.

Fishing Bridge: Renewal and repair work was accomplished at the Fishing Bridge tourist cabins and cafeteria. At the boat house one acetylene welding torch was purchased and there was added to main building at Lake dock one bathroom back of living quarters. At Lake dock two rest rooms with section in between for pump and hot water heater was added to oil house. Purchased sewage pump, tank, controls and hot water heater; rewired old building and wired new addition; installed electric conduit and sewer lines between boat house and connections of this service under hotel.

Canyon: At the Canyon Hotel the following work was accomplished: repaired and painted over premises; fire prevention for hotel completed--purchased and installed fire exit fixtures including independent circuit from engine room switchboard to all fire exits in the building; re-piped the laundry sewer system; roughed-in and installed bathroom on third floor of girls dormitory; purchased and installed one Hammond Organ and Novachord; purchased one new Hobart meat chopper, one new glass washing machine, new fire hose house in rear of hotel, three large rubber mats for entrance doors, 50 new innerspring mattresses; made 150 new cushions for room chairs. At the Canyon Lodge there was accomplished considerable renewal and repair work throughout the premises; new chlorinating machine purchased and installed; also small building erected for housing this new chlorinator; rebuilt the boiler setting at the power plant; repairs to piping at river pumping plant. At the tourist cabins and cafeterias there was mostly repair and renewal work.

Camp Roosevelt: At this point new floors were placed in a large number of the cabins and considerable renewal and repair work was accomplished throughout the camp.

To meet the requirements of the present government specification, there was installed new gas tanks and the piping was rearranged at Hamilton's Fishing Bridge and Lake stations and Mrs. Pryor's Canyon station.

HAMILTON STORES, INC.

This company operates the general stores and gasoline filling stations at Old Faithful, West Thumb, Lake and Fishing Bridge and the curio shops in all of the lodges of the park.

At Old Faithful a wood lattice fence was constructed on the west side of the swimming pool to close in the clothes line next to the pool. Modern hydraulic hoists as well as car washing facilities were installed at the gas stations at Old Faithful, Lake and Fishing Bridge.

HAYNES, INC.

This company operates all the picture shops throughout the park, including those in the hotels and lodges, and operates the general stores at Tower Falls and Camp Roosevelt.

Haynes, Inc., built a warehouse at Old Faithful in the utility area; supplied a new electric plant and flourescent lighting in Canyon Shop; added a one-ton panel truck; at Mammoth Campground, Old Faithful and West Thumb supplied new outside cedar signs; painted the outside of the headquarters building at Mammoth and the general store at Camp Roosevelt; installed a wind-controlled draft on smokestack, a latticework fence and gate, and auxilliary flourescent lights in the general store at Tower Falls. Equipment added at Mammoth included a power driven meat grinder, kitchen range, automatic water heater, two typewriters, 12 beds, 13 wardrobe racks. Haynes Guide (192 pages) was completely rewritten and placed on sale at the opening of the 1939 season. Many new photographs were taken, as well as Kodachrome motion pictures and stills. Showings were made in Gardiner, Billings, Karsts Ranch and Butte, in Montana, and in St. Paul and Minneapolis, in Minnesota; and in the Departmental Auditorium in Washington, D. C. (illustrating a lecture delivered by Superintendent Rogers).

PRYOR STORES

The Pryor Stores in the park, operated by Pryor and Trischman, consist of general stores at Mammoth, Canyon and in the auto camp at Mammoth, as well as a cafeteria in the Mammoth auto camp and a coffee shop in the Mammoth headquarters area.

At the general store in Mammoth the heating system was extended and three employee rooms redecorated. In the store proper a new refrigeration unit was installed. Fixtures and mannequins for display purposes were purchased. The Canyon Store soda fountain refrigeration unit was enlarged and there were other

minor repairs made to the building. A new section of steam table was installed at the Mammoth Auto Camp Cafeteria, cooling units were installed for the small soda fountain in the Mammoth Auto Camp Store and there were other general repairs.

The kitchen in the Coffee Shop was rearranged to accommodate Hobart electrical equipment for the preparation of food. Ventilation was improved to permit adequate air circulation and a hood over the range was enlarged to eliminate fumes from cooking. Foundations of the building were strengthened and parts of floor replaced; the interior was painted; boys dormitory was redecorated and larger windows were installed for air and light.

Two Wayne electric pumps were installed at the gas station at Canyon and Mammoth and also a Lincoln grease gun was installed at each station. A 5,000-gallon gasoline storage tank was installed at Canyon.

MEDICAL SERVICE

The medical service in the park is under contract with Dr. G. A. Windsor of Livingston, Montana. Dr. Robert E. Fallis carried on the duties of Resident Physician under Dr. Windsor. A new medical contract was entered into by Dr. Windsor and the Department, which was approved May 10, 1940, to take effect January 1, 1940, and to have a life of ten years. The Mammoth Hospital closed on September 13 and all hospital cases were then handled in the Park Hospital at Livingston. The Mammoth Hospital was reopened June 10, 1940. Two hundred seventy cases were handled in the Mammoth Hospital during the fiscal year, which includes 135 sick; 33 surgical cases; 6 confirements; 8 heart cases; 81 accidents; 2 bear bites, 4 burns and 1 case of measles. Fourteen hundred one patient days were rendered at the Mammoth Hospital, which does not include patients taken care of in Livingston, the latter including all cases before and after the park season and heart and lung cases necessarily removed from high altitude during the season. Dr. Windsor traveled 5,750 miles, while his assistant traveled 7,000 miles. The ambulance covered 3,600 miles. There were 600 park calls made and 9 tours of the park, while 2,950 office calls were attended, which does not include the personal calls made in Livingston during the winter months. Forty-six hundred ten calls were handled by nurses in dispensaries; there were 20 bear bites not admitted to the hospital, and seven deaths occurred.

COOPERATING BUREAUS

The Public Roads Administration, U. S. Public Health Service, Bureau of Entomology, Fish and Wildlife Service, Forest Service, Post Office and War Departments, and the U. S. Weather Bureau have all cooperated with the officials of the National Park Service during the fiscal year.

Weather Bureau: Activities of the Weather Bureau office in Yellowstone Park this year, in charge of Charles L. Howard, Meteorologist, were a continuation of routine duties of a first order city station, plus continued snow research work. Three daily weather observations are taken and filed with the local telegraph office throughout the year so that the Yellowstone Park weather may be obtained by the public upon inquiry at any of the prin-

cipal cities of the country. These weather reports are given country-wide distribution over the Airways Teletype system, and this is one of the many stations that show the presence and progress of storms across the network of government airways in the United States.

In cooperation with the rangers of the Park Service, the high and low temperatures and daily precipitation are observed at ten stations over the park. This data is tabulated at Mammoth and sent to Cheyenne for publication with Wyoming climatological data. Snow research conducted by the Weather Bureau has been directed toward more accurate measurements of snowfall and eleven new type windshielded snow storage gauges have been installed at the following points: Bechler River, South Entrance, Old Faithful, Gallatin, West Yellowstone, a battery of three gauges at Northeast Entrance and three at Lake. Daily weather forecasts this season have been telephoned from the Weather Bureau office at Mammoth to the Ranger Stations at Lake, Canyon and Old Faithful in order to improve the service at these points.

Public Roads Administration: The activities of the Public Roads Administration were confined to the construction of new roads and bridges and were under the direction of Senior Highway Engineer C. F. Capes, of the District Office in Denver, Colorado.

Major construction included work on the construction of a bridge over the Lamar River and approximately five and one-half miles of new highway on the Northeast Entrance Road between Tower Junction and Cooke; placing of seal and cover coat on approximately 22 miles of the Northeast Entrance highway (this grading and surfacing project was completed last year and seal coat done this year); construction and oil surfacing of the highway from Lake Butte to Lake Junction and adjacent roads; construction of a parking area at Fishing Bridge; construction and oil surfacing was completed on the Grand Loop highway between Isa Lake and West Thumb and in the vicinity of Old Faithful; construction of new bridges on the East Entrance approach road over Mormon, Grinnell and Libby creeks and the North Fork of the Shoshone River. Construction and oiling of the South Entrance highway between Lewis River and South Entrance was completed in October, 1939; construction of the Gardiner River Bridge and approaches on the Tower Junction-Mammoth section was completed in November, 1939. Betterment work was in operation on the Northeast Entrance highway, on the East Entrance highway, and near Fishing Bridge.

POST OFFICE

The Post Office in Yellowstone National Park was in charge of Postmaster C. W. Anthony until February 11, 1940, at which time he was relieved from duty by Inspector John M. Knudson until March 1, 1940, when Joe D. Kurtz was appointed as Acting Postmaster. Mr. Kurtz was assisted by one regular clerk and a number of temporary clerks during the summer.

Mary Capes, the regular clerk, was married on November 18, 1939, to Russell G. Lambert, an employee of the National Park Service.

Advice was received that for the 1939 calendar year the Yellowstone Park

post office ranked highest among second class post offices in the State of Wyoming for bond sales, with an average of $100.50 per capita. Receipts for the post office at Yellowstone National Park for the fiscal year just ending showed a 15.8 per cent increase over the corresponding period last year.

Inspector Besselievre visted the park early in the season to assist in opening the sub-stations throughout the park.

NATIONAL REEMPLOYMENT SERVICE

The National Reemployment Service, which has had an office at Mammoth for several years for furnishing employees to the various contractors in the park, operated this office during the 1939 season, but due to the few construction jobs under way in the park during the 1940 season, this office did not reopen. The contractors were permitted to obtain their employees through the National Reemployment Service offices at Livingston and Cody.

MISCELLANEOUS

Deaths: Automobile accidents were responsible for two deaths during the fiscal year. Rocco B. Martello, 17, of Brooklyn, New York, and Norman Montero, 19, of New York City, CCC enrollees were killed when a truck overturned in the Firehole Canyon on August 12. One CCC enrollee, James Hester, was killed on June 20 when struck by a falling snag while working on the Chipmunk Creek Fire.

Julia Eldred, age 3, of Gardiner, Montana, died enroute to the Mammoth Hospital, following an injury when she was struck by a car on the streets of Gardiner July 23, 1939.

One death resulted from drowning when Wesley Hunt of Dacoma, Oklahoma, was drowned in the Yellowstone River while fishing near Mud Geyser on August 22

Three deaths resulted from heart attack--Mrs. Fanny Hobson, 76, of Washington Countrhouse, Ohio, on July 15; Charles Glazier, 65, of Livingston Montana, former Yellowstone Park Company employee, on August 24, at Canyon Lodge; Oscar A. Carlson, of Los Angeles, California, on June 20, at Fishing Bridge.

Myrtle Hefner, 63, of Lexington, Illinois, died of apoplexy July 29 at Old Faithful.

David Roman, day-old son of Mr. and Mrs. L. Roman, of Spokane, Washington, died at the park hsopital on August 10.

Births: The park's population was increased by eight during the year due to new arrivals in the families of park employees. A son was born to CCC Foreman and Mrs. Willis W. Welch on August 22; a son to District Park Ranger and Mrs. Rudolf L. Grimm on August 31; a son to Assistant Park Naturalist and Mrs. David DeL. Condon on September 28; a daughter to Clerk and Mrs. Fred Bertagnolli on November 11; a daughter to Assistant Chief Ranger and Mrs. Albert E. Elliott on December 11; a son to Night Watchman and Mrs. J. R. A. Whitlock on March 6; a son to CCC Chief Mechanic and Mrs.

Almon E. Dewing on March 12; and a daughter to Clerk and Mrs. Glenn D. Williams on March 21.

Marriages: Yellowstone romances culminated in four marriages during the year. Russell G. Lambert and Miss Mary Capes, Daughter of C. F. Capes of the Public Roads Administration, were married in Livingston, Montana, on November 18, 1939. Park Ranger John C. Fullerton was married to Miss Dorothy M. Hay of Wyoming, Pennsylvania, at Livingston, on June 13, 1939. Earl DuPaix and Miss Margaret Bacorn were married in the park chapel on November 18, 1939. Dean P. Bauer, son of Park Naturalist and Mrs. C. Max Bauer, was married to Miss Arletha L. Muntz, at Livingston, Montana, on September 29.

Special Visitors: The list of distinguished visitors during the 1939 season included former President Herbert Hoover; Honorable Harlan F. Stone, Justice of the Supreme Court; Honorable Lloyd C. Stark, Governor of Missouri; United States Senators Francis T. Maloney, of Connecticut; Sheridan Downey, of California; Gerald P. Nye, of North Dakota; Ernest Lundeen, of Minnesota; and Harry Schwartz, of Wyoming; U. S. Congressmen D. Lane Powers, of New Jersey; Leland M. Ford, of California; William P. Cole, of Maryland; S. O. Bland, of Virginia; Ambrose J. Kennedy, of Maryland; George N. Seger, of New Jersey; W. Sterling Cole, of New York; William E. Hess, of Ohio; and George J. Bates, of Massachusetts; Major General Albert J. Bowley, U. S. Army, Commander 9th Corps Area; Major General Herbert Jay Brees, U. S. Army, Commander 8th Corps Area; Lily Pons, opera and movie star, and her husband, André Kostelanetz, noted concert director; W. H. Jackson, pioneer photographer and member of the 1871 Hayden Survey party; Horace M. Albright, former Superintendent of Yellowstone and former Director of the National Park Service; Mrs. Ford Brown, prominent novelist and short story writer; Edwin L. Chloupek, Czechoslovakian minister; Ray Tucker, prominent newspaperman and columnist; and A. Anchorena, National Park Staff, Argentine Republic.

With the opening of the 1940 season Governors Nels H. Smith, of Wyoming, and C. A. Bottolfsen, of Idaho, attended the ceremonies at Old Faithful marking the opening of the roads for the 1940 season.

Dr. S. K. Padover, Special Assistant to the Secretary of the Interior, visited the park in May, 1940.

United States
Department of the Interior
National Park Service

ANNUAL REPORT

1941

7.874

Yellowstone National Park

Edmund B. Rogers, Superintendent

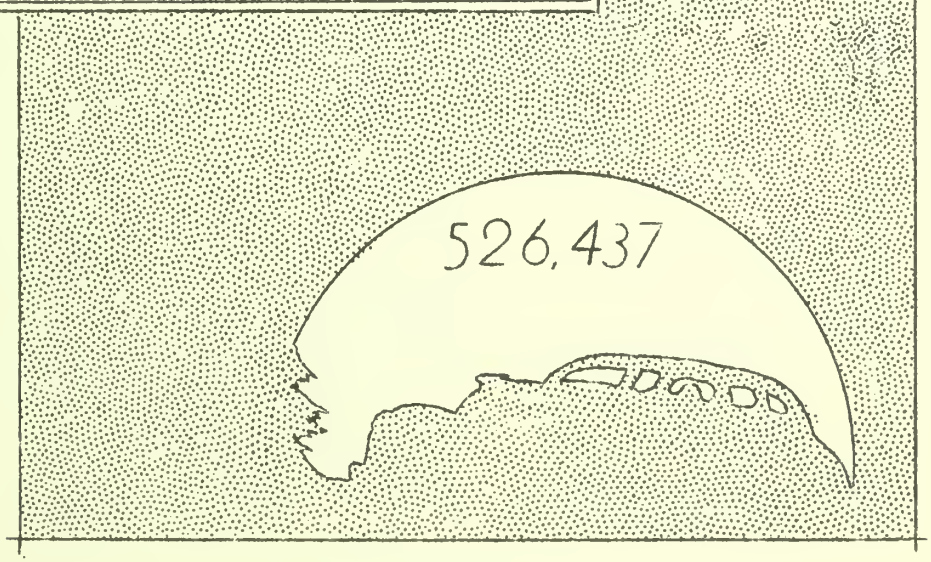
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

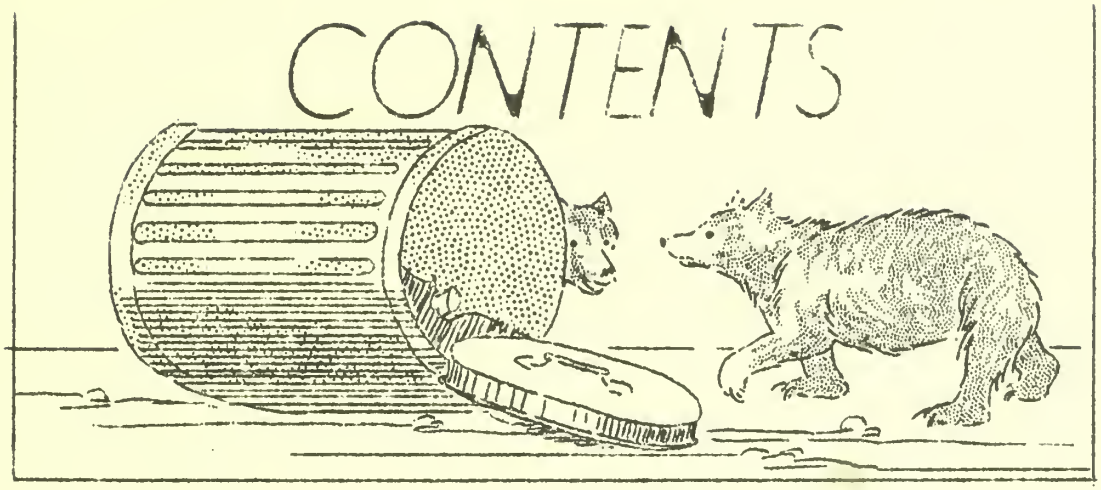
During the years 1927-28, and 1931 to 1940 on account of a shortage of funds it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1941 the shortage of funds makes mimeographing necessary.

Fifty copies of the Yellowstone report have been prepared for distribution to collectors who have the Yellowstone reports since the first issue, and to others who are interested in having copies for reference purposes.

The illustrations in this issue are the work of Assistant Park Naturalist Albert E. Long.

Edmund B. Rogers,
Superintendent.





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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1941 -

Edmund B. Rogers, Superintendent

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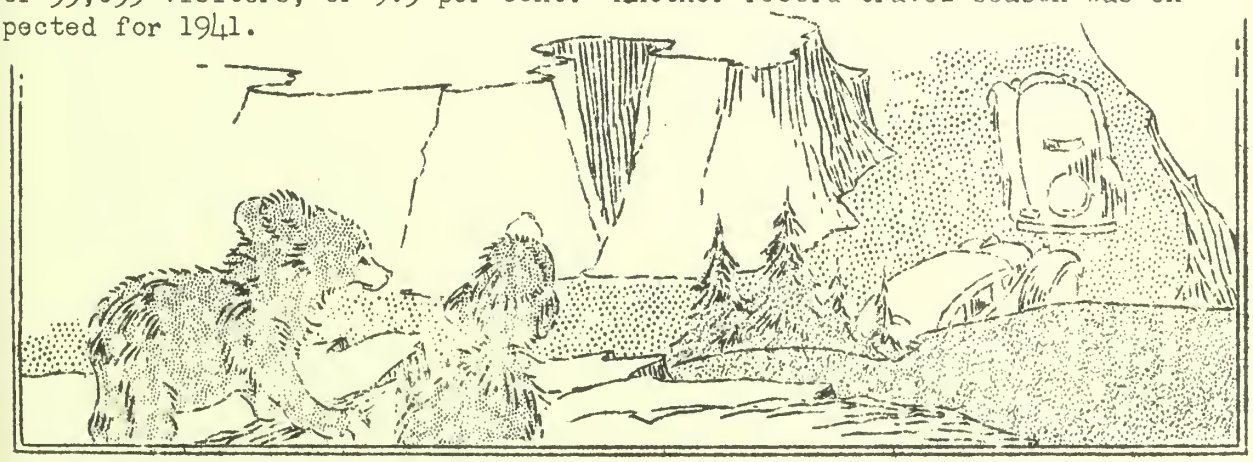
Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933, to June 30, 1934, and subsequent reports have covered the fiscal year periods. This report, therefore, for 1941 covers the fiscal year July 1, 1940, to June 30, 1941.

The report for 1941 is considerably smaller than the reports of previous years as the requirements from Washington no longer call for details of the various activities but a concise exposition of the general condition of the park area, the progress of work, new developments initiated and projects completed, special events of administrative or public interest, the status of fiscal affairs, etc., for inclusion in the Annual Report of the Director of the National Park Service to the Secretary of the Interior.

TRAVEL

Yellowstone's travel for the travel year from October 1, 1939 to September 30, 1940, exceeded all expectations and set a new high when 526,437 persons were recorded at the five gateways. This was an increase of 8.1 per cent over the previous travel year when 486,936 visitors were recorded and it was the first time that the half-million mark in travel was exceeded. The previous record travel was in 1937 when 499,242 persons visited the park. Travel during the fall and winter months was slightly behind that of last year but by the end of May, 1941, there was only a difference of 44 visitors to the same date last year. Travel during June increased 15.9 per cent over June of 1940 and by the end of the fiscal year the travel figures showed an increase of 33,035 visitors, or 9.3 per cent. Another record travel season was expected for 1941.



APPROPRIATIONS

The following appropriations for the 1941 fiscal year were available for expenditure by the Yellowstone Organization:

1411000.331	All Other Expenditures	$448,520.00
1411000.332	Passenger-Carrying Equipment	3,000.00
1411000.333	Maintenance of Roads in National Forests	10,440.00
	Total 1411000 Yellowstone National Park	$461,960.00
1411000.041	Big Hole Battlefield National Monument	1,980.00
1411000.051	Emerg. Recons. and FFF in National Parks	110,182.67
1411000.711	Custer Battlefield National Cemetery	6,815.00
140/11000.061	Forest Protection & Fire Prevention, 1940-41.	8,026.22
1411018.001 & .004	Physical Improvements, Buildings and Utilities, National Park Service	84,690.00
14X8037	National Park Service, Donations, T. F.	270.00
1CC 520-936	Civilian Conservation Corps, Yellowstone National Park and Morrison Cave State Park	119,566.66
	Total All Appropriations	$793,490.55

REVENUES

Revenues for the 1941 fiscal year totalled $458,703.79, which is an increase of $52,325.09, or nearly 13 per cent more than the revenues for the 1940 fiscal year when $406,378.70 was collected. The largest increase was in gate receipts, which jumped from $361,255.50 in 1940 to $398,525.00, an increase of $37,264.50.

CUSTER BATTLEFIELD NATIONAL CEMETERY

Administrative jurisdiction was assumed over Custer Battlefield National Cemetery on July 1, 1940. Considerable progress and improvements were made during the year in this area, including establishment of a Junior Historical Aide position to assist in the interpretative work in lieu of the two local boys formerly doing this work, who charged the visitors personally for their services, which were both inadequate and unsatisfactory. A new outside underground gasoline tank and pump were installed to eliminate the previous fire hazard of storing gasoline in drums within area buildings. Fire escape facilities were installed in residence buildings and two new cooking ranges installed. Considerable improvement was effected in the water and sewer systems and pumping plants. Considerable road maintenance was also accomplished.

PARK OPERATORS' BUSINESS

The business of the operators for the 1941 season was comparable to the increase in travel and all operators reported a profitable season. Business to the end of June during the 1941 season also was keeping pace with the travel and another good business year appears in sight for the operators.

FOREST FIRE PROTECTION

The park experienced one of its worst fire seasons during the summer of 1940. There was a total of 64 fires, resulting in a burn of more than 25,000 acres, suppression costs of which amounted to approximately $100,000. The serious fire situation greatly handicapped the park's organization and required the assignment of a number of permanent and experienced temporary men to fire work whereas the handling of the public and other ranger duties naturally suffered. With considerable rain experienced from the middle of May throughout June, the fire hazard for the 1941 season was not serious and only two Class A fires, caused by lightning, were reported by the end of June.

SOUTH ENTRANCE RANGER STATION FIRE

In addition to the devastating forest fires which burned during August, the South Entrance Ranger Station caught fire on the evening of August 13 and burned to the ground. All of the occupants of the building escaped without injury but nothing was saved from the burned structure. The fire is believed to have been caused by a defective kerosene refrigerator. Emergency funds were made available for the construction of a new ranger station and the work was completed and the new ranger station was ready for occupancy before winter set in.

CLOSING AND OPENING OF ROADS

Several storms occurred during the month of November, which interfered with travel, and the East, South and Northeast roads were closed to motorists on November 4, 1940. Travel continued over the Gardiner-West Yellowstone road until November 29. The road along the north side of the park from Gardiner to Cooke was kept open to travel throughout the winter. Due to a mild winter it was possible to open the park roads to travel considerably earlier than in previous years. The West Gate was admitting visitors by the first of April, 1941, while the East Entrance and all of the roads on the Grand Loop, except the Dunraven Pass road, were opened on April 23, the earliest in the park's history. The South Gate and Dunraven Pass were opened to travel on May 1 while the Red Lodge-Cooke road was opened May 23.

PARK OPERATORS

The Yellowstone Park Company continued on its program of modernizing and bringing up-to-date its present facilities. The tourist cabins and lodges at Old Faithful have all been provided with running water and similar improvements were underway at Fishing Bridge. At Lake most of the old Lake Hotel is being torn down and a combination of hotel and cottages similar to the Mammoth layout is programmed to take the place of the Lake Hotel and Lodge. The improved facilities are cutting down the complaints but due to the heavy travel the facilities at the Lodge and Tourist Cabin areas have not been sufficient to accommodate the demand. A number of complaints were registered with regard

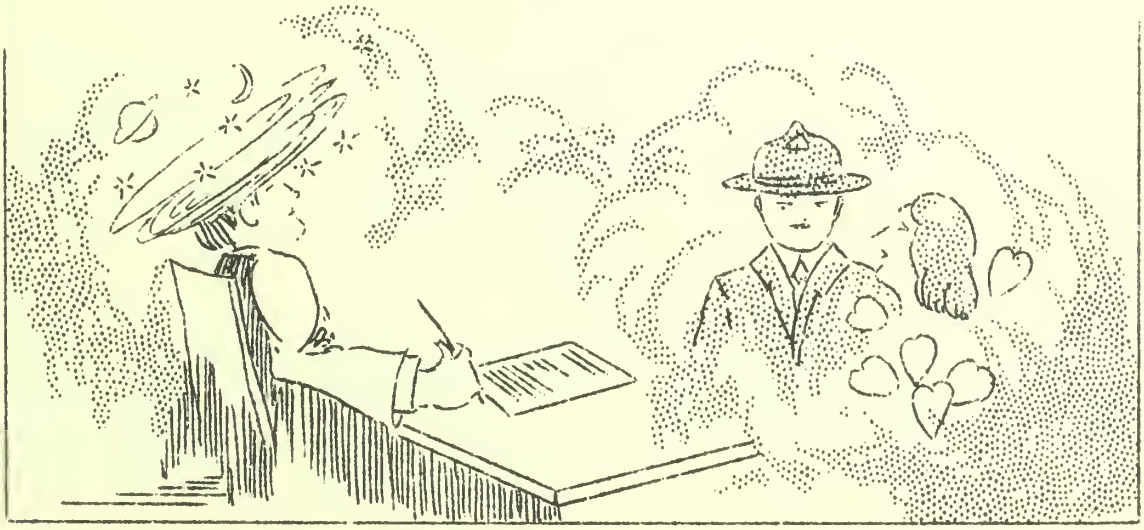
to poor beds but the company expects to place an order for new beds, inner-spring mattresses, and bed springs so as to provide better sleeping accommodations at all its operations in the park.

CLOSING AND OPENING OPERATIONS

Following the Labor Day travel the various operations in the park began to close, the first of which was Camp Roosevelt on September 4, 1940, Old Faithful, Lake and Canyon Lodges closed on September 6, while the hotels at Mammoth, Old Faithful and Canyon closed on the 12th. The last train visitors to the park arrived on the 10th and the final departure for rail visitors was September 12. The Western Air Express continued plane service to West Yellowstone until September 15 although the scenic flights over the park were discontinued on the 3rd. Tourist cabins and cafeteria service were available for late visitors until September 23, following which accomodations and meals were available at the C. A. Hamilton Stores at Old Faithful, Lake and Fishing Bridge until the roads were closed. The collection of the motor vehicle license fee was discontinued at the close of September 30 and on May 5, 1941, the collection was started for the 1941 season. The Old Faithful tourist cabins and cafeteria opened on May 10, 1941, while the Fishing Bridge cabins and cafeteria opened on May 24 and the Mammoth, Canyon and West Thumb tourist cabins and Canyon cafeteria on May 29. The hotels and lodges opened on June 20. Airplane service into West Yellowstone started on June 15 while the railroads began delivering passengers on June 20.

SELECTIVE SERVICE REGISTRATION

Registration under the Selective Service Act was conducted in the park on October 16 at four stations, Mammoth Hot Springs, Old Faithful, Lake and Canyon. Two hundred thirty-nine registrants were registered at the four stations, Mammoth having 102, Old Faithful 45, Lake 36, and Canyon 56. Nineteen states were represented among the registrants.



BEAR

The annual bear census was taken by districts throughout the park on August 3, 10, and 17, which resulted in an actual count of black bears of 199 and an estimate of 510, while the grizzly bear census showed an actual count of 93 and an estimate of 320. One hundred sixteen bear incidents, consisting of 75 bear damages and injuries to 41 persons, occurred to the close of September, 1940, and it was necessary to kill twelve bears for control purposes. Six injuries and 17 bear damages occurred during the month of June, 1941.

BUFFALO SHOW HERD

The buffalo summer show herd, numbering 36 animals, was released from the Antelope Creek pasture on September 16, 1940, and on June 11, 1941, thirty-seven buffalo were brought into the corral for display purposes during the 1941 season.

TRUMPETER SWAN

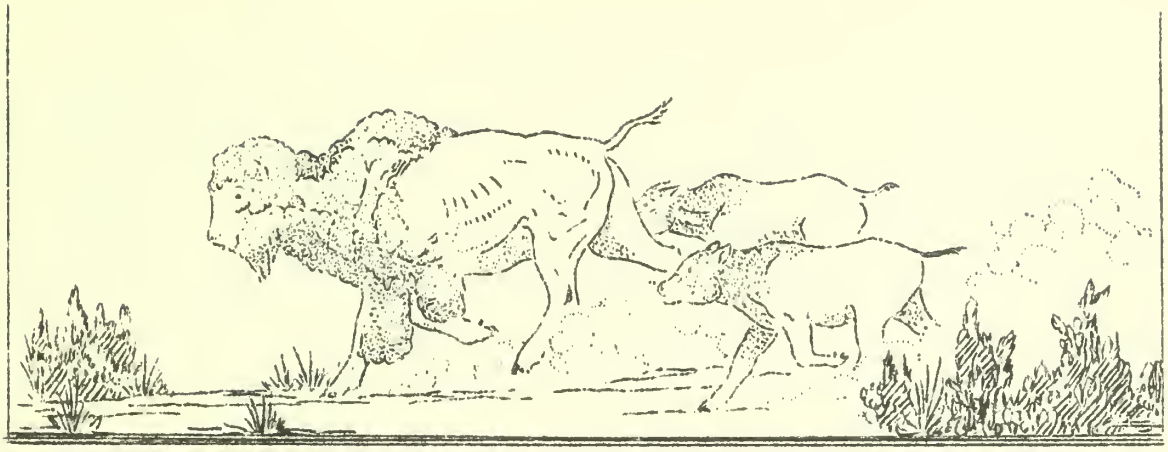
Due to the fact that plans for a trumpeter swan count were abandoned during the 1940 season because of forest fire emergencies and consequent lack of sufficient personnel, an estimate of the swan population in and near the park was made by the district rangers during early September. These estimates were based on observations made during the summer and gave a total of 57 trumpeter swan, including 43 adults and 14 cygnets. Since some important waters where swan are frequently located were not observed, these figures are considered extremely conservative.

ELK

The elk season in Gallatin County, which opened October 15, and closed on November 17, resulted in a reduction of 714 animals. Elk hunting in Park County, which opened on October 15 and closed on March 1, resulted in a reduction of 273 animals, whereas a figure of 3,000 animals had been set to be taken by hunters. The winter was exceedingly mild and few elk migrated out of the park to the hunting territory. Elk trapping operations, which were begun in December, were unsuccessful and it was possible to catch only eleven animals, which were shipped on February 24 to a location near Butte, Montana. Many of the requests for live elk shipments were unfilled due to the inability to trap them because of the mild weather.

ANTELOPE

A census of antelope was made on March 24 and although the animals were quite widely scattered and counting conditions were not ideal it was felt that the census was reasonably successful. Seven hundred eighty-four pronghorns were actually seen as compared to 811 in February, 1940. The total number of antelope is estimated at 900 head.



BUFFALO (BISON)

A census of the Lamar-Pelican buffalo herd was completed during March with a total of 753 animals being actually observed. Five hundred thirty-six were seen in the Lamar and Lower Yellowstone River valleys and 217 in the Pelican valley area. Attempts were made during March to secure a census of the buffalo in the Hayden valley and Fountain Flat areas but this undertaking was not successful due to light snow conditions and wide range of the animals in forested sections.

DEER

Due to unfavorable weather conditions, no attempt was made to secure a deer census as the animals were so widely scattered that successful enumeration was impossible. The same condition prevailed so far as an elk census was concerned.

BIGHORN SHEEP

In general, the condition of bighorns in the park has been good and only two known deaths occurred during the past winter. A census of these animals was made during late winter, with 200 being observed and the present total estimated at 300 head.

FISH PLANTING

A total of 18,067,414 fish were planted in the waters of Yellowstone National Park during the 1940 season. These included eyed eggs, fry, advanced fry and fingerling No. 1 to No. 5 by species as follows: Black-spotted, 13,981,291; Rainbow, 1,032,960; Loch Leven, 264,250; and Montana Grayling, 2,847,991.

BUFFALO REDUCTION

The buffalo reduction program started on January 6 and the animals this year were lured into the corrals by the use of hay, although drivers devoted one day to drifting a herd of buffalo from the lower Lamar River section to the vicinity of the ranch. One hundred seventy-five animals were slaughtered, the meat and hides of which were furnished to the various Indian agencies, while 30 live shipments were made. Scientific studies of slaughtered animals were made by Dr. E. R. Quortrup and Dr. F. D. McKenney of the Fish and Wildlife Service and by Dr. Hadleigh Marsh of the Montana Veterinarian Research Laboratory. Regional Wildlife Technician Daniel B. Beard and Wildlife Ranger Estes Suter of Wind Cave National Park were also present to make observations of the reduction program.

OLD FAITHFUL SEWER SYSTEM

Work on a new sewer system at Old Faithful progressed throughout the working months and by June 30, 1941, the system was practically complete and ready for operation.

MOUNT WASHBURN LOOKOUT STATION

The new lookout station on Mount Washburn was ready for use near the beginning of the fiscal year and a ranger-naturalist and a fire lookout were placed at the station for public relations and fire protection work. The improved facilities were responsible for a much larger number of visitors making the Mount Washburn trip and the service rendered was highly complimented by most of those who visited the top of the mountain.

ERA PROGRAM

The ERA program in the park continued throughout the summer and fall and the ERA activities were closed down entirely on November 23.

CCC ACTIVITIES

During the 1940 season there were five CCC camps located in the park as follows: YNP-1 Mammoth, YNP-3 Lake, YNP-5 Nez Perce, YNP-7 Glen Creek, YNP-8 Cascade Creek. Permanent camps, YNP-1, Mammoth and YNP-8, Glen Creek, continued throughout the winter. The camp YNP-8, Cascade Creek, was reoccupied May 7, Camp NP-15, Old Faithful, was occupied May 1 and NP-16, Yellowstone Lake, May 3. The Cascade Creek camp was to be abandoned July 1, 1941.

PUBLIC ROADS ADMINISTRATION ACTIVITIES

The Taggart Construction Company completed its surfacing and seal-coating job on the East Entrance and Lake Junction roads before the close of 1940 and the Northwestern Engineering Company also completed the seal-coating of the Northeast Entrance road. The Lamar River Bridge and the grading contract from

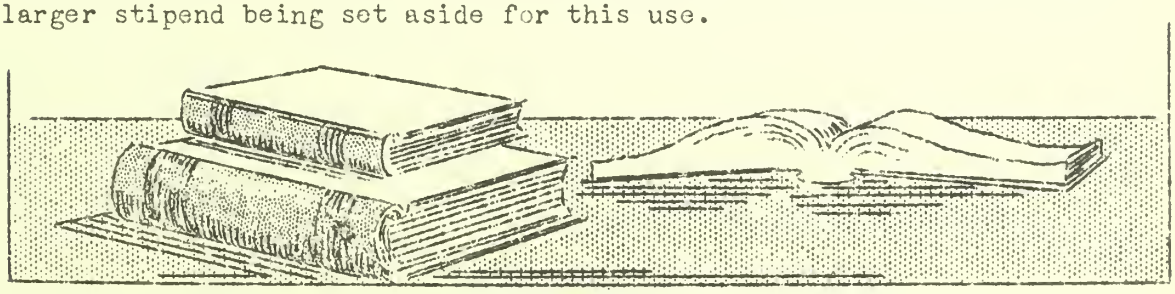
the Lamar Canyon to near the Yellowstone River Bridge was completed by the close of the working season by Lowdermilk Brothers. Work on the East Entrance approach road bridges continued throughout the fall and early spring by Peter Kiewit Sons Company and this project was to be completed early in the 1942 fiscal year. Lowdermilk Brothers started work on the Canyon road project during the fall of 1940 and began operations as soon as weather conditions permitted in the spring of 1941. This project will continue throughout the summer of 1941. Peter Kiewit Sons Company began work on the Old Faithful-Isa Lake project in early May and on May 25 E. A. Studer started work on the West Thumb development project.

LAND ACQUISITION

During the year very little actual progress was made regarding the acquisition of 220 acres along the north line of the park, including the property of the Child Estate, Roy Armstrong, Anton Stermitz and Lena Bassett Ross, valued at $11,647. As reported last year, options were signed and agreements reached between the government and the administrators of the Child Estate, Anton Stermitz and Lena Bassett Ross. A price for the property of Roy Armstrong, involving 50 acres more or less, has not been agreed upon. During the spring of 1941 a commission was appointed by Judge Berg of Livingston, Montana, to appraise this property. Their appraisal is dated April 28 and the price was set at $1,750.00. This price indicated was deemed too much by Special Assistant to the United States Attorney C. W. Buntin, in which the National Park Service agreed, and action has been taken to take the case to a jury.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The regular annual meeting of the Yellowstone Library and Museum Association was held in the office of the Park Naturalist on August 17. As it was not possible to complete all of the business on that date, the meeting was continued on August 23. The Yellowstone Library and Museum Association awarded a fellowship in history to Sidney R. Barsky, of the University of Wyoming, the stipend being $250. The subject chosen for investigation was "The Aboriginal Use of Yellowstone Park Lands". This is the first fellowship granted by the Association and if it proves successful the policy will be carried on year after year, probably with a larger stipend being set aside for this use.



YELLOWSTONE FOLDER

Following the close of the 1940 season a recommendation was made to Washington that only one government publication about the size and similar to the Motorists Guide be made available to be substituted for the present Motorists Guide and Circular of General Information booklet. The government publication for the 1941 season was issued in this form and has proven very satisfactory.

BLISTER RUST CONTROL

Three representatives of the Blister Rust Control Division of the Bureau of Entomology and Plant Quarantine finished a two week survey of the park in September, 1940. Investigations were made in a number of the five-needle pine areas to determine whether or not blister rust infection was present in the park. There were no infection centers found but it is the opinion of these men that it will be a matter of only a few years until the disease is found in the park.

POST OFFICE

Joe D. Kurtz, formerly employed as a CCC foreman with the National Park Service in Yellowstone National Park, received a permanent appointment as postmaster of the park on September 13, succeeding Claude W. Anthony. Mr. Kurtz has been temporarily filling this position since March 1, 1940.

SPECIAL DETAILS

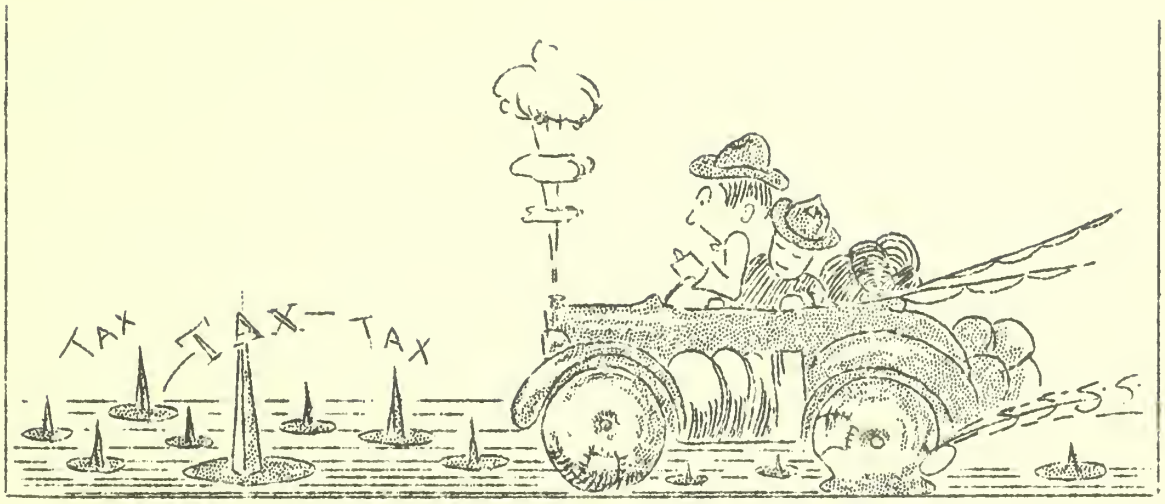
Assistant to the Superintendent Joffe was on a special detail to the Washington Office to assist in the office of the Park Operators Division on rate schedules. The assignment lasted from January 1 to March 7, 1941.

SUPERINTENDENT CONFERENCE

Superintendent Rogers attended a national park superintendent's conference in Washington from January 19 to January 29.

NATIONAL DEFENSE TRAINING SCHOOL

A training school for CCC enrollees, out-of-school youths, and employees of the National Park Service was initiated by the Montana State Vocational Education Department, working in conjunction with the CCC district headquarters at Fort Missoula, which is a part of the national defense program to train men for industry. Classes in auto mechanics, welding, machine shop practice, automotive maintenance and blacksmithing were held two nights each week and on Saturday afternoons with CCC and NPS employees as instructors. The classes continued until June 30, 1941, when it was necessary to close them due to lack of funds.



WYOMING SALES TAX

In accordance with the provisions of the Buck Act, the 2 per cent Wyoming state sales tax was imposed in the park beginning January 1. The provisions of the Act require that all park operators collect this sales tax in the future, the amount collected to be paid to the State of Wyoming.

MONTANA DAY CELEBRATION

The third annual Montana Day in the Park was celebrated on February 16, 1941, With ideal weather conditions prevailing 2,300 people in 558 automobiles were present. The Gardiner Commercial Club operated a portable ski lift near the Northeast Entrance for the benefit of skiers and other winter sport enthusiasts while hot dogs and coffee were served at the Buffalo Ranch to all visitors. Those who took part in the occasion were rewarded with seeing large numbers of wild animals along the road.

WINTER ACTIVITIES

Favorable weather conditions during the winter stimulated skiing and other winter sports and the Yellowstone Winter Sports Association was organized in February for the purpose of purchasing a ski lift for the use of Yellowstone Park residents and for the promotion of other winter sports activities. The ski lift was obtained and placed in operation while skiing conditions were still favorable.

PROTECTION DEPARTMENT PERSONNEL CONFERENCE

A conference of Yellowstone Park rangers and protection department personnel was held at Mammoth Hot Springs on April 28 to 30. The first day was devoted to police training with a member of the Billings Police Department acting as instructor and the remaining two days occupied a discussion of regular protection department activities.

FIRE TRAINING SCHOOL

Following the ranger conference a fire training school was conducted from May 1 to 7. National Park Service officials from the Regional Office and several parks participated in the conference.

TRI-STATE YELLOWSTONE CIVIC ASSOCIATION

A meeting of the Tri-State Yellowstone Park Civic Association, tying in with the early opening of the park for the tourist season, was held at Old Faithful Lodge on May 11. The following day the organization sponsored a celebration to mark the early opening of the park at which Governor Chase Clark of Idaho and E. V. Robertson, Cody, Wyoming, were the principal speakers. The Tri-State Yellowstone Park Civic Association has been instrumental in promoting the idea of a longer Yellowstone season, from May 1 to October 15.

USE OF NEZ PERCE CCC CAMP BY U. S. ARMY

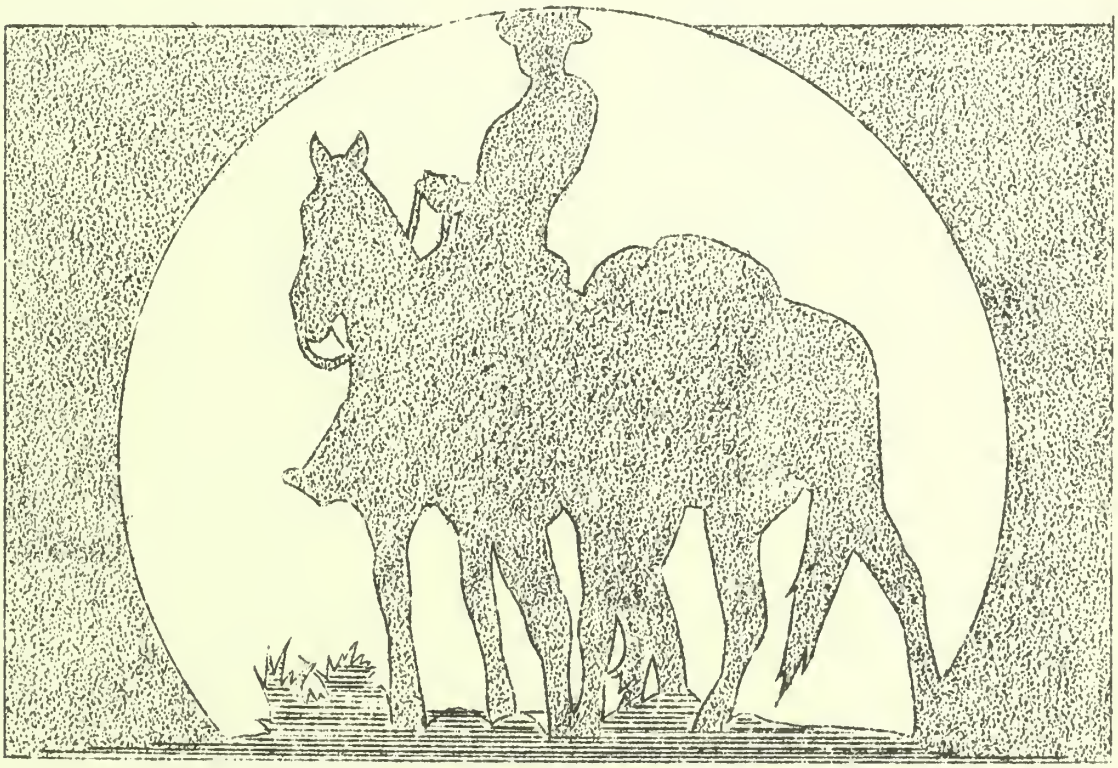
On June 16, 1941, a portion of the 20th Bombardment Squadron of the United States Army, Fort Douglas, Utah, began occupancy of the Nez Perce CCC camp for recreational purposes, with the expectation that some 200 members were to make use of the camp for periods of two weeks each during most of the summer.

VISITORS

Special visitors to the park during the 1940 season included: Mrs. Constantin Oumansky, wife of the Soviet Ambassador; Aaron Lane Ford, Congressman from Mississippi; Charles Wakefield Cadman, noted composer; Edgar J. Bergen, radio star and comedian; Mrs. William H. Corwith, national president, American Legion Auxiliary; Carl Zeidler, youthful mayor of Milwaukee; Samuel I. Rosenman, Justice of the New York State Supreme Court and advisor to the President; C. Diamantoupouli, Greek Ambassador; W. H. Jackson, pioneer photographer of the 1871 Hayden Survey; Gilbert Grosvenor, President, National Geographic Society; Honorable Roy E. Ayres, Governor of Montana; and Lewis R. Freeman, author and explorer. Mark Smith, President of Kiwanis International, was the first prominent visitor in 1941, arriving in April. Newton B. Drury, the new Director of the National Park Service, paid his first visit to the Yellowstone on September 10 and visited the area again in June, 1941. Other 1941 visitors to the end of June included Joseph G. Buch, Grand Exalted Ruler, B.P.O.E.; Earl Thieson, photographer for Look Magazine; Carlos Salamanco, Good-will Ambassador from Bolivia; and Cedric Adams, columnist and radio reporter for the Minneapolis Star Journal.

ACCIDENTS AND DEATHS

While the 1940 season had been free of serious accidents up to August, two accidents occurred during that month which resulted in two deaths. On August 26, W. F. Stuart, 59, of Silver Gate, Montana, an employee of the Northwestern Engineering Company, was killed when he was hit by a car driven by Judd Parker, of West Yellowstone and Cooke, Montana. On August 29, the second serious accident occurred, resulting in the death of John Davis, 48, of Daniel, Wyoming, an employee of Lowdermilk Brothers, Contractors. Mr. Davis fell from the Lamar River Bridge, which was under construction at that time, and sustained injuries which resulted in his death some two hours later. No other serious accidents occurred during the fiscal year. However, six other deaths occurred during the year as follows: J. Elmer Holden, 56, of Tensleep, Wyoming, died at the government employees camp at Canyon on July 5 of a heart attack; Raymond Smith McCann, 45, of Waukesha, Wisconsin, died at the Canyon housekeeping cabins on July 7 of a heart attack; Arthur L. Morgan, 61, of Richland, North Dakota, died at Mammoth Hot Springs on July 18 of a heart attack; M. Madeline Smith, 31, of Chicago, Illinois, died at the Canyon housekeeping cabins on August 2 of a strangulated hernia; W. S. Dixon, 76, of Shepard, Texas, died at the Canyon Lodge on August 11 of a heart attack; and Catherine Dempsey, 49, of New York City, died at the Mammoth Hospital on August 20 of acute encephalitis.



United States
Department of the Interior
National Park Service

ANNUAL REPORT

1942

Yellowstone National Park

Edmund B. Rogers, Superintendent

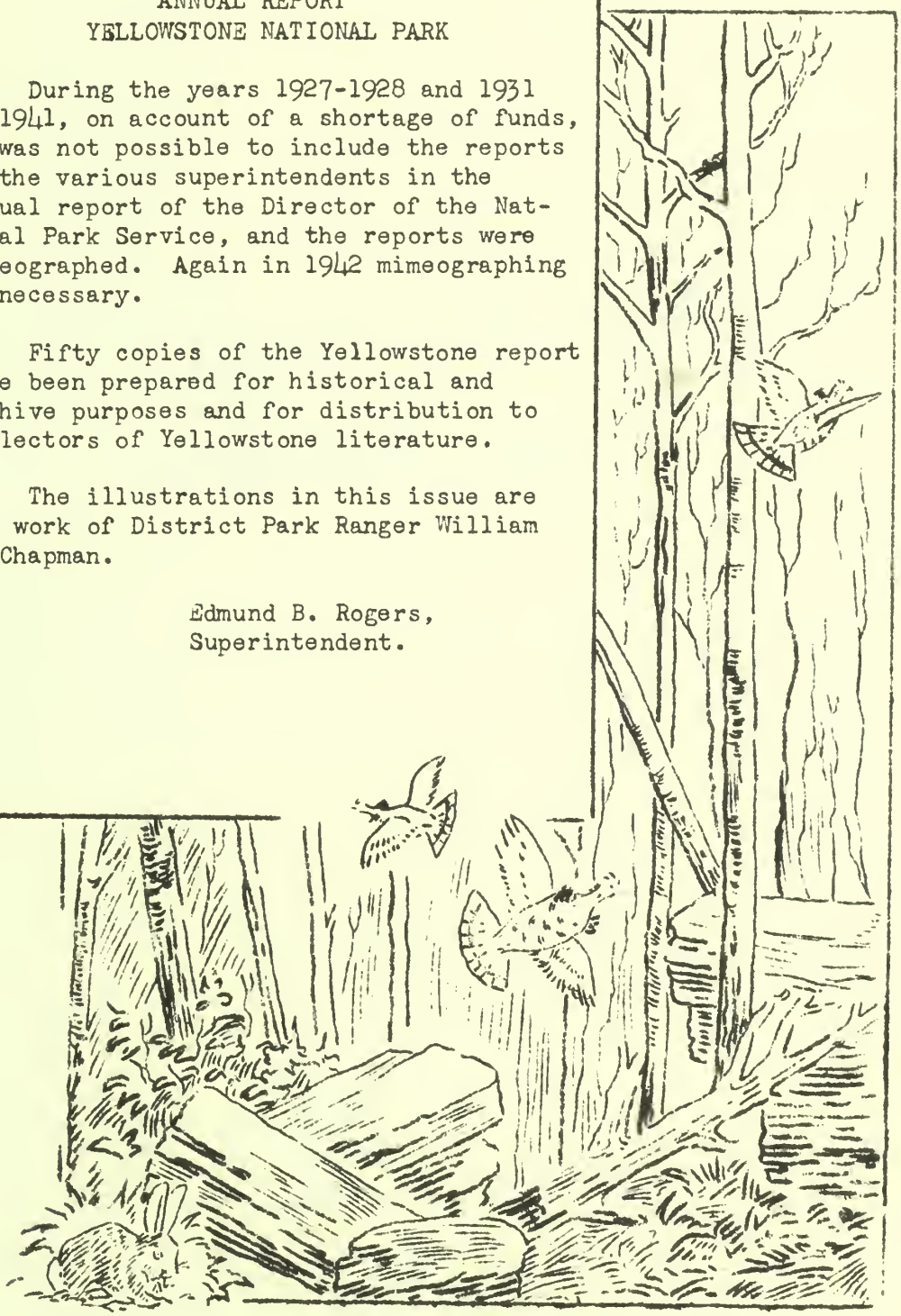
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-1928 and 1931 to 1941, on account of a shortage of funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1942 mimeographing is necessary.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

The illustrations in this issue are the work of District Park Ranger William S. Chapman.

Edmund B. Rogers,
Superintendent.



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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1942 -

Edmund B. Rogers, Superintendent

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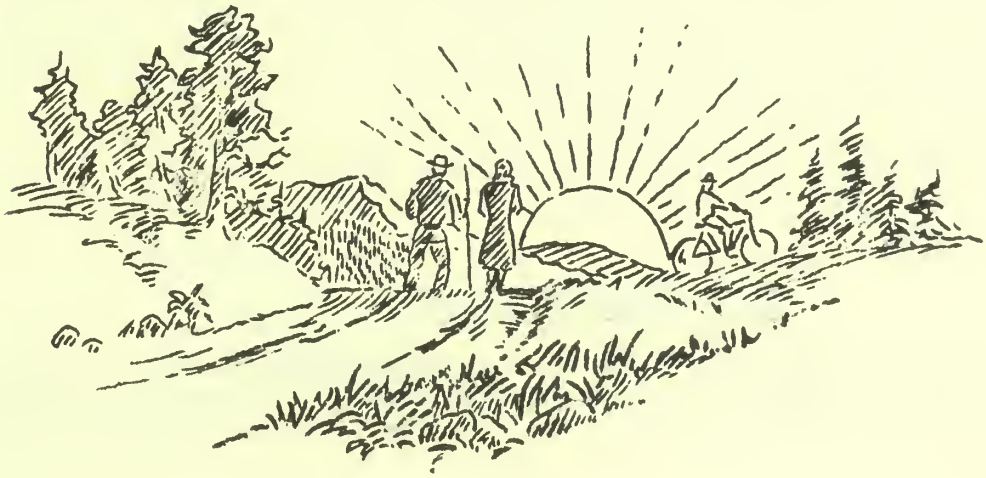
Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933 to June 30, 1934 and subsequent reports have covered the fiscal year periods. This report, therefore, for 1942 covers the fiscal year July 1, 1941, to June 30, 1942.

The report for 1942, as was the case in 1941,was considerably curtailed as the requirements from the Director's Office no longer call for details of the various activities but only the highlights of protection, development, visitor use, etc. The Superintendent's report is no longer needed for inclusion in the Director's brief annual report to the Secretary of the Interior but is prepared in order that the continuity of annual reports be not broken for historical and archive purposes.

TRAVEL

A new all-time record for travel was set during the 1941 travel year, which covered the period from October 1, 1940 to September 30, 1941 when 581,761 visitors were admitted at the five park gates as against 524,437 in 1940, an increase of 10.5%. Rail travel showed an increase for the travel year, 18,954 visitors as against 17,781 in 1940. The September travel was below that of the previous year and the fall travel was not up to expectations. The tire and car rationing throughout the country, gas rationing in the Eastern states, restrictions on air, rail and bus travel, and the war in general, had a material effect on the travel and business during the 1942 travel year. The month of June showed a decrease of 61.6% from that of the previous June, while the total travel from the close of the travel year on September 30, 1941 to the end of the fiscal year, June 30, 1942, showed a loss of 56.8%.



APPROPRIATIONS

The following appropriations for the 1942 fiscal year were available for expenditure by the Yellowstone organization:

1421000.331	All Other Expenditures.....	$ 452,400.00
1421000.332	Passenger-carrying Equipment.....	5,500.00
1421000.333	Maintenance of Roads in National Forests.....	9,940.00
	Total 1421000 Yellowstone National Park....	$ 467,840.00
1421000.041	Big Hole Battlefield National Monument.....	1,430.00
1421000	Total Devils Tower National Monument.....	9,448.19
1421000.051	Emerg. Recons. & FFF in N.P. - Yellowstone...	3,568.09
1421000.051	Emerg. Recons. & FFF in N.P. - Custer BNC....	285.00
1421000.061	F. P. and F. P. - Yellowstone National Park..	6,932.80
1421000.061	F. P. and F. P. - Devils Tower Nat'l Mon.....	25.00
1421000.711	Custer Battlefield National Cemetery.....	6,395.00
141/2100.051	Emerg. Recons. & FFF in N.P., 1941-1942.....	2,246.65
14X1018.001	Physical Imps., Bldgs., & Utilities, N.P.S...	62,100.00
14X1010.001	Roads & Trails, National Park Service.....	3,000.00
	Total all appropriations.....	$ 563,270.73

REVENUES

Revenues for the 1942 fiscal year totaled $434,539.08, which represents a decrease of $24,164.71, or approximately 5.3% less than the revenues for the 1941 fiscal year, when $458,703.79 was collected. This decrease was reflected mostly in the amount collected for franchise fees from the operators and was the result of a change in the method of payments under the park contracts in some cases.

PARK OPERATORS' BUSINESS

The business of the operators was pretty well in proportion to the increase in travel during the 1941 season, the Yellowstone Park Company showing an increase of 13.81% over the previous year, which was a larger increase than that of the travel. The decline in travel at the start of the 1942 season was likewise reflected in the business of the operators. None of the lodges was open for the season, the Lake Hotel was closed, and the only tourist cabins and cafeterias operated were at Old Faithful and Fishing Bridge. The park's transportation system was permitted to operate its buses on their regular schedules but no side sightseeing trips were permitted. The railroads started delivering passengers at the various gates on June 20 but no air service was available into West Yellowstone as in the past few years and there were available no air flights over the park.

FOREST FIRE PROTECTION

The summer of 1941 was quite wet, with more than normal precipitation. While this condition was not particularly pleasant from the standpoint of visitors, it reduced considerably the fire danger and no fires

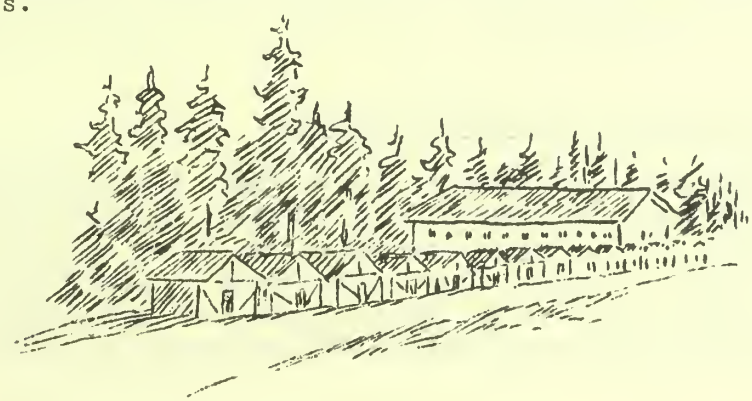
of any serious proportions occurred during the season. Several cloudbursts occurred in July, blocking some of the highways temporarily with washouts. A serious cloudburst occurred at Mammoth on August 18, which flooded portions of the Mammoth-Gardiner road and tied up traffic completely for some three hours. A severe wind of a twister type damaged a considerable number of trees in the vicinity of the Yellowstone Cascades near Yellowstone Lake, on September 6. A special appropriation of $3100 was necessary to provide for the cleanup of the area involved. There was considerable precipitation during the spring of 1942 and by the end of the fiscal year no serious fire danger had as yet presented itself.

CLOSING AND OPENING OF ROADS

The Red Lodge-Cooke road was closed to travel on October 1 and did not reopen until June 24. As adequate Government funds were not available for spring opening, it was necessary for the Montana State Highway Department to assist with the opening. The east and south gates were closed on November 4, which was identical with the closing dates in 1940. The east gate was reopened on April 15, the earliest in the park's history, while the south gate was permitting travel on May 1, the same date as the previous year. The road from Gardiner to Cooke was kept open for travel throughout the winter. The west gate was opened to travel on March 20. The collection of the motor vehicle license fee was discontinued on September 22, 1941 and was started again on May 30, 1942.

PARK OPERATORS

The Yellowstone Park Company continued its program of modernizing and bringing up-to-date its present facilities. The unusually heavy travel during the 1941 season taxed the accommodations to capacity at most of the operations, particularly the tourist cabins and lodges. The work of improving Lake Lodge and the building of new cabins, the placing of utilities in the Lake cabin area and the installation of utilities in the Fishing Bridge cabin area were underway throughout the summer and until late in the fall. The cafeteria at Fishing Bridge was enlarged. Work was resumed in the Fishing Bridge area in the spring. New mattresses and springs were obtained to improve sleeping accommodations in the tourist cabins and lodges. Most of the complaints received during the summer were registered against the tourist cabin accommodations, particularly the beds.



CLOSING AND OPENING OPERATIONS

By the end of September all park operations had closed, with the exception of the general stores at Old Faithful and Lake, which remained open to accommodate late visitors. Camp Roosevelt Lodge and tourist cabins closed on September 4, Old Faithful, Lake and Canyon Lodges, Mammoth and Thumb cafeterias, and Thumb tourist cabins on September 8, Mammoth, Old Faithful and Canyon Hotels on September 12, Mammoth cafeteria on September 16, and Old Faithful and Fishing Bridge cafeterias on September 23. The Haynes Tower Falls store closed on September 27 and the Pryor Coffee Shop at Mammoth on September 30. The Mammoth Hospital closed on September 13. The Old Faithful swimming pool closed on October 6 and the Lake store on October 31. The general store at Old Faithful closed on November 10, leaving open only the general store at Mammoth to take care of permanent residents. Early visitors to the park for the 1942 season were accommodated at the general stores at Old Faithful and Lake but on May 27 the tourist cabins and cafeterias at Old Faithful and Fishing Bridge opened. Because of the expected heavy decline in travel, these cafeterias and tourist cabins were the only ones operated for the season, together with the hotel and cottages at Mammoth, and the hotels at Canyon and Old Faithful. The swimming pools at Mammoth and Old Faithful and all general stores and gasoline filling stations were operated.

SELECTIVE SERVICE REGISTRATION

Registration under the Selective Service Law for young men who had reached the age of 21 since October 17, 1940 was conducted in the park on July 1, 1941. Registration offices were operated at Mammoth, Old Faithful, Lake and Canyon, and 153 persons were registered. The third registration under the Selective Service Act was conducted on February 16. Thirty-two persons were registered at the registration office at park headquarters. Authority was granted by the Selective Service officials in Wyoming to register park employees at isolated stations by either radio or telephone and four persons availed themselves of this privilege in order to avoid long ski trips to reach the registration office. This was a unique procedure in registration. The fourth selective service registration for men between the ages of 45 and 65 was held in the park on April 25, 26 and 27. Sixty-two persons were registered, 31 at Mammoth and 31 in the interior of the park. The fifth registration under the Selective Service Act for men born on or before January 1, 1922 and on or before June 30, 1924 was conducted in the park on June 29 and 30. A total of 239 men was registered, 49 at Mammoth, 80 at Fishing Bridge, 32 at Canyon and 78 at Old Faithful.

ARMY CAMP NEAR WEST YELLOWSTONE

The Zone Construction Quartermaster, U. S. Army, arrived at West Yellowstone on August 8 with a group of Army officers and engineers to look over the location for a proposed new Army Camp to be located near West Yellowstone. The site selected near Henry Lake in Idaho was to comprise some 100,000 acres and the camp was to house some 30,000 men. Work got underway immediately by the contractor and before the end of the month

a bad employment situation had developed due to the contractor taking some of the best employees of the park, both from the Government and operators, and offering them much higher salaries. Several Civil Service clerks resigned in order to accept these higher wages. Considerable work was done on this project but before the winter set in it had been abandoned and all structures which had been erected were torn down and the site cleared.

EMPLOYMENT SITUATION

The establishment of the Heart Mountain Relocation Project some 13 miles from Cody on the Cody-Powell road for Japanese evacuated from the West coast created a real employment problem during the 1942 travel season. Due to the extremely high wages paid in connection with this project, good workmen flocked to Cody and it was very difficult to hire and keep men during the season. There was a serious shortage of satisfactory employees for work in the park and the operators and contractors, as well as the Government, had difficulty keeping their forces complete.

DEVILS TOWER NATIONAL MONUMENT

On July 15, 1941 the Devils Tower National Monument was transferred to the jurisdiction of the Yellowstone National Park with the Yellowstone Park Superintendent as Coordinating Superintendent. On January 19, 1942 Dwight E. Richards, the clerk assigned to Devils Tower National Monument, was transferred to the Yellowstone to carry on the fiscal and other clerical work of the monument.

WAR DECLARED

On the morning of December 7, 1941 the Japanese attacked Pearl Harbor and declared war upon the United States. The following day Congress declared war upon Japan. On December 11 Germany and Italy both declared war upon the United States and Congress, on the same day, retaliated by declaring war upon these two powers. Before the end of the month automobile tires were being rationed throughout the United States, which action was to have a vital effect on travel to the national parks. A tire rationing board to handle the tire rationing in the Yellowstone was appointed early in January, consisting of Chief Clerk Neilson, Chief Ranger LaNoue and Senior Foreman-Mechanic Miller. Sugar rationing went into effect on May 5.

BEAR

The annual bear census was taken on August 4, 11 and 18 and from actual counts it was estimated that the grizzly bear population numbered 300 and the black bear 550. These figures compare with 320 and 510 in 1940. The bears of the park caused numerous damages to persons and property and it was necessary to kill a number for control purposes as in previous years. A check at the end of the season showed 90 personal injuries to park visitors, 72 damages to park visitors' property, and 30 damages to Government, concessioners' and contractors' property.

Twenty-six bears were killed for control purposes during 1941, as against 12 during 1940. In 1940 there were 41 personal injuries to park visitors, 47 damages to park visitors' property, and 28 damages to Government, concessioners' and contractors' property. An 11-year average showed 59 personal injuries to park visitors, 74 damages to park visitors' property, 57 damages to Government, concessioners' and contractors' property, with 32 bears killed for control purposes. By the end of June 1942 considerable difficulty had already been experienced with black bears, especially at the Old Faithful, Lake and Canyon areas. Grizzly bears were frequenting developed areas at Lake and Canyon and trouble was anticipated. Nine personal injuries and 24 property damages by bears were reported for the season to June 30 and 9 bears were killed.

BEAR ACCIDENT

An unusual accident occurred in the park on June 24 when Kent Watson, 4, son of Park Ranger and Mrs. W. Verde Watson, was attacked without provocation by a black bear near the family residence at Old Faithful. The youngster was badly mauled, bitten through the skull and about a quarter of his scalp was taken off, one of the bear's teeth penetrating his brain. However, the youngster was expected to recover. This is the first case of its kind known to have occurred in the park.

CANYON GRIZZLY BEAR GROUNDS

Due to a shortage of ranger and naturalist personnel and the anticipated light travel, the closing of the cafeteria and lodge at Canyon and the small amount of patronage expected at the Canyon Hotel, responsible for lessening the food supply for bears, as well as the prohibition against side trips for park buses, the grizzly bear grounds at the Canyon were not opened for the 1942 season. The elimination of this "bear show" at the Canyon, because of circumstances caused by the war, may afford the opportunity for the Park Service to discontinue this attraction for all time and thus remove one of the unnatural conditions which has grown up in the park through popular demand.

BUFFALO SHOW HERD

The buffalo summer show herd was kept in the Antelope Creek buffalo pasture for the 1942 season, with 37 buffalo, including 19 bulls, 11 cows and 7 calves.

BUFFALO

Feeding of the buffalo in the Lamar Valley was begun on February 10. The reducing of the Lamar Valley buffalo herd by 200 animals was begun on March 16. The actual butchering process was contracted for a low bid of $1.25 per animal and the work was begun on March 25. Seventeen animals were butchered each day as compared to 11 for the previous year. The carcasses were trucked daily to refrigerator cars at Gardiner. The program was completed by the slaughter of 183 buffalo on April 6 and all carcasses were shipped by the seventh of April. All of the meat, heads and hides were furnished to various Indian agencies. Following the slaughter operations, 17 live buffalo were shipped to the Crow Indian agency and San Rafael Grazing District in Utah.

ELK

The elk hunting season in Park County, Montana, which closed on the evening of January 31, was fairly successful in bringing about a considerable reduction in surplus elk, although the desired reduction of at least 3,000 animals was not obtained. New regulations were issued by the Montana State Fish and Game Commission covering the hunting procedure in Park County. These provided for an intermittent season whereby hunting of elk in the main area was permitted from October 15 to November 15 and from December 16 to January 31. The theory of the closed season apparently was that elk might be induced to migrate into the area north of the park during this time and become distributed in such a manner that more orderly hunting conditions might result when the season was opened again. Weather conditions, however, continued so mild in the latter part of November and early December that no migration occurred. Several shipments of live elk were made in February, including two crated females to Buenos Aires, Argentina. A summary of reduction figures showed 2,071 elk killed by hunters, 126 accidentally killed in trapping, from gunshot wounds and from natural causes, and 127 through live shipments, or a total of 2,324. Considering this reduction and a 15% anticipated increase through the birth of calves, it was estimated that the northern elk herd by the fall of 1942 would number about 11,700 animals.

In accordance with a new policy, tests for Brucellosis infection were made on January 22, 23 and 24 on a group of 38 elk, mostly healthy animals, with the assistance of Dr. R. L. Sudheimer of the Bear River Wildlife Disease Research Station, Fish and Wildlife Service. The tests showed negative results and approval of the Fish and Wildlife Service and of the office of the Director of the National Park Service was granted for continuing shipments of live animals with intermittent testing. A second Brucellosis test was made on February 19 by Dr. Howard Welch of the Montana State Veterinary Research Laboratory and blood samples from

48 animals were taken. All of the animals tested negative with the exception of two bull calves.

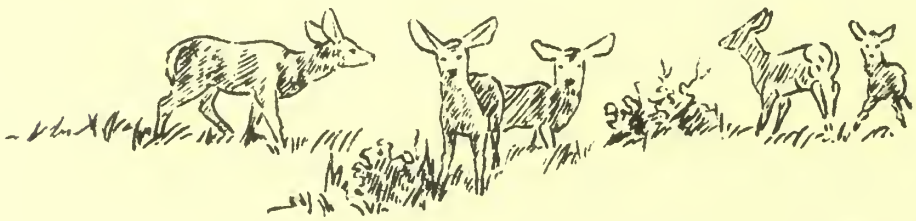
On April 19 a true and albino elk was observed near Crown Butte in the Gallatin area by Assistant Chief Rangers Barrows and Skinner and Dr. Hadleigh Marsh of the Montana State Veterinary Research Laboratory at Bozeman. The animal, a young cow, was completely white except for a slight shading of bluish-gray down the front portion of the shoulder. While a number of cream-colored elk have been reported on different occasions this is the first known authentic case within the vicinity of the park where the animal appeared to be a true albino.

DEER

The deer population in general appeared to be in very good condition, with the exception of some in the vicinity of Mammoth, which were subsisting to a large degree upon the Mammoth garbage dump and were engaged in destructive browsing of landscape shrubbery. Twenty-six of these animals were trapped in February at the Mammoth elk trap and transplanted to the Lamar Canyon, 25 miles from Mammoth. Although somewhat difficult to handle, the animals were transplanted without serious injuries. Upon release the deer remained in a group and began exploration of their new surroundings. The transplanting was undertaken merely as an experiment.

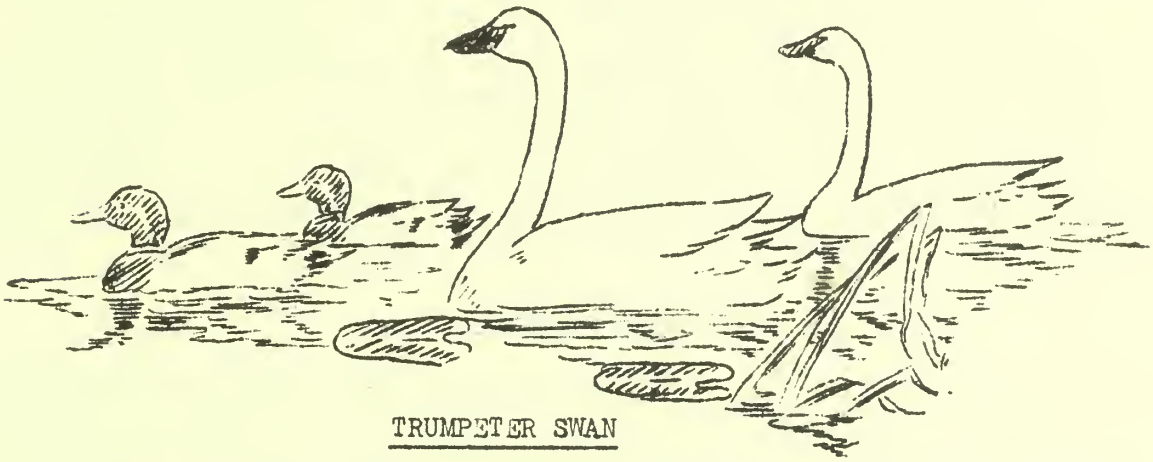
BIGHORN SHEEP

During the period from March 9 to 12 an attempt was made to obtain a census of the bighorns in the park. However, due to unfavorable weather conditions for counting and the fact that personnel was needed for more pressing projects, complete coverage of the bighorn range was not accomplished. Observations made during the counting showed a total of 139 bighorns actually seen. Most of these appeared to be in healthy condition. A special report on bighorn, covering studies made in 1939-1940, was prepared by Park Ranger Walter H. Gammill.



ANTELOPE

No census of antelope was attempted but these animals appeared to be faring very well. Their condition was materially benefitted through the acquisition of hay on the former Anton Stermitz ranch. The hay was not harvested, being left standing in the field, but all fences were removed. It is estimated that there are about 900 antelope in the park.



TRUMPETER SWAN

A trumpeter swan census was held on August 15 and 16, during which period all of the possible swan waters of the park were visited. These birds were found on 17 different lakes or ponds and on one stream. Swans with cygnets were located on only 6 different lakes. The total count for the park was 44 adults and 15 cygnets, a total of 59. A count of trumpeter swans on the same dates was made of Red Rock Lakes and surroundings under the direction of the Fish and Wildlife Service. Reports were received from refuges in Wyoming and Oregon and the count showed 99 adults and 54 cygnets, or a total of 153 outside the park. All counts of trumpeter swans in the United States totaled 212.

WATERFOWL CENSUS

A waterfowl census, in cooperation with the Fish and Wildlife Service, was held during the latter part of January, the principal counting being on January 24, 25 and 26. A summary of the census at Yellowstone showed an actual count of 1690 ducks, 346 Canada geese and 66 trumpeter swans, as against an actual count in 1941 of 1528 ducks, 240 geese and 61 trumpeter swans. The 1942 estimate was 2568 ducks, 408 Canada geese and 93 trumpeter swans.

FISHING AND FISH PLANTING

During the 1941 season all of the waters of the park were fished more heavily than ever before but during the month of June 1942 the fishing intensity declined due to a decrease in travel. At the checking stations visitors reported taking a total of 153,059 fish as compared with 153,593 fish during the 1940 season. These figures, of course, do not include many fish taken and consumed within the park by visitors

and employees and represents only a fraction of the actual number taken by anglers. The fishing season closed October 15 and reopened on May 30. Through cooperation of the National Park Service, the Fish and Wildlife Service and the Montana Fish and Game Department, a total of 15,790,232 fish were secured to restock the park waters during the 1941 season. Total egg collections of blackspotted trout at Yellowstone Lake made by the Fish and Wildlife Service were 38,919,650, being 4,536,313 less than the collections made during the all-time record year of 1940. At Trout Lake the Fish and Wildlife Service collected a total of 1,071,714 rainbow trout eggs and 1,002,615 fish and eggs of this species were planted. Total Montana grayling egg collections at Grebe Lake were 5,019,403 and 2,834,974 were actually used for planting within the park. A total of 480,000 Loch Leven trout were secured from the Emigrant and Big Timber State hatcheries for planting, the largest number in recent years. For the first time since 1890 Mackinaw trout fingerling were secured for restocking the heavily fished waters of Lewis Lake, 5,890 being developed at the Bozeman Hatchery for this purpose.

NATURALIST SERVICE

During the summer of 1941 twenty-two ranger naturalists were employed but for the 1942 season only sixteen were authorized. A considerable change in the naturalist program was instituted because of the war. No guide caravans were conducted, the grizzly bear grounds at Canyon were not opened to the public and other services were curtailed. However, all museums remained open. The park naturalist was given the responsibility for the coordination of a program for Civilian Defense, which consisted of teaching courses in first aid, law enforcement, forest fire suppression and civilian defense. The park naturalist, Dr. Bauer, was absent from December 10 to March 7 on a special assignment in Death Valley National Monument.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The Yellowstone Library and Museum Association carried on the project of selling books and also hired two young ladies to re-work the Yellowstone herbarium. A librarian was employed for half time work for the summer. The regular annual meeting of the association was held in the park naturalist's office on October 1. Chief Ranger LaNoue and Assistant Chief Ranger Peyton were elected as new directors. A special meeting of the board of directors was held on May 7 at which it was decided that only one more issue of Nature Notes should be sponsored by the association and the publication then be discontinued for the duration. Nature Notes have been a continuous publication since June 1924.

TWENTY-FIFTH ANNIVERSARY OF N.P.S.

The twenty-fifth anniversary of the establishment of the National Park Service was celebrated throughout the National Park Service areas on August 25 and in the Yellowstone the campfire programs were scheduled for special talks on history by naturalists, with special music and introduction of park officials. All of the programs were rained out with the exception of the one at Mammoth, which was carried on according to schedule.

C.C.C. ACTIVITIES

At the beginning of the 1942 fiscal year there were four C.C.C. camps in the park, Camp NP-1, Mammoth, NP-7, Glen Creek, NP-15, Old Faithful, and NP-16, Lake. The main jobs of the camps consisted of grading the Mammoth housekeeping area, campground maintenance, maintenance of nursery, work in the Old Faithful, Lake and Fishing Bridge cabin areas, fire presuppression and fire suppression. On August 17 Camp 15 left West Yellowstone for Dubois, Idaho and Camp 16 left Lake for Jenny Lake in the Jackson Hole, leaving only the two permanent camps at Mammoth. Due to the difficulty in enlistment, the combined enrollment strength of the two permanent camps was about equal to the strength of one full camp. The opportunities offered for employment by National Defense agencies and enlistments in the military forces resulted in a scarcity of enrollees for the C.C.C. On November 19 Camp NP-7 was abandoned and the men from that camp were transferred to NP-1, leaving only one permanent camp in the park. About the time the two companies were combined, 50 men arrived from the Fifth Corps, making a company strength of 173 in Camp NP-1. On May 25 supervision of C.C.C. activities was transferred from Park Engineer C. A. Lord to Assistant Chief Ranger Curtis K. Skinner. On June 1 C.C.C. Company 560 from Downey, Idaho was moved in to reoccupy NP-16 at Lake. A considerable number of enrollees from each camp left the organization for various reasons in June and the company strength was only about 50% by the end of the fiscal year. It was anticipated that the C.C.C. would be liquidated shortly and the Yellowstone camps abandoned.

ARMY ACTIVITIES

A portion of the Twentieth Bombardment Squadron of the United States Army, Fort Douglas, Utah, continued to occupy the Nez Perce C.C.C. Camp for recreational purposes throughout the 1941 season, the camp being abandoned on September 6.

YELLOWSTONE NURSERY

The Yellowstone nursery was operated up to the close of May 1942, when the project was disbanded. Twenty-seven thousand lodgepole pine transplants were lifted and shipped to Glacier Park and a small number of miscellaneous plants were removed from the nursery and planted in the Mammoth area. All land under cultivation in the nursery area, except that which was occupied by transplant beds, was plowed, harrowed and disced and seeded with crested wheat grass.

PUBLIC ROADS ADMINISTRATION ACTIVITIES

Work on the east entrance approach road bridges and surfacing by Peter Kiewit Sons' Company, the Canyon road project by Lowdermilk Brothers, the Old Faithful-Isa Lake Project by Peter Kiewit Sons' Company, and the West Thumb Development Project by E. A. Studer and Sons Company continued during the summer and fall of 1941 until October. Work was resumed in the spring but there was a serious shortage of labor and it was difficult to get the necessary equipment repairs due to low priority so that progress

was generally unsatisfactory. Some work was done on the Canyon project to place the area around the Canyon Hotel in satisfactory travel condition but the contractor was given authority to suspend the project for the duration of the war. The other three contractors expected to continue work throughout the summer and it was anticipated that the east entrance project and the West Thumb project would be completed before the end of the working season.

LAND ACQUISITION

During the year all proceedings had been completed with regard to the acquisition of 220 acres along the north side of the park, including the properties of Lena Bassett Ross, the Child Estate, Anton Stermitz and Roy Armstrong. In October 1941 Mrs. Ross was paid $1,000 by the District Court at Helena for her property, on December 5 the Child Estate received $690.00 for its property from the U. S. District Court at Helena, and on December 11 Anton and Agnes Stermitz were paid $9,392 as part payment on account of their claim totaling $9,700. The case of the United States Vs. Roy N. Armstrong et al., Civil No. 74, was opened in Helena on January 10, 1942 and concluded on the 15th. The Jury awarded $5.00 per acre for 41.7 acres under consideration, plus $1,600 damages for severence from the balance of the Yellowstone land, a total of $1,808.50.

U. S. WEATHER BUREAU

The U. S. Weather Bureau at Mammoth was closed on August 29 and the observer, Charles Howard, departed for Denver to engage in special Weather Bureau work. The Yellowstone station has been maintained since December 1903. While there will no longer be a station at Mammoth one is being operated by the Weather Bureau at West Yellowstone outside the park. The rangers throughout the park will continue to make weather observations.

U. S. POST OFFICE

Two carved stone bears were installed in front of the Mammoth Post Office on October 10. These bear sculptures were designed by Mrs. Gladys C. Fisher of Denver.

MEDICAL SERVICE

Dr. R. E. Fallis, the resident physician employed by the park medical officer, departed on October 31 to enter private practice at Kalamazoo, Michigan. He had been employed since January 16, 1938. He was succeeded by Dr. Jack Hays, former C.C.C. medical officer at Mammoth, who reported for duty on December 15.

WINTER ACTIVITIES

Skiing conditions during the winter were very good beginning in January and a number of persons living in the vicinity of the park as well as park residents enjoyed the ski field near Undine Falls. A ski tow operated by the Yellowstone Winter Sports Association was in operation

for its members and others who wished to use it. A fine wildlife display was also enjoyed by those who traveled the north side road between Gardiner and the Buffalo Ranch.

MONTANA DAY CELEBRATION

The Fourth Annual Montana Day celebration was held on February 22. Although the occasion received sufficient publicity, the attendance was very disappointing, due perhaps to the bad weather and the effect of tire rationing on automobile travel. Only 92 cars, carrying 294 persons were checked in at the north gate, whereas last year 558 automobiles carrying 2,300 persons were registered.

SNOPLANE OPERATION

The first real trial of the operation of a snoplane for travel in the park was made by Glen Simmons of the Reclamation Service on March 17, accompanied by park ranger Stevens. The couple made the trip by snoplane from the south entrance to Old Faithful in two hours and thirty-five minutes and were at West Yellowstone 7 hours and 40 minutes from the time of their departure. Considerable time was spent at the Old Faithful region in getting the vehicle over the dry ground.

PUBLICITY

Due to an effort to conserve paper and following the policy of the Department not to attempt to particularly encourage travel because of the gasoline and tire rationing and restriction on travel, no publicity director for the 1942 season was engaged by the park operators. The park has had a publicity director each summer for more than 20 years.

BANDITS' CAPTURE

Considerable excitement prevailed at headquarters on November 15 when a car crashed the gate at Gardiner and failed to halt for two rangers who had been stationed on the highway to stop them. The car was pursued for several miles when it ran off the road and upset on an icy spot near Crystal Spring, some twelve miles from Mammoth. The occupants of the car, wanted for armed robbery near Three Forks, Montana for transporting a stolen car across state lines, took to the woods and a manhunt of some two hours resulted in their capture east of Obsidian Cliff. Three youths, Fred Thompson, 18, Dean Upton, 19, and Harold C. Bauer, 19, all of Mitchell, South Dakota, were taken into custody without an exchange of shots and later turned over to the F. B. I. agents for prosecution. All three later received prison sentences.

ARRESTS

Sixty-three cases were tried before the U. S. Commissioner during the fiscal year and fines totaling $1,101.50 were assessed, along with jail sentences totaling 40 days. The cases consisted of 40 traffic violations, 9 fishing violations, 3 cases of assault, 3 disorderly

conduct, 2 carrying unsealed firearms, 2 petty larceny, 1 failure to extinguish campfire, 1 defacing natural features, 1 malicious damage to property and 1 hitchhiking.

FIRE AND DEFENSE TRAINING SCHOOL

The Region Two fire and defense training school was held in the park May 18 to 23, inclusive, with representatives from various areas in the district, as well as several rangers from Glacier and representatives from the Washington office and Region Four headquarters.

WAR TIME EFFECTIVE

On February 9 all clocks and other timepieces in the park were advanced one hour, placing the park on Mountain War Time.

BURIAL DISCOVERY

Human and other bones were found in a ditch being dug for a water line in the housekeeping cabin area at Fishing Bridge on August 26. The find was investigated and dug up by assistant park naturalist Condon. It proved to be a burial containing almost a complete skeleton of a human being, remnants of two dogs and a number of artifacts.

BIRTHS

Two births occurred in the park during the fiscal year, a son to Mr. and Mrs. J. Stanley Fillmore at the Mammoth Hospital on August 2 and a son to Mr. and Mrs. Verne H. Holmberg at the Mammoth Hospital on August 6. Both Messrs. Fillmore and Holmberg were National Park Service employees.

ACCIDENTS

The first serious accident of the 1941 season occurred on July 23 when Major J. T. Flock, 35, of the 9th Bombardment Squadron, Fort Douglas, Utah, was drowned in Yellowstone Lake. His companion on a fishing trip near West Thumb was Captain R. H. Carmichael, 28, of the same squadron, who was rescued after six hours in the water. Their boat capsized due to a severe storm. Major Flock's body was never recovered. A second serious accident occurred on July 31 when a C.C.C. truck containing 23 enrollees overturned as the truck was returning from work at the Game Preservation Ranch. Ten of the occupants of the truck were badly injured necessitating their being sent to the hospital. One of the injured enrollees, Fred Jacques, Route 2, Fairmont, West Virginia, died at the Mammoth Hospital on August 3 as a result of his injuries. Two other deaths occurred in the park during July, Paul B. Klugh, 62, Summit, N. J., who died of a heart attack at the Fishing Bridge tourist cabins on July 14 and Earl R. Ward, 39, Auburn, Kansas, who died at the Mammoth Hospital following an operation on July 18. Edward J. Ossenbeck, 46, Cincinnati, Ohio, died at the Mammoth Hospital on August 1 of an acute hemorrhage.

DEATHS

Yellowstone Park's original "Old Timer", James McBride, died at the Chico Hot Springs Hospital at Emigrant, Montana on May 3, after an illness of several months, at 78. He was the park's first scout, its first chief ranger and its first fish and game warden. He was retired on December 31, 1928. He was buried in the cemetery in Gardiner on May 8 in his Park Service uniform.

W. H. Jackson, pioneer photographer, a member of the Hayden Survey Party which visited the park in 1871, died in New York City at the age of 99 on June 29. Mr. Jackson's photographs of the park aided greatly in having the Yellowstone established as the first national park in 1872.

VISITORS

Special visitors to the park during the 1941 season included: Herbert Hoover, former President of the United States; Jack Dempsey, former heavyweight champion of the world; Judge John N. Sternhagen and Judge John W. Kern of the U. S. Board of Tax Appeals; Joseph J. Frelinghuysen, former U. S. Senator from New Jersey; Charles Kramer, member of Congress from California; John J. McKee, member, Board of Governors of Federal Reserve System; U. S. Senator H. H. Schwartz of Wyoming; U. S. Congressman John Lesinski of Michigan; U. S. Senator Pat McCarran of Nevada; A. O. Stanley, Chairman, International Joint Boundary Commission; U. S. Senator Charles O. Andrews of Florida; Frederick E. Capurro, Minister of Public Works, Montevidio, Uruguay, South America; Frank C. Walker, Postmaster General; Irving N. Brant, Special Consultant, Department of the Interior; Mrs. Louis J. Lemstra, National President of the American Legion Auxiliary; Mrs. Joseph E. Davies, wife of former Ambassador to Soviet Russia; Doris Duke Cromwell, wealthy heiress; Governor Nels H. Smith of Wyoming; Jessica Dragonette, well-known singer and radio star; U. S. Senator Bennett Champ Clark of Missouri; Antonio Picasso Panizo, Consul General of Peru; Dr. Federico Pinedo, Minister of Finance, Argentina; Dr. Frederick N. Davenport, Chairman, Council of Personnel Administration; John A. Haeseler, photographer, March of Time. Edward Huergo, Vice President of the Argentina National Parks, visited the park in May.

United States
Department of the Interior
National Park Service

ANNUAL REPORT

1943

Yellowstone National Park

Edmund B. Rogers, Superintendent

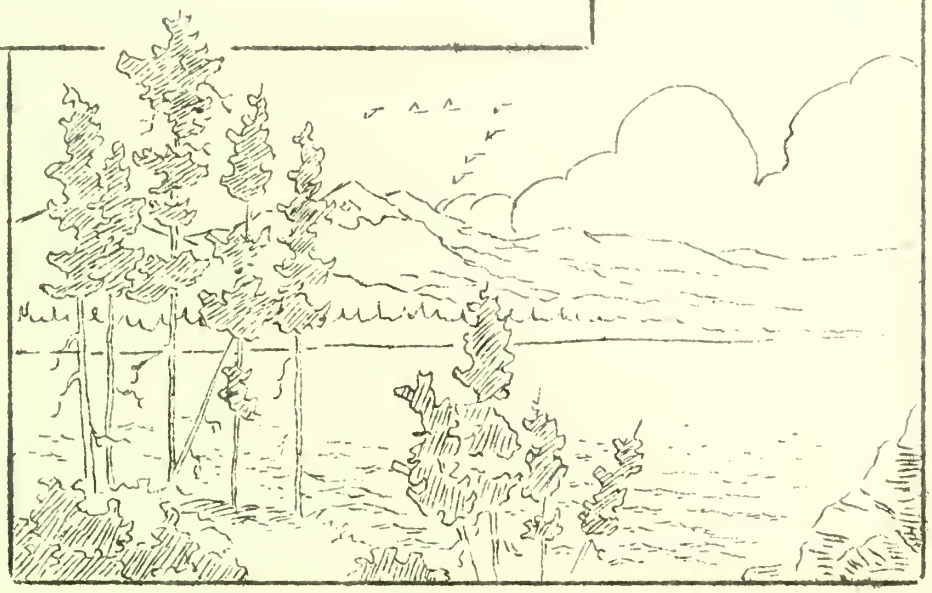
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

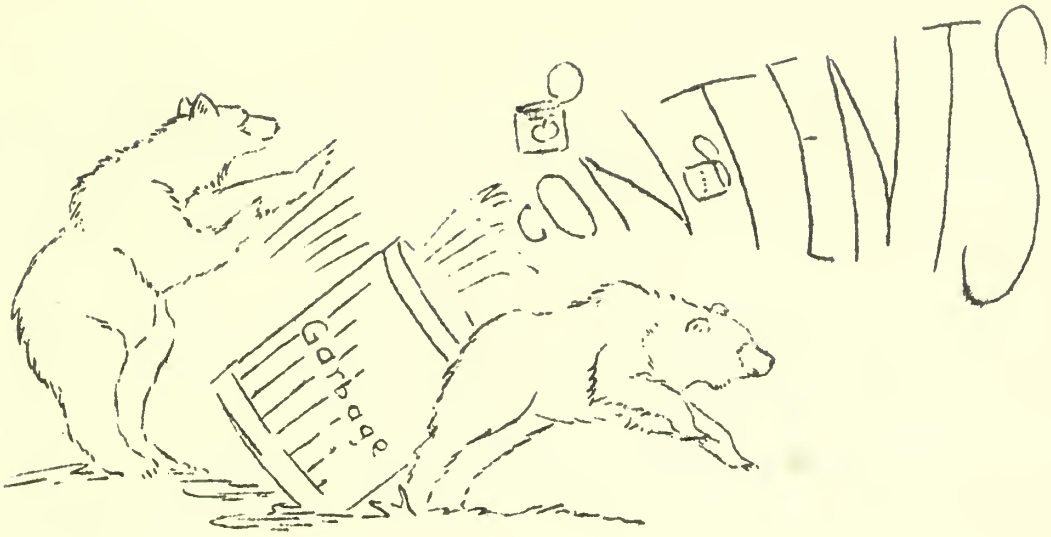
During the years 1927-1928 and 1931 to 1942, on account of a shortage of funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1943 mimeographing is necessary.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

The illustrations in this issue are the work of Assistant Chief Park Ranger William S. Chapman.

Edmund B. Rogers,
Superintendent.





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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1943 -

Edmund B. Rogers, Superintendent

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Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933 to June 30, 1934 and subsequent reports have covered the fiscal year periods. This report, therefore, for 1943 covers the fiscal year July 1, 1942 to June 30, 1943.

The report for 1943, as was the case in 1942, was considerably curtailed as the requirements from the Director's Office no longer call for details of the various activities but only the highlights of protection, development, visitor use, etc. The Superintendent's report is no longer needed for inclusion in the Director's brief annual report to the Secretary of the Interior but is prepared in order that the continuity of annual reports be not broken for historical and archive purposes.

TRAVEL

The restrictions on travel, gasoline and tire rationing and the War in general, materially affected the number of visitors using the park during the 1942 travel year. July showed a loss of 71.1% from the previous July, August showed a loss of 73.8% as compared to the previous August, and by the end of the travel year on September 30, 191,830 persons had visited the area as against 581,761 the previous year, which was the record travel year, or a loss of 67%. Fifty-eight thousand and ninety-three cars entered the park during the travel year, as against 172,296 for 1941, a decrease of 66.3%. Only 5,687 persons entered the park by rail and bus, as against 18,657 in 1941, and there was no travel by airplane to the park.

With the War still on when the 1943 season got underway, the park was destined to experience one of its worst travel years. None of the hotels, lodges or cafeterias was open and there was no bus service available, so that travel was restricted entirely to persons residing nearby the park who could save sufficient gas to make a park trip and distant visitors, most of whom were going across country in connection with War work, visiting members of their family or friends engaged in War work or in the armed forces and enlisted men and officers being transferred from one station to another. With all the travel restrictions and gasoline and tire rationing, it was surprising that as many as 8,397 persons were able to enter the park in June, which was in comparison to 36,925 for the same month in 1942. From the beginning of the travel year on October 1, 1942 to the end of June 1943, 16,085 persons had entered the park as against 62,154 for the same period in

1942, a decrease of 74.1%. The park was open to take care of such visitors as might be able to reach it but with the restrictions on travel, gasoline, food, tire and other rationing, no attempt was made to encourage persons to come to the park and only limited accommodations and services were provided.

REVENUES

Revenues for the 1943 fiscal year totaled $116,239.69, which represents a decrease of $318,299.39, or approximately 73.2% less than the revenues for the 1942 fiscal year, when $434,539.08 was collected. This decrease was reflected chiefly in the reduced automobile travel, most of the park's revenues resulting from the collection of the $3.00 motor vehicle license fee.

APPROPRIATIONS

The following appropriations for the 1943 fiscal year were available for expenditure by the Yellowstone organization:

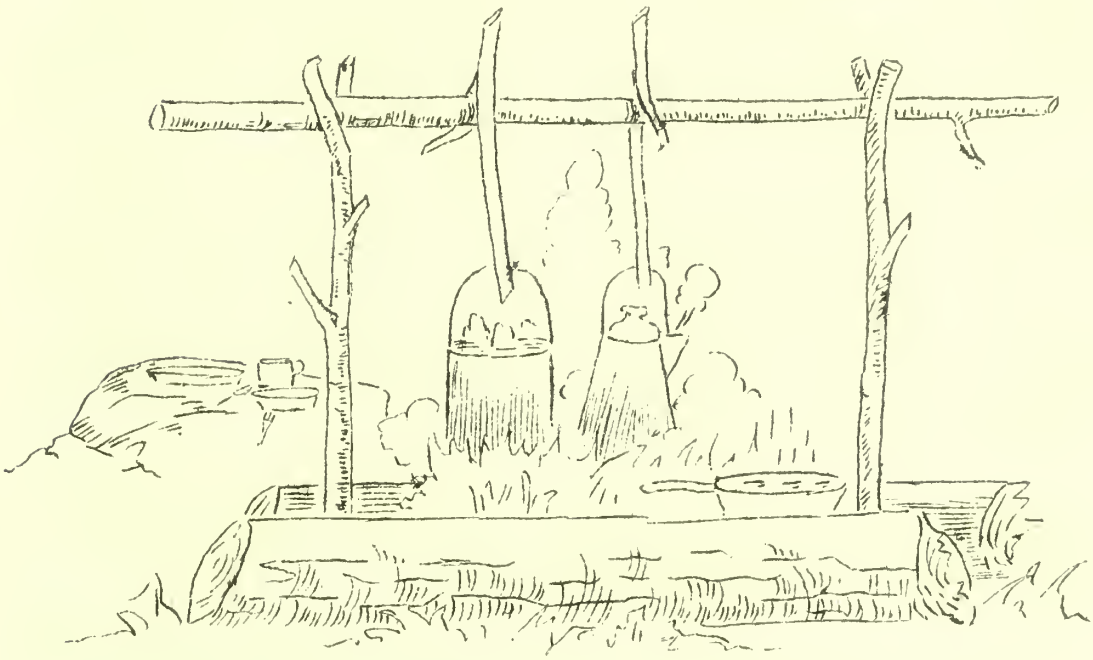
1431000.331	Yellowstone National Park	$449,530.00
1431000.041	Big Hole Battlefield National Monument. . .	1,425.00
1431000.041	Devils Tower National Monument.	8,520.00
1431000.051	Emergency Recons. & FFF in N.P. - Yellowstone	47,060.00
1431000.051	Emergency Recons. & FFF in N.P. - Custer B.N.C.	112.00
1431000.051	Emergency Recons. & FFF in N.P. - Devils Tower N. M.	139.00
1431000.061	F.P. and F.P. - Yellowstone National Park .	7,999.00
1431000.061	F.P. and F.P. - Devils Tower Nat'l. Monument	25.00
1431000.711	Custer Battlefield National Cemetery. . . .	6,855.00
	Total all appropriations	$521,665.00

PARK OPERATORS' BUSINESS

The reduced travel during the 1942 season was naturally reflected in the business of the park operators. None of the lodges was open to start the 1942 season, the Lake Hotel was closed, and the only tourist cabins and cafeterias operated were at Old Faithful and Fishing Bridge. The park's transportation system was permitted to operate its buses on their regular schedules but no side sightseeing trips were permitted. No air service was available into West Yellowstone and there were no air flights available over the park. The Mammoth Grill closed on July 7 and the Cocktail Lounge in the recreation hall on July 20 because of very little business. The hotels were permitted to close on August 27 and bus service was discontinued on the same date, which was some two weeks earlier than in normal years. The railroads discontinued their regular service to the various park entrances on August 27. The tourist cabins and cafeterias at Old Faithful and Fishing Bridge remained open until September 10.

The 1943 season saw no attempt made to cater to early visitors and as there was no promotion of travel the operators were required to keep open only such facilities as were thought necessary to accommodate the

small number of persons who might be able to reach the park. No hotels, lodges or cafeterias were operated and there was no bus service available. Tourist cabins were opened only at Old Faithful and Fishing Bridge and Mr. C. A. Hamilton served meals and took care of overnight guests at his general stores at Old Faithful and Fishing Bridge. At Mammoth meals were available at the Pryor general store and lodgings at the Pryor Coffee Shop. No accommodations were available at West Thumb, Lake, Canyon or Tower Falls. It was expected that the Yellowstone Park Company would take a heavy loss this War year due to its tremendous investments, while the smaller operators might be able to meet expenses through their curtailed operations. It was very difficult for the operators to obtain sufficient and experienced help.



CHANGE OF ASSISTANT SUPERINTENDENT

On April 8 Assistant Superintendent J. W. Emmert left the Yellowstone to assume his new duties as Superintendent of Hot Springs National Park. Mr. Emmert was succeeded by Fred T. Johnston, Assistant Regional Director, Region One, Richmond, Virginia, who reported on May 17.

NEW PARK ENGINEER

Associate Park Engineer Philip H. Wohlbrandt was promoted to the vacancy in the position of Park Engineer, effective February 16, 1943, created by the death of Cecil A. Lord.

COMPLAINTS

Comparatively few complaints were received during the 1942 season. Two complaints were registered against the high price of cabin accommodations, 1 for lack of cabin accommodations, 2 for transportation rates, 1 for charges for wood, 2 for indifferent and discourteous treatment by employees, 1 for discrimination and 5 miscellaneous. Taking into account the shortage of personnel and the extremely difficult operating conditions due to the War, the number of complaints registered was very small. No complaints were registered during May or June 1943 when operations were underway.

FOREST FIRE PROTECTION

Thirteen fires were reported during the month of July 1942 but all were held to Class A, with the exception of one on Union Falls in the Bechler River District. The fire condition was critical during the month of July with dry lightning storms and very little moisture, necessitating manning of regular protection points and all secondary lookouts.

Thirty-four fires were reported in August, 22 of which were held to Class A, 3 to Class B, 3 to Class C, 1 to Class D and 1 to Class E in size. Fires were reported on all but 12 days of August and 6 fires were reported on August 20. The Witch Creek fire, which started on August 4, was the largest of all fires suppressed, requiring a fire crew throughout the entire month. Considerable difficulty was experienced in retaining personnel in all classes of employment, more particularly for fire fighting work. Some difficulty was experienced in obtaining food supplies such as meat and fresh vegetables.

Seven lightning fires were reported and suppressed during September, 4 being Class A and 3 Class B burns. Five other lightning fires were also reported but were not found by suppression crews. After September 9 no fires were reported in the park.

A total of 48 reported fires occurred in the park during the 1942 season, of which 43 were caused by lightning and 5 were man-caused. Crews also hunted for 11 fires that were reported but not found. Of the 48 fires, 33 were in Class A, 12 in Class B and 1 each in Classes C, D and E. The lightning fire occurrence during 1942 was heavier and more concentrated over a short period than during any fire season of recent years.

Cool weather during the first half of June 1943 retarded the melting of the winter snow in the higher elevations and thus materially reduced the danger of the forest fires and the normal length of the fire season. No fires occurred in June.

MOTOR VEHICLE LICENSE FEE

Due to the necessity of assigning many of the permanent and temporary rangers to fire duty and the shortage of fire fighters, the collection of the Motor Vehicle License fees at the park gates was discontinued from 9:00 a.m. August 4 to 7:00 a.m. August 12. Women were employed to assist in checking station duties at the various entrances during the absence of the regularly assigned permanent and seasonal rangers. The collection of the Motor Vehicle License fee was discontinued for the season on September 19, which was longer than originally anticipated, but it was determined that the travel was sufficient to operate the entrance stations and make the collections so as to increase the park's revenues. Collection of the Motor Vehicle License Fee for the 1943 season was begun on June 19.

CLOSING AND OPENING OF ROADS

Winter came to the park early in 1942 and by the first day of November all roads were tentatively closed and by the second of the month no more travel was permitted. It was necessary to use the snowplows to open the roads in order to move out some of the rangers to their winter stations. The road from Mammoth to Cooke was kept open throughout the winter for the benefit of Cooke residents and in connection with the elk reduction program.

The snowplows did not start clearing the roads of snow in the spring until May 3, considerably later than during the past several years. The road to West Yellowstone was opened on May 10, the east entrance on June 10, and the south entrance on June 23. The Continental Divide road from Old Faithful to West Thumb was open to travel on June 24 and the Dunraven Pass road from Canyon to Tower Falls on the 27th. As no funds were available for opening the northeast approach road from Red Lodge to Cooke, this highway was not passable by the end of the fiscal year.

EARTHQUAKES

Two slight earth tremors were reported at Old Faithful at 9:40 a.m. October 31. It was estimated that the total time for the first shock was about 3 seconds and the second about 1 second. The shocks were distinctly felt by the District Ranger, the winterkeeper and the Hamilton store employees. No damage was reported and as Old Faithful geyser erupted within a short period after the shocks, it was evident that it had suffered no damage.

Six distinct earth tremors were reported by the Old Faithful winterkeeper on February 3. No damage was reported and the shocks apparently had no effect on Old Faithful or any of the other geysers.

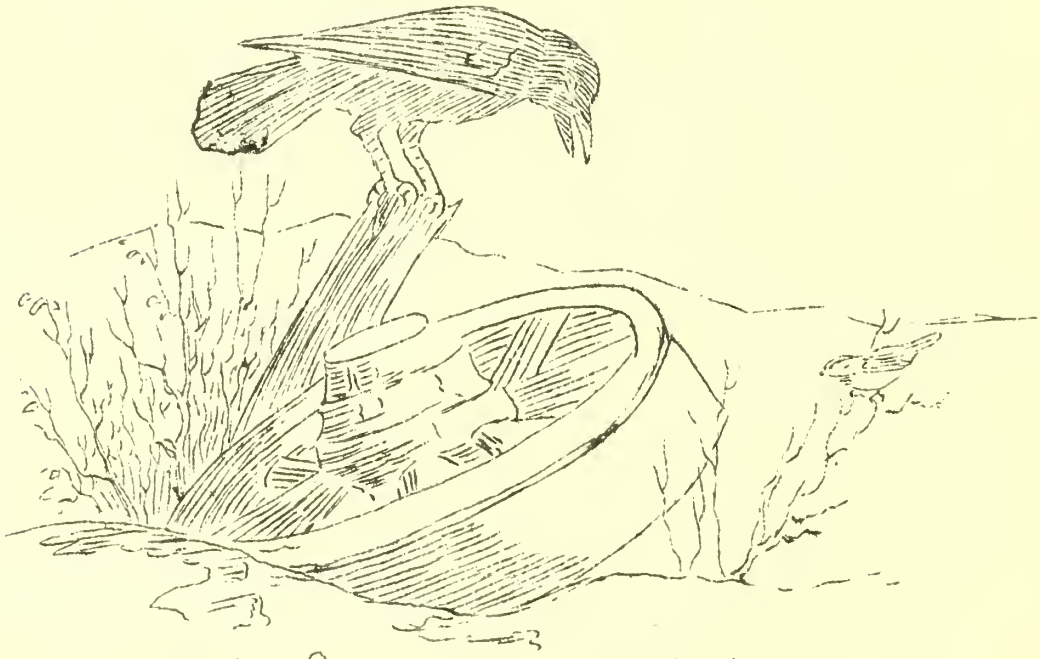
EMERGENCY LANDING FIELD IN THOROFARE

A field study of a proposed emergency landing field between Thorofare Creek and the Yellowstone River in the southeast portion of the park was made on October 29 by a representative of the Ranger Department and a

representative of the Teton National Forest. It was determined that no major improvement work would be necessary for the use of this site.

SCRAP METAL COLLECTION

A scrap metal collection campaign started in September, was discontinued at the close of October due to adverse weather conditions. Approximately 220 tons of scrap were collected and hauled to Gardiner, Montana by National Park Service trucks and personnel and two W.P.A. trucks which were assigned to the park for two weeks. The scrap was turned over to the Park County, Montana scrap metal committee for sorting and shipping. All scrap collected was from old dump grounds which had been abandoned and not obliterated, surplus salvage material which was in storage and from old developed sites which had been abandoned but not thoroughly cleaned up. No attempts were made to excavate and salvage scrap metals from any of the dump grounds in the park which are now in use. The Yellowstone Park Company contributed some 130 tons of scrap, making about 350 tons collected in the park, which averaged more than a ton per person for residents of the park.



Too big for small scrap collectors.

DISCONTINUANCE OF SATURDAY HALF-HOLIDAYS

In accordance with Joint Resolution 170 of the 77th Congress and Executive Order No. 9289, providing for overtime payments, all Park Service employees were placed on a 48-hour week and Saturdays were regarded as a full work day beginning January 2 and the Saturday half-holiday was discontinued until further notice.

SELECTIVE SERVICE REGISTRATION

The Sixth Registration under the Selective Service Act for youths who had reached the age of 18 years since July 1, 1942 started on December 11. Registrations of park youths reaching 18 years of age, who are required to register on their birthdays, will be handled from time to time.

EMPLOYEES IN THE ARMED FORCES

A considerable number of Park Service permanent employees enlisted or were inducted into the armed forces for service in the United States Army, Navy and Coast Guard. The first group to leave comprised members of the Protection Division who enlisted in the Coast Guard, including Assistant Chief Rangers Hugh Peyton and Curtis K. Skinner, District Park Rangers Earl M. Semingsen, John W. Jay and Wayne B. Alcorn and Park Rangers Frank F. Kowski, William Nyquist, Merritt S. Johnston, W. Verde Watson and Walter H. Gammill. Park Ranger Howard B. Hawk, Packmaster Lloyd K. Holman and Clerk-Stenographer Rex A. Madson were inducted into the Army. Chief Ranger Francis D. LaNoue enlisted in the U. S. Army and received a Commission as First Lieutenant. Chief Electrician Lloyd W. Seasholtz, Senior Foreman-Mechanic Roger H. Miller, Senior Property Clerk Francis P. Roylance and Buffalo Herder David W. Pierson enlisted in the U. S. Navy. District Park Ranger Frank H. Anderson enlisted in the Navy on June 28, 1943 and Ruben S. Hart enlisted in the Army Air Force on June 22, 1943 soon after the beginning of the 1943 travel season. Park Rangers Aubrey L. Haines and Frank T. Hirst have been in the U. S. Army since June 1941 and February 1942, respectively. Clerk LeRoy B. Van Cott was inducted into the Army on March 9, 1943 but was given a medical discharge after about two weeks' service.

GASOLINE RATIONING

Gasoline rationing went into effect in the park and the Western States on December 1, resulting in a restriction of travel of park residents as well as travel to the park. At the time the gasoline rationing went into effect the Yellowstone Rationing Board consisted of United States Commissioner T. Paul Wilcox, Chairman, Park Naturalist C. Max Bauer and Chief Ranger Francis D. LaNoue. Chief Ranger LaNoue resigned from the Board on February 5 due to ill health and Foreman-Plumber Wyman P. Benson was appointed as his successor. The Board later was increased to six members, the three new members being Assistant Chief Ranger W. Leon Evans, Senior Storekeeper William A. Wright and J. E. Haynes, the authorized park photographer.

PRACTICE BLACKOUT

Yellowstone Park underwent its first practice blackout from 9:00 to 9:20 p.m. on December 14. The entire Mammoth community was totally blacked out through the pulling of the master switch at the power plant. Similar practice blackouts were conducted about the same time in 9 Western States. No further practice blackouts were held during the remainder of the fiscal year.

ABSAROKA WILDLIFE CONSERVATION COMMITTEE

On May 8 and 9 the Absaroka Wildlife Conservation Committee was organized at meetings held at Mammoth at which were present representatives of the Montana State Fish and Game Department, Forest Service, National Park Service, Park County Rod and Gun Club, Livingston Chamber of Commerce, Livingston Junior Chamber of Commerce, Dude Ranchers Association and Stockgrowers. The representatives spent part of two days examining the northern winter game range and at the final meeting voted to recommend to the Montana Fish and Game Commission that hunters harvest 1600 elk from the north Yellowstone herd next winter.

Wesley A. D'Ewart, Stockman and Montana State Senator from Wilsall, was elected president of the new organization and George H. Kern of the Park County Rod and Gun Club, secretary.

BEARS

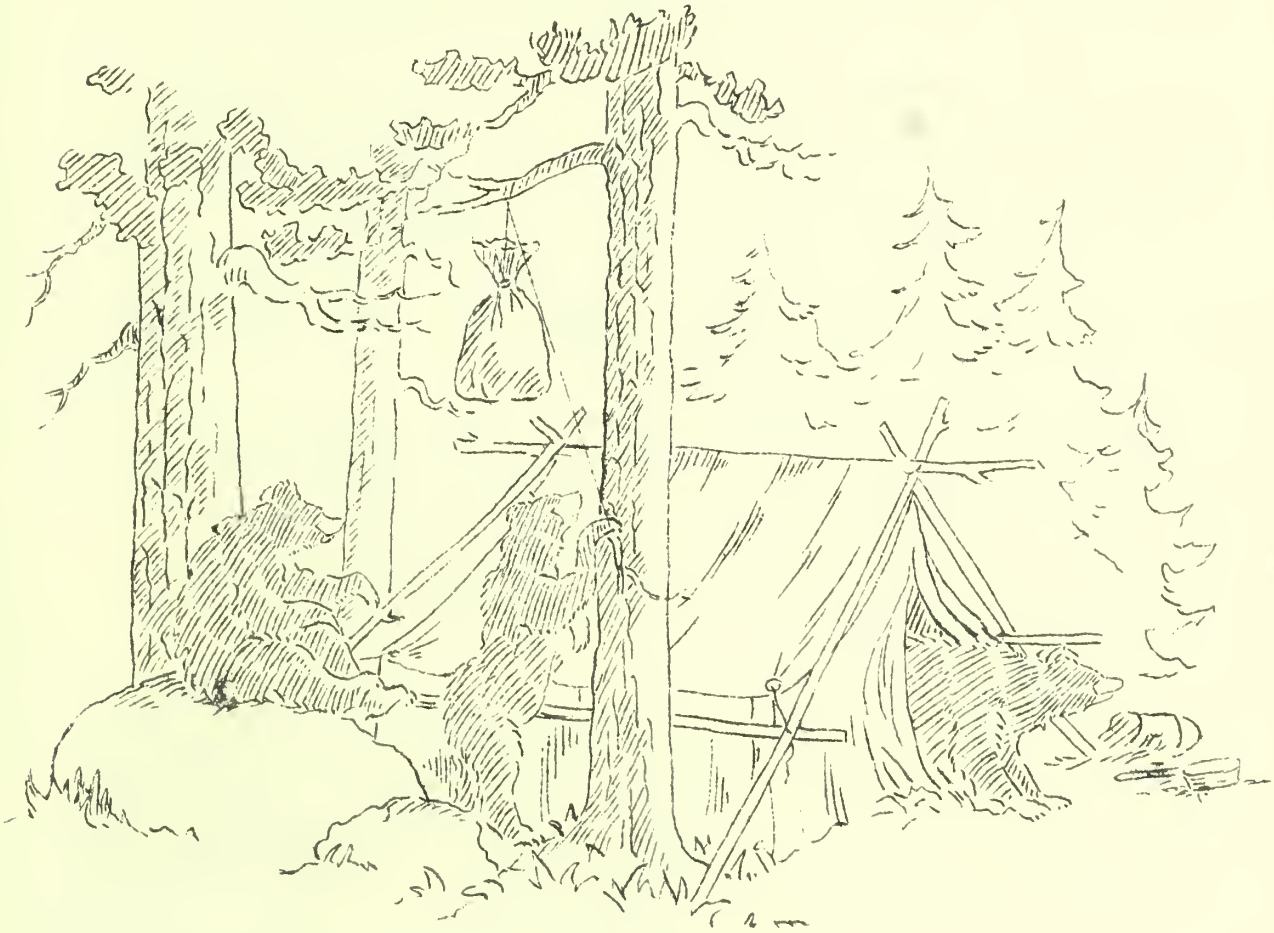
A serious grizzly bear situation occurred in July 1942 at Old Faithful, Canyon and Fishing Bridge. Two campers sleeping in the Fishing Bridge campground received minor injuries from a female grizzly during the early morning of July 26 when one was attacked in bed and the other while trying to chase the animal away from his sleeping partner. Whether these bear troubles were traceable to the closing of the grizzly bear grounds was not discernible but it was evident that the park was experiencing more bear troubles than usual. Numerous instances occurred where both black and grizzly bears threatened personal safety of visitors and two bad injuries occurred, one in June and one in August. Drastic control measures had to be taken in order to meet the bear problem.

Information was prevalent that bears have been particularly destructive during 1942 in some of the areas surrounding the park, particularly along the Madison-Gallatin and Absaroka ranges where sheepmen and others reported unusual killing of sheep and moose by these animals. Some of the depredations were laid to park bears but it was apparent that bears other than park bears were also "on the warpath" as incidents were reported in locations too far distant from the Yellowstone to involve park bears.

Because of the many emergencies existing during the summer and shortage of personnel, no bear census was attempted during the 1942 season.

A total of 29 personal injuries and 118 property damages was reported during the 1942 season, as against 90 personal injuries and 102 property damages during the 1941 season. The ten-year average for personal injuries was 55 and for property damages, 134. Eighty-three bears, consisting of 55 blacks and 28 grizzlies, were killed for control purposes, as against 26 in 1941 and against a ten-year average of 33.

For the second consecutive year the grizzly bear grounds at Canyon were not open for the 1943 season. There was a marked decrease in difficulties experienced with bears at the start of the 1943 season, due no doubt to visitor education regarding bears and efforts to make garbage and other unnatural food unavailable to bears, as well as a marked decrease in visitors. One large male grizzly and one female grizzly were secured for the Los Angeles County Museum in June.



The first serious bear accident in more than twenty-five years occurred at Old Faithful on the night of August 22-23 when Miss Martha Hansen, 45, of Twin Falls, Idaho, was attacked by a large brown bear in the tourist cabin area while enroute to the ladies' rest room. She suffered critical injuries and death occurred on August 27 at the Park Hospital in Livingston. Kent Watson, four-year old son of Park Ranger and Mrs. W. Verde Watson, who received a bad scalp wound from a bear on June 24, 1942, fully recovered from the injury.

ELK

The early and hard winter experienced in the park drove many of the elk to the lower regions, resulting in excellent hunting outside the park boundaries. The lower layer of snow became crusted early in the winter and was probably most responsible for a marked movement of elk to the lower portions of the winter range. By the end of November only small bands had moved out of the park to the open hunting territory but as the winter progressed the drift outside was extremely heavy. By the end of December approximately 4,300 elk had been taken from the Northern herd by hunters in the open territory north of the park. Gasoline rationing and a shortage of sporting ammunition seemed to play no part in preventing hunters from making long trips to reach the hunting territory. The hunting season in Park County, Montana closed on January 14 after the Montana Fish and Game Commission gave the required five days' notice. A total of 6,539 elk were accounted for through hunting. Seven moose, 2 bighorns, 2 buffalo and approximately 30 deer were illegally killed during the elk season.

Five thousand five hundred elk were reported taken by hunters in the Teton National Forest and Jackson Hole area during the 1942 season, 168 elk were checked by Idaho officials in the hunting areas adjacent to the Bechler River District of the park, while the kill in the Gallatin area was 1,177 when the season closed on November 17.

After the hunting season in Park County closed, large bands of elk continued to move out of the park where they caused considerable damage to ranchers' haystacks and fences.

A census of the northern Yellowstone elk herd was conducted on February 28 and March 1 by representatives of the Montana Fish and Game Department, Forest Service and National Park Service. Counters found 4,966 elk outside the park from Crevice to Yankee Jim Canyon and 3,269 on the winter range inside the park. Although not ideal, counting conditions were generally favorable and the figure of 8,235 is thought to closely represent the actual number of elk in the herd at that time.

The Montana Fish and Game Department, Forest Service and National Park Service cooperated in a count of carcasses of winter-killed game animals on the winter range during the period from April 19 to 30. Areas outside the park accounted for 398 elk and 474 were found inside, making a total of 872 dead elk found. This count constituted the first effort to accurately and completely cover the winter range for the purpose of determining the extent of winter losses.

ELK SLAUGHTER

A project proposed to kill a number of elk in the park and dispose of the meat through the Japanese Relocation Center at Cody met with strenuous protest. The story regarding the killing evidently first became known to members of the Rocky Mountain Sportsmens Association in Butte and a press release soon resulted. Many telegrams and

letters of protest were received from sportsmens organizations, unions and numerous individuals and residents of the communities near the park, particularly in Montana, were extremely resentful of the Park Service disposing of the meat to the Japanese. There was not so much criticism of the actual killing of the elk in the park but most of the protest seemed to be against using the Japanese in the park for work in connection with the reduction program and the meat being distributed through the Heart Mountain Relocation Center. The problem was finally solved when the Montana State Fish and Game Department agreed to take the meat and arrange for its disposal and the elk reduction program was consummated with the killing in the park being done by Park Rangers and the meat being disposed of through sale by the Montana Fish and Game Department and through distribution to various Indian agencies.

The unusually severe weather, snow conditions and numerous storms drove large bands of elk out of the park and the kill by hunters was greater than at any time since the elk reduction program first got underway in 1934 and so far as the records show, since 1919. The ability of a large number of hunters to get their elk also aided materially in reducing the criticism of the elk reduction program. The actual killing in the park by Park Rangers started on December 12 and was completed at Tower Falls and the Lamar Valley on January 14. All carcasses had been shipped and operations completely terminated by January 16. Four hundred and one elk were slaughtered in the Lamar area, 285 at Tower Falls and 5 in other areas, a total of 691 elk having been killed in the reduction program. Three hundred twenty-eight carcasses were turned over to the Montana State Fish and Game Department for dressing, handling and disposal. Such parts as were not suitable for human consumption were saved for fish food at State hatcheries. Three hundred sixty-three elk carcasses were furnished to 11 Indian agencies.

BUFFALO

The extremely hard winter and crusted snow conditions created a condition in the buffalo herd which had not been experienced for many years. As early as December two buffalo bulls from the park herd appeared outside the park above Deckard Flat and one injured a horse belonging to the operator of a hunting camp. On orders from the Montana State Deputy Game Warden, this buffalo was shot and the carcass taken over by the State. By January approximately 17 buffalo were scattered in areas below Gardiner outside the park boundaries. In February 27 buffalo were seen frequently between Gardiner and Yankee Jim Canyon, some 10 to 15 miles outside the park, and a few were reported more than 30 miles down the Yellowstone River from Gardiner near Wanigan. During the elk count on February 28 a total of 34 buffalo were seen outside the park. Buffalo continued to remain outside the park until the latter part of May. On March 20, 63 buffalo were counted outside the park and on the 27th approximately 130 were observed near Deckard Flat and the mouth of Bear Creek outside the park. One large bull which caused considerable trouble to ranchers was shot by a Montana Deputy Game Warden in April near Big Creek, approximately 25 miles below the town of Gardiner. The carcasses of two buffalo were found on the range outside the park and 12 live animals were seen outside the park during the count of dead animals.

The feeding of the Lamar buffalo herd started on January 2 and was concluded on April 7. Due to the unusually severe winter approximately 306 tons of hay were fed, as against approximately 280 tons in 1942, about 60 tons of which were fed on the open range between February 10 and March 6, and 334 tons in 1941. Six hundred and eighteen buffalo were counted on the feeding grounds on March 9. The first calves were observed on April 21.

During March 122 buffalo were seen in the Pelican Creek area. They were generally in poor condition due to the very deep snow which made forage difficult to secure.

A census of the buffalo during March and April showed 618 on the Lamar feeding grounds, 61 on the northern winter range and 63 outside the park.

On March 13 park rangers counted 122 bison in Pelican Valley and adjacent areas. During early April rangers counted 70 bison in the Hayden Valley area. There were no calves seen in a herd of 23 bison observed in Hayden Valley on May 26. A census of the Fountain and Nez Perce Creek areas taken on April 1 and 2 yielded a total of 30 bison.

A known loss of 9 animals occurred during the winter, 3 killed for control measures outside the park, 2 illegally killed by hunters outside the park and 4 deaths through natural causes. No reduction of the park herd was undertaken during the winter.

BUFFALO SHOW HERD

Thirty-seven buffalo, including 19 bulls, 11 cows and 7 calves, comprising the summer show herd, was kept in the Antelope Creek buffalo pasture for the 1942 season but this activity was discontinued for the 1943 season.

DEER

Thirteen deer were trapped at Mammoth and transported to the Game Ranch early in February. These deer persisted in remaining around the buildings at Mammoth and caused considerable damage to the trees and shrubbery. Some had died from starvation since they refused to leave the community area and forage on the hillsides where some forage was available. The unusually severe weather and crusted snow was especially hard on the deer and a considerable number died during the winter. The winter losses of deer, as indicated by the number of carcasses found on the winter range, were determined along with the dead elk count. Areas outside the park yielded 173 carcasses while 233 were found inside, making a total of 406. This loss is very heavy and still does not take into account the numerous deer killed by coyotes and it is probable that most of those that died of natural causes early in the winter were also devoured. It was estimated that the deer herd did not exceed 600 animals before the fawn crop arrived.

BIGHORN SHEEP

A bighorn sheep census was conducted from March 22 to 29, inclusive, and 132 were counted. Fourteen of this number were found in the Absaroka National Forest area near Gardiner. On February 18 two were seen on Quadrant Mountain and four were observed near the Snake River station on March 18, which brought the total to 138. Small bands were widely scattered over the northern winter range and conditions for counting were not favorable but all the most important known areas usually frequented by bighorns during the winter were carefully covered.

By the end of March six dead bighorns had been accounted for. All except one had apparently died of natural causes. A careful investigation determined that one large and apparently healthy ram had been killed by coyotes near the Hoodoos. The examination was made while the carcass was still warm and tracks in the snow revealed that at least three coyotes participated in the kill.

ANTELOPE

Most of the pronghorns ranged outside the park until the latter part of March when small numbers began moving up the Yellowstone River.

Some losses occurred during the winter and 58 carcasses were found during the dead animal count. The crusted snow condition was responsible for several antelope being killed by coyotes.

COYOTES

An abnormally large number of coyotes was observed in the Mammoth community area during the fall. Two deer were killed by coyotes in October on the lawns in the immediate vicinity of the residences and some of the coyotes were in the habit of frequenting the community area during the daylight hours. Fearing a possible attack on some of the school children at Mammoth by coyotes, it was necessary to kill off several for control purposes. No attempt was made to carry these control measures beyond the limits of the Mammoth community area.

The fears of the park authorities were thoroughly justified for on the afternoon of November 10 a coyote attacked the resident nurse, Miss Margaret Jelenik, at a point directly in front of the Mammoth Hotel as she was returning from the store. Miss Jelenik was bruised and bitten on the right hand and leg but the coyote's teeth did not break the skin. The coyote was shot immediately after the attack occurred.

Up to November 16, when the control operations were discontinued, a total of 16 coyotes had been killed. At the Buffalo Ranch it was necessary to construct a fence around the elk carcasses during the elk reduction program to prevent the coyotes from feeding on and damaging the carcasses before they had been shipped.

SWAN CENSUS

Due to the numerous emergencies of the summer season and shortage of personnel for such purposes, the regular annual census of trumpeter swans was not undertaken during the 1942 season and only random or accidental observations of these birds were made. No swan census was contemplated for the 1943 season.

RODENT CONTROL

The control of ground squirrels suggested by the Public Health Service was carried on only in the Mammoth area during April. A total of 355 of these rodents was disposed of. During May 180 ground squirrels were killed around Mammoth and 75 near the Tower Falls ranger station. Control measures, which are limited to areas of human habitation, were restricted by lack of ammunition.

FISHING AND FISH PLANTING

The fishing intensity to which park waters were subjected declined during the 1942 season but this decrease was comparatively much smaller than the decrease in travel. The Madison River was heavily fished during the last month of the season which closed there on September 30. Other park waters closed on October 15. The season re-opened on May 30 but abnormally high waters which reached record levels after mid-June limited good fishing to the various lakes.

At checking stations visitors reported taking a total of 101,611 fish from July 1, 1942 to June 30, 1943. This figure represents only a fraction of the total number of fish taken since those consumed in the park by visitors or taken by employees are seldom reported.

Spawn taking operations were hampered by a late spring and the swollen condition of the streams. During the 1943 season the Fish and Wildlife Service took 23,008,370 blackspotted trout eggs from the tributaries of Yellowstone Lake which is within the limit of 25,000,000 agreed upon by the two Services. Trout Lake near Soda Butte yielded 386,000 rainbow trout eggs and 3,300,000 grayling eggs were taken at Grebe Lake.

Plants of blackspotted trout during the 1942 season totaled 9,416,095, rainbow trout 104,291, Lochleven 137,300, brook trout 24,980 and grayling 2,418,000.

NATURALIST SERVICE

During the summer of 1942 only 16 naturalists were employed as against the regular seasonal force of 22. By the fifth of August two of these had entered the armed forces and several others left before the close of the season for military or other duties. No guide service was available during the season, the grizzly bear grounds at the Canyon were not open to the public and other services were curtailed. During the 1943 season no Ranger-Naturalists were employed, all of the naturalist activities being carried on by the members of the permanent organization.

Assistant Park Naturalist Albert E. Long transferred to the War Production Board in Washington, D. C. in March and was succeeded by Harold J. Brodrick by transfer from Carlsbad National Park. Assistant Park Naturalist David DeL. Condon transferred to Rocky Mountain National Park in February and he was succeeded by Dr. Walter B. McDougall by transfer from Grand Canyon National Park. Because of the reduced naturalist activities during the 1943 season, the hours of the members of this division were divided among protection, research and custodial duties.

The museums at Norris, Madison Junction, Fishing Bridge, Old Faithful and Mammoth were open during the 1942 season but for the 1943 season only the Mammoth and Old Faithful museums were operated.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The Yellowstone Library and Museum Association carried on the sale of books during the 1942 season and employed two young ladies to rework the Yellowstone herbarium. The sale of books was carried on to a limited extent for the 1943 season and a librarian was hired for the Mammoth library. The funds of the Association were greatly reduced due to a considerable reduction in sales during the past two seasons. Six rolls of microfilm relating to the park between the years 1872 and 1878 were received from the National Archives in Washington, D. C. The regular annual meeting of the Association was held on October 1. Due to the enlistment in the Coast Guard of Hugh Peyton, one of the directors of the Association, District Park Ranger Frank Anderson was elected to succeed him.

C.C.C. ABANDONED

C.C.C. operations in the Yellowstone were discontinued in July 1942 with the abandonment of the Lake Camp on July 24 and the Mammoth NP-1 camp on July 25. The Yellowstone has had C.C.C. camps in the park since it started operations in 1933. The Mammoth and Cascade Creek Camps were turned over to the War Relocation Authority and the removal of the buildings at these camps to the Heart Mountain Relocation Project near Cody was started as soon as the east entrance road was open in May 1943.

CONSTRUCTION WORK

Construction work was underway under the supervision of the P.R.A. in the park throughout the 1942 season on two projects, the West Thumb development and the Old Faithful-Isa Lake section of the Continental Divide road. All contract work was closed down before the end of October. E. A. Studer and Sons had completed their work on the West Thumb development but the final mat had not been placed on the Old Faithful-Isa Lake section under contract to Peter Kiewit Sons' Company. No work was undertaken on the Canyon project under contract with Lowdermilk Brothers. No contract construction work was undertaken for the 1943 season.

FOOD RATIONING

Point rationing became effective throughout the country on March 1. Before the end of March meat was being rationed and the only available close supply of meat for park residents, the butcher shop at Gardiner, closed its operations. This necessitated park residents getting their meat from Livingston or other points more than 60 miles away and worked considerable hardship, particularly in view of the gasoline rationing.

SCHOOL BOARD

On May 22 a new school board, consisting of Albert E. Elliott, Chairman, Harold J. Brodrick, Secretary-Treasurer, Philip H. Wohlbrandt, and Mrs. Henry Peterson, was appointed by the Superintendent. The school term ended on May 21.

MEDICAL SERVICE

The hospital at Mammoth was kept open during the 1942 season until August 30 and nurses were retained at Old Faithful and Fishing Bridge until September 10. There was no resident physician on duty in the park during the winter but a nurse was kept at Mammoth the year-around. Dr. Jack E. Hays, the resident physician, left on July 15 to enter the Army. The hospital did not open for the 1943 season but a nurse was available at Mammoth and nurses were expected at Old Faithful and Fishing Bridge early in July. Because of the serious shortage of Doctors and nurses, it was not possible for the medical service to provide the type of service for the park which has been possible in the past.

WINTER ACTIVITIES

The heavy snow of the winter provided good skiing conditions at times and a number of park personnel enjoyed the ski field near Undine grade. The ski tow operated by the Yellowstone Winter Sports Association was again in operation for its members and others who wished to use it. There was a fine display of wildlife along the north side of the park between Mammoth and Cooke but due to gasoline rationing there was very little travel over this highway during the winter except by Cooke residents.

MONTANA DAY CELEBRATION

The Montana Day Celebration usually held in February was discontinued in 1943 due to the War. Such celebrations were held in the park during the past 4 years and gave visitors from nearby communities an opportunity to view the park in winter and observe and photograph the wildlife.

SNOPLANE

A snoplane, rented from a resident of Jackson, Wyoming, was brought into the park on February 18 via the south gate. The snoplane was used to make inspections of snow conditions and deliver rations to Old Faithful and outlying stations. It was principally brought into the park to experiment with such a machine for possible future use here, with the idea of purchasing such a machine later.

PUBLICITY

Due to curtailed operations and restrictions on travel, the park refrained from issuing any publicity for the 1942 season and no Publicity Director was appointed. The Yellowstone Park Company printed an "Accommodations and Services" leaflet for distribution to visitors to supplement the park's booklet, as conditions changed considerably throughout

the season. No attempt was made to encourage travel for 1943 and no general press releases were distributed and no Publicity Director was employed for the season. As the Yellowstone Park Company did not operate its print shop at Mammoth, the National Park Service mimeographed an "Accommodations and Services" leaflet for distribution to visitors and the old 1942 park folder was used for distribution, no 1943 season park folder having been printed.

FIRE TRAINING SCHOOLS

The greater part of 14 days in July 1942 was spent in conducting fire training classes. About 250 National Park Service and operators' employees received 3½ hours of instruction in the common causes of fires in buildings and how to prevent fires from starting, and in the use and care of fire extinguishers. About half an hour of each training session was devoted to the control of incendiary bombs.

Seventeen members of the Protection Division and one from the Naturalist Division were trainees at the building and forest fire school held at Mammoth from April 12 to 17 while 33 other employees participated in one day of instruction. Eight district and Assistant Chief Rangers served as instructors and attended most of the classes in addition to their teaching duties.

DEFENSE TRAINING PROGRAM

A defense training program under the supervision of the Park Naturalist, which was started in June 1942, continued throughout the month of July. Over 300 Government employees were given the training course from 25 to 36 hours and on July 22 training started for employees of operators and others interested in the program from a voluntary basis. At the end of July First Aid courses were being given to 125 people.

ACCIDENTS

Two serious accidents occurred during the month of August 1942, resulting in the drowning in Yellowstone Lake on August 22 of C. L. Anderson, 49, of Long Beach, California. Anderson's companion in the boat, R. C. Crawford of Greenville, Texas, was rescued and suffered no ill effects from his experience. On August 23 Miss Martha Hansen of Twin Falls, Idaho was severely mauled by a large brown bear in the tourist cabin area at Old Faithful and died at the Park Hospital in Livingston on August 27. No other serious accidents occurred during the fiscal year.

On May 23 the park was the scene of a horrible accident which occurred in the area near West Yellowstone. A B-17 bomber from the airfield at Lewistown, Montana caught fire and crashed at a point about 4 miles south and 2 miles east of the west entrance shortly after midnight. Ten members of the crew died from the accident while one member, Lieutenant William McDonald, 24, bombardier, was able to escape. The dead included: Sergeant William S. McCune, 28, of

West Orange, N. J.; Staff Sergeant Lawrence S. Medlin, 19, of Chattanooga, Tennessee; Staff Sergeant Leo E. Thorn, 30, Lake Charles, Louisiana; Staff Sergeant Donald W. Rice, 21, Henrietta, N. Y.; Staff Sergeant Gilbert E. Underwood, 37, West Orange, N.J.; Staff Sergeant Alexander Jurkowski, 21, Brooklyn, N. Y.; Lieutenant Roy E. Thompson, 23, Mt. Pleasant, N. Y.; Lieutenant James Jerome Highley, 22, Oklahoma City, Oklahoma; Lieutenant George A. Brast, 23, Roosevelt, New York; and Lieutenant Robert K. Edwards, 37, Philadelphia, Pennsylvania.

DEATHS

Within the first three days of the new year the park lost two of its permanent employees through death. On January 1 Park Engineer Cecil A. Lord died in the Park Hotel in Livingston from a heart attack and two days later Automobile Mechanic James V. Tipolt died at the Park Hospital in Livingston following an operation for rupture which was the result of an injury sustained by him on December 26.

VISITORS

There were very few prominent visitors in the park during the 1942 season. Congressman Charles H. Leavy, of Spokane, Washington, and John V. Hansen, well-known photographer and national park lecturer, were visitors in July, while a party consisting of Herbert Hoover, former President of the United States, Ray Lyman Wilbur, President of Stanford University and former Secretary of the Interior and Arthur M. Hyde, former Governor of Missouri and former Secretary of Agriculture, came in in August. Other prominent visitors in August included a party of leading Swedish journalists sent on a tour of the United States by the Office of War Information, consisting of Alfred Oste, Sten Hedman, Nils Norney, Gustaf Naastrom and Victor Vinde, and a party from South America including Senora Marta Ide de Rios, wife of the President of Chile, Dr. Manuel E. Hubner, Consul General of Chile and Jackson Leighter, Office of Coordinator of Inter-American Affairs and the State Department.

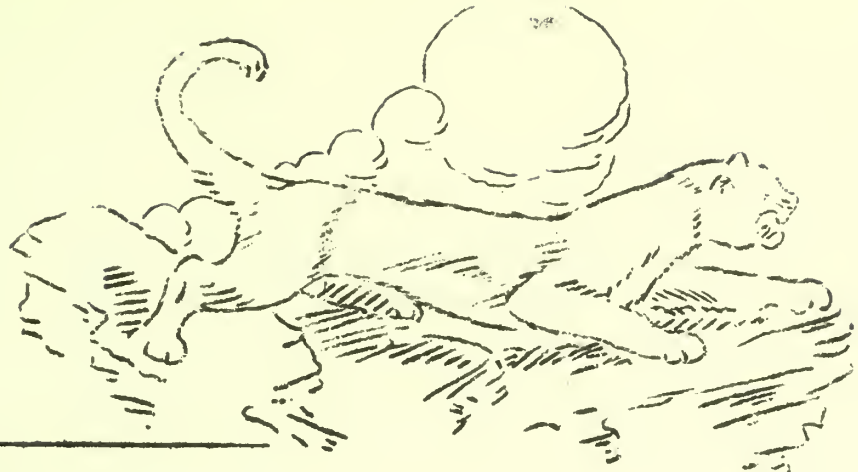
United States
Department of the Interior
National Park Service

ANNUAL REPORT

1944

Yellowstone National Park

Edmund B. Rogers, Superintendent



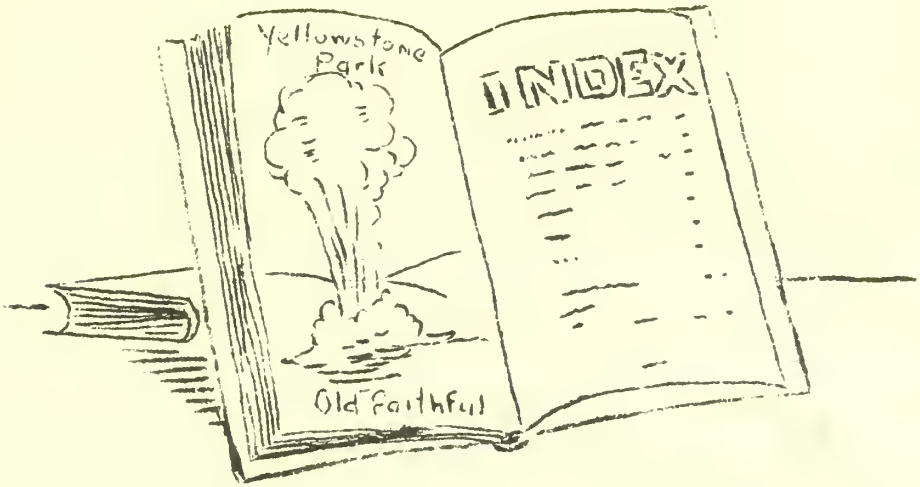
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-1928 and 1931 to 1943, on account of a shortage of funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1944 mimeographing is necessary.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

The illustrations in this issue are the work of Assistant Chief Park Ranger William S. Chapman.

Edmund B. Rogers,
Superintendent.



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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1 9 4 4 -

Edmund B. Rogers, Superintendent

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Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933 to June 30, 1934 and subsequent reports have covered the fiscal year periods. This report, therefore, for 1944 covers the fiscal year July 1, 1943 to June 30, 1944.

The report for 1944, as was the case in 1943 and 1942, has been considerably curtailed as the requirements from the Director's office no longer call for details of the various activities but only the highlights of protection, development, visitor use, etc. The Superintendent's report is no longer needed in detail for inclusion in the Director's brief annual report to the Secretary of the Interior but is prepared in order that the continuity of annual reports be not broken for historical and archive purposes.

TRAVEL

When the 1943 season got underway the park was destined to experience one of its worst travel years. None of the hotels, lodges or cafeterias opened and there was no bus service available, so that travel was restricted entirely to persons living near the park who could save sufficient gasoline to make a trip, and distant visitors, most of whom were going across country in connection with war work, visiting members of their families or friends engaged in war work or in the armed forces, and enlisted men and officers being transferred from one station to another. No train service was available to any of the park entrances but the Northern Pacific ran daily bus service, except Sundays, from its main line at Livingston, Montana to the north entrance at Gardiner. There was daily bus service along the west side of the park from Bozeman to West Yellowstone and from Ashton, Idaho to West Yellowstone.

Despite all the restrictions on travel, gasoline and tire rationing and no attempt being made to encourage travel to the park areas, it was surprising that as many as 64,144 people could find it possible to reach the park gateways during the travel year extending from October 1, 1942 to September 30, 1943. In 1942, the first year of World War II, the travel reached 191,830, which was a loss for 1943 of 66.5% and was the smallest travel year in 24 years. Every state in the Union was represented in the travel and in addition 18 cars were registered from Canada, 4 from Hawaii, 5 from Mexico and 1 from Alaska.

With World War II still in progress and with restrictions more stringent than they were in 1943, it was even more surprising to note the increase in the number of visitors during the month of June when the 1944

travel season got underway. Only minimum accommodations were provided for visitors and no encouragement was offered the public to induce tourist travel. None of the hotels, lodges and cafeterias was operated and activities were similar to what they were during the 1943 season. During June 14,261 persons visited the park, as against 8,337 in June 1943 and the total season travel from October 1, 1943 to June 30, 1944 was 20,886, as against 16,085 for the same period the previous year, an increase of 29.8%.

REVENUES

Revenues for the 1944 fiscal year totaled $47,106.58, which represents a decrease of $69,133.11, or approximately 59.5% less than the revenues for the 1943 fiscal year, when $116,239.69 was collected. This decrease was reflected chiefly in the reduced automobile travel, most of the park's revenues resulting from the collection of the $3.00 motor vehicle license fee.

APPROPRIATIONS

The following appropriations for the 1944 fiscal year were made available to Yellowstone and coordinated areas:

1441000.100 & .333	Yellowstone National Park	$347,183.00
1441000.041	Big Hole Battlefield National Monument	851.00
1441000.041	Devils Tower National Monument	8,016.00
1441000.051	Emergency Reconstruction & Fighting Forest Fires- Yellowstone National Park	13,460.00
1441000.051	Emergency Reconstruction & Fighting Forest Fires- Devils Tower National Monument	153.00
1441000.061	Forest Protection & Fire Prevention - Yellowstone	12,860.00
1441000.711	Custer Battlefield National Cemetery	7,635.00
	Total all appropriations	$390,158.00

PARK OPERATORS' BUSINESS

No attempt was made when the 1943 season opened to promote travel and the operators were required to keep open only such facilities as were thought necessary to accommodate the small number of persons who might be able to reach the park. No hotels, lodges or cafeterias were operated and there was no bus service available. Tourist cabins were opened only at Old Faithful and Fishing Bridge and Mr. C. A. Hamilton served meals and took care of overnight guests at his general stores at Old Faithful and Fishing Bridge. At Mammoth meals were available at the Pryor general store and lodgings at the Pryor Coffee Shop. No accommodations were available at West Thumb, Lake, Canyon or Tower Falls. The Haynes picture shops were operated at Mammoth and Old Faithful and boats were available at Fishing Bridge. The tourist cabins at Old Faithful closed on August 30, while those at Fishing Bridge remained open until September 7. The general store at Fishing Bridge closed on September 10 but the Old Faithful store remained open as long as the roads were passable, which was until October 24. Meals and lodgings were discontinued at the Pryor store and coffee shop on October 13.

With the war still on in 1944, arrangements were made to operate the park under practically the same conditions as existed during the previous season. The general store at Old Faithful opened on May 10, taking care of overnight guests and serving meals. The general store at Mammoth started taking care of overnight guests and serving meals on May 17 and at Fishing Bridge the general store served meals and provided informal lodging accommodations beginning May 29. The Haynes shop at Mammoth opened May 23 and the Old Faithful shop on the 28th. Boats were available at Fishing Bridge beginning June 10, while the tourist cabins at both Old Faithful and Fishing Bridge started operations on June 21, providing both furnished and unfurnished cabins. No hotels, lodges or cafeterias were open and no facilities were available at West Thumb, Lake, Canyon or Tower Falls. There was no bus service available and as in 1943 the railroads did not deliver tourists to the park gateways.

WESTERN CONFERENCE OF NATIONAL PARK OPERATORS

A meeting of the Western Conference of National Park operators was held in Chicago on April 13 and 14, 1944. Due to illness, W. M. Nichols, President of the Yellowstone Park Company, was unable to attend but the Yellowstone operators were represented by E. H. Moorman, Manager of Lodges and Camps. Superintendent Rogers was also present. The hours and wages applicable in all National Park Service areas was the main subject of discussion at the conference.

MEDICAL SERVICE

The hospital at Mammoth was not opened for the 1943 season, but a year-around nurse was employed for duty at Mammoth. Nurses were also available at Old Faithful and Fishing Bridge during the summer season until August 29. When the 1944 season opened there was a tremendous scarcity of doctors and nurses and it was difficult for the park medical officer to obtain competent nurses for the park. The hospital at Mammoth was not operated during the 1944 season but the year-around nurse was available at Mammoth and a nurse was obtained for Fishing Bridge. No nurse was available at Old Faithful.

Margaret Jelinek, the permanent nurse at Mammoth, resigned December 1, 1943 and Mrs. Dwight Richards occupied the position for a month until a successor to Miss Jelinek could be engaged. Miss Elsie Kane was secured and entered on duty on January 1, 1944.

COMPLAINTS

Few complaints were registered by park visitors, either during the 1943 season or the start of the 1944 season. With a war going on, tourists seemed inclined to accept what the park had to offer and did not register written complaints to the Superintendent, although some dissatisfaction by tourists was heard by rangers. This condition did not necessarily mean that the service or accommodations were up to expectations but with none of the hotels, lodges or cafeterias operating, Mr. Hamilton and Mrs. Pryor did a good job in providing meals and lodgings for those who were able to visit the area, and the Haynes Picture Shops at Mammoth and Old Faithful pleased many visitors in their ability to furnish kodak film of nearly all sizes.

PUBLICITY

Because of the numerous restrictions on travel and the policy of the National Park Service to refrain from encouraging travel to the National Park Service areas, the park issued very little general publicity through the 1943 season and no publicity director was appointed. No new folder was issued for the park for general distribution to visitors or persons making inquiry regarding a park visit, but the available supply of 1942 folders was issued throughout the season. In addition the park mimeographed an "Accommodations and Services" circular, detailing all the operations in the park, which was distributed to visitors as they entered the park gateways. The same condition prevailed for the 1944 season. There was a sufficient supply of the 1942 folder on hand to last throughout the season and the mimeographed "Accommodations and Services" circular met the needs of the park in keeping visitors informed as to operations, road conditions and accommodations. This "Accommodations and Services" circular was revised several times each season to keep it current.

AUTHORITY TO ADMINISTER OATHS

On January 10, 1944 Superintendent Rogers, Assistant Superintendent Johnston, Assistant to the Superintendent Joffe and Chief Clerk Soule received authority to administer oaths in connection with Civil Service appointments and to sign other Civil Service papers.

RETIREMENTS

Buffalo Keeper Thomas Phillips was retired, due to disability, at the close of December 31, 1943. He served from May 13, 1926 to January 31, 1927 as a 4-horse teamster and laborer and since February 1, 1927 filled the position of Buffalo Keeper in the Yellowstone. He was injured in line of duty on November 10, 1939, sustaining a broken ankle. The injury did not heal sufficiently for Mr. Phillips to continue his duties as Buffalo Keeper and a retirement for disability was requested and approved.

Henry Peterson, Automobile Mechanic, was retired due to disability at the close of May 31, 1944. Mr. Peterson was employed intermittently in the park from 1911 to 1927. On May 1, 1927 he received a permanent Civil Service appointment as Automobile Mechanic and served in this capacity until his retirement. Mr. Peterson had been in failing health for several years and was no longer able to carry on the duties of his position. He was fifty-two years of age at the time of retirement.

EMPLOYEES IN THE ARMED FORCES

Two Yellowstone Park permanent employees joined the armed forces during the 1944 fiscal year, Warehouseman-Truck Driver Lester C. Abbie enlisting in the Navy on September 14, 1943 and Purchasing Clerk Ladd S. Shorey enlisting in the Army on April 26, 1944.

NEW CHIEF RANGER

Assistant Chief Ranger Maynard Barrows, who was Acting Chief Ranger since May 1943 when Chief Ranger LaNoue entered the military service, was appointed Chief Ranger on December 4, 1943.

FOREST FIRE PROTECTION

The fire danger did not become serious until the latter part of July 1943. The late spring and summer was responsible for most of the streams remaining very high during most of July and the water level of Yellowstone Lake broke all records. On July 26 a lightning storm occurred, which resulted in a number of fires, only one of which, at Lewis Lake, required large crews to combat. Aside from the rangers, the only available employees to fight fires were on the road crews and these were mostly inexperienced youngsters and old men. Fifteen fires were reported during July, 12 of which were found and all were out or under control by the end of that month, with the exception of the Lewis Lake fire.

Thirteen forest fires were reported and suppressed during the month of August and 9 fires were reported and searched for by smokechaser crews, but were either burned out when located or were not found at all. All of the fires but one were lightning-caused and all were held to less than Class D size. Snow and a heavy rain occurred in the park on August 30, which lessened the fire danger.

No reportable fires occurred during the month of September and all fire lookouts were closed by September 15, mainly due to the men not being able to remain longer than that date. The park was extremely fortunate from a forest fire standpoint during the 1943 season, as it would have been practically impossible to get fire fighters had a bad fire season occurred.

Three fires were reported during October, the first of which was not found, while the second one on Duck Creek originated outside the park and then traveled inside, burning 120 acres of sage, grass and aspen. The third was a grass fire on Daly Creek.

Two small grass fires occurred in May, one of which was man-caused and the other the result of a lightning strike. Both were controlled with negligible damage resulting.

Frequent rains and cool weather in June 1944 retarded the melting of snow at the higher elevations and kept the danger of forest fires to practically zero during the month. As in 1943, there was available for fire fighting only the road crews, which were composed of even younger men than the previous year, and a number of old men. Most of the fire guards were inexperienced young men.

MOTOR VEHICLE LICENSE FEE

The collection of the motor vehicle license fee for the 1943 season was continued after some of the accommodations in the park had been closed. Collection was discontinued on September 28 and started again for the 1944 season on June 17, following the reporting for duty of several seasonal rangers.

RANGER SERVICE

The ranger force operated during the 1943 season with only 15 seasonal rangers, as against 47 in normal years, and with one vacancy occurring on July 19 there were only 14 men to finish out the season. Most of the seasonal rangers left by early September to return to school and all seasonal rangers were terminated by the 15th. All lookout stations were abandoned for the season on September 14. The park was again allowed 15 seasonal rangers for the 1944 season.

PARK RANGERS' CONFERENCE AND FIRE SCHOOL

A conference of park rangers and a fire school was conducted in the Canteen the week of May 18-23, 1944. Five Yellowstone rangers also attended the Glacier fire school held in Glacier National Park during the week of May 22-27.

CLOSING AND OPENING OF ROADS

The Red Lodge-Cooke road was not opened for the 1943 season until July 28. As no Government funds were available for opening this road and as neither the State of Wyoming nor the State of Montana would participate in the snow removal, it was necessary for the citizens of Red

Lodge to raise funds for renting a plow to remove drifts to open the highway to travel.

Because of the shortage of labor and funds and the late start in getting work underway at the beginning of the 1943 season, the maintenance operations were somewhat retarded. Park roads generally were in good condition, with the exception of the Gallatin section, which was quite rough and going to pieces under the pounding of the heavy oil tankers using this section. Yellowstone Lake reached its greatest recorded height during July and the wind and wave action caused considerable damage to the road and parking areas in the vicinity of Steamboat Point, Mary Bay and near the Thumb mess house. About half the road crews consisted of school boys, most of whom had to return to school by the end of August.

A footbridge was built over the Gardiner River in September about one mile south of the north entrance, to replace a bridge washed out by the high water of the spring. Two of the regular maintenance crews were moved to the Red Lodge-Cooke road in September. Four washouts were repaired and numerous rock slides were removed from the ditches. The work accomplished was of an emergency nature to protect the roadbed from excessive damage during the coming winter and spring. An allotment of $2500 was received for the work done.

The Red Lodge-Cooke road was closed for three or four days in September, due to the storm of August 31, and this highway was closed for the winter by the storm of October 19 which also closed the Dunraven Pass road on that date and the Continental Divide road on the 22nd. The east and south gates closed on October 23.

The roads to Canyon and Old Faithful were traveled by rangers and winterkeepers until almost the end of November but the Madison Junction to Old Faithful road was closed to tourist travel on November 8 and the Mammoth to West Yellowstone road on November 24.

The snowplows started opening the roads for the 1944 season on May 1, as against May 3 the previous year. Because of the light condition of the snow and the small amount remaining in the park, the plows were able to proceed ahead of schedule. The plows reached Old Faithful and West Yellowstone on May 2, Canyon May 4, Lake May 9, south gate May 15, West Thumb and Old Faithful May 17, east gate May 22 and Dunraven Pass May 24. The road outside the park from Moran to the south entrance was opened on May 9 and the Sunlight Basin road from Cody to Cooke on May 18. Travel was permitted over the West Yellowstone-Mammoth road on May 15, Madison Junction to Old Faithful on the 17th, Norris to Canyon and Lake, Continental Divide and south entrance roads on the 22nd, Dunraven Pass on the 29th and Lake to east entrance on the 30th. The ice went out of Yellowstone Lake on May 21. All road crews were in operation by the end of June. Obtaining labor presented a serious problem. Even with the use of high school boys, it was impossible to fill all road crews and scarcity of truck drivers was a great handicap. The Red Lodge-Cooke highway was not opened to travel by the end of the fiscal year.

CONSTRUCTION WORK

Due to the war and the unavailability of funds, no construction projects were undertaken during the 1943 season and there was no construction work to be done during the 1944 season. The two major road construction projects begun prior to 1943 and still unfinished (6.95 miles grading and surfacing--Isa Lake to Old Faithful, and 3 miles grading and surfacing--Canyon area) were cancelled and the money remaining for completion of these contract jobs was impounded due to war regulations precluding use of critical materials on any but the most essential projects. It will be necessary to secure new contracts for the completion of these projects at such time as work may again be resumed.

LABOR SITUATION

The manpower shortage during the 1943 season was acute. Even on a reduced scale of operations, that obtained by virtue of heavily curtailed appropriations, it was difficult to keep scheduled positions filled. This applied to protection as well as maintenance personnel. As a result, neither protection activities nor maintenance work could be given the required proper attention. Operations were organized and re-organized in order to accommodate the most urgent and essential

activities with the fluctuating personnel. It was only through good fortune that the season was void of any accidents, only one serious forest fire occurred and a minimum of vandalism and practically no complaints were registered.

Road maintenance crews, made up almost entirely of old men and boys of high school age, were originally established at Mammoth, Madison Junction, Old Faithful, West Thumb, Canyon, Tower Falls, East Entrance, Gallatin and South Forest. As the season progressed, many of these employees dropped out and it was impossible to replace them all. The crews were readjusted and combined. Forest fires during the middle and latter part of the season called the majority of these employees away from road work intermittently, thus requiring further re-organization of the crews. Cooks at the road camp messes had an unusually erratic season and with ration points to handle, their problems were multiplied. The number of employees eating at some of the messes fluctuated to the extent that the preparation of meals became quite difficult. Several camps had to be abandoned during the summer and toward the end of the season all camps were readjusted to provide personnel for two new camps which were established on the Red Lodge-Cooke highway for some special maintenance work. Three small crews remained at Mammoth, Canyon and Madison Junction until the season closed. Fortunate for our road maintenance work, the season opened with the highways in good condition, with the exception of the Gallatin section.

The employment situation at the start of the 1944 season was almost identical with what it was in 1943, although there were additional restrictions with regard to the hiring of men and it was necessary to select even younger boys for road maintenance work. Due to the scarcity of men it was impossible to organize some of the crews as early as was desired.

NATURALIST SERVICE

The three permanent members of the Naturalist Division carried on the naturalist activities during the 1943 season, operating both the Mammoth and Old Faithful Museums. No seasonal ranger-naturalists were employed. In normal years the park is allowed 22 seasonal ranger-naturalists.

On October 31, 1943 Dr. Walter B. McDougall, Park Naturalist, P&S-2, was transferred to Death Valley National Monument, leaving only chief park naturalist C. Max Bauer and park naturalist Harold J. Brodrick in the permanent organization. Only the Mammoth Museum was open during the 1944 season and no seasonal ranger-naturalists were employed.

INDIAN ARTIFACT

The Yellowstone received the loan of an unusual and interesting artifact on April 26, 1944 to add to its Indian Collection in the Mammoth Museum, through the generosity of William R. Bandy, Cadastral Engineer, General Land Office, Helena, Montana. A "stone cup" or goblet was found by Mr. Bandy in July 1932 on the east shore of a small lake near the summit of the Absaroka Range along the east boundary of the park, while surveying that boundary, and has been turned over to the Mammoth Museum.

ERUPTION OF MORNING GLORY POOL

Morning Glory Pool, one of the most beautiful in the Yellowstone area, erupted at about 7:30 p.m. on June 10, pushing water toward the highway to a depth of about one foot. From observations made some two hours later, it was noted that the trees in the immediate vicinity of the pool had not been touched, indicating that the water had been pushed out rather than being thrown out to any great height. The cause of the eruption was not known, unless it was due to the large amount of debris that had been thrown into the water from time to time by thoughtless visitors, closing in the pressure. Numerous articles, such as handkerchiefs, tokens, pennies, automobile hub caps, stew pans, cans, combs, smoking pipes, pens, pencils and other unidentified items were included among the debris disgorged by the eruption. Although the eruption lowered the water level some 10 to 12 inches, within two hours after the eruption the pool was running over at its normal rate but the water was still cloudy at the end of the month. Park records do not indicate that a previous eruption of the feature has ever occurred.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The regular annual meeting of the Yellowstone Library and Museum Association was held in the Park Naturalist's office on October 2. Assistant Superintendent Johnston, Assistant Chief Rangers Barrows and Evans, and Assistant Park Naturalist Brodrick were elected as new Directors, succeeding former Assistant Superintendent Emmert, Chief Ranger LaNoue, District Park Ranger Anderson and Assistant Park Naturalist Condon.

YELLOWSTONE RATION BOARD

Yellowstone's Ration Board No. 24 was reorganized, following a visit to the park on June 15 and 16 by Mr. H. D. Watenpaugh, State Director of the O.P.A. Judge T. Paul Wilcox, the Chairman of the Board, resigned on June 16, 1944 and his resignation was accepted as of the 21st. Mrs. Enid Wilcox, the clerk of the board, also resigned as of the same date. Following the resignation of Chairman Wilcox, the board consisted of William A. Wright, Acting Chairman, C. Max Bauer, J. E. Haynes, W. Leon Evans and Wyman P. Benson.

SAFETY COMMITTEE

The Park Safety Committee for 1944 was appointed by the Superintendent on January 10 and consisted of Albert E. Elliott, Chairman, Evelyn Kumor, Clerk, and William Wiggins and R. R. Robinson, Jr., Members.

BOARD OF SURVEY

On January 10 the Superintendent appointed the Yellowstone Park Board of Survey for 1944, consisting of C. Max Bauer, Chairman, William N. Reeve, Clerk, Phil Wohlbrandt and Elmer Ames, Members, with Wyman P. Benson and George McMullin, Alternates.

FEDERAL EMPLOYEES UNION

New officers for 1944 were elected in January by Local No. 465, Yellowstone Park Federal Employees Union. This organization is responsible for the social and community activities of the park. William N. Reeve was elected President, T. M Thompson, Vice-President, Evelyn Kumor, Secretary-Treasurer, and William England, Guardian. The Executive Committee selected consisted of Ladd S. Shorey, Howard Kocher, LeRoy B. Van Cott, John Bauman and Stanley Fillmore.

MAMMOTH SCHOOL

The 1943-1944 school term started on September 7 and two teachers, Mrs. Irene Evans and Mrs. Rose French, were employed, the salaries being paid by members of the community having children in school. The school term closed on May 26 with appropriate commencement exercises. Four pupils, Peter Soule, Joan Peterson, Alice Hochstrasser and Eunice Ayers, were graduated.

ABSAROKA WILDLIFE CONSERVATION COMMITTEE

Representatives of the Absaroka Wildlife Conservation Committee, which was organized in the Yellowstone in the spring of 1943 to cooperate on wildlife matters affecting the park and Park County, Montana, rode the range in the park on September 25 to get first-hand information on range conditions. A meeting was held on September 26 for a discussion of matters affecting the organization. Members of the Montana Fish and Game Department and the U. S. Forest Service were represented at the meeting, as were several ranchers residing between the park and Livingston who were affected by elk migrations.

The spring meeting of this organization, during which the name was changed to "Absaroka Conservation Committee," was held in the park on May 6 and 7. The entire morning and part of the afternoon of May 7 was devoted to the general meeting held in the Canteen building. Members of the group were taken for an inspection trip over the game range in the vicinity of the Game Ranch on the afternoon of the 6th and to the Buffalo Ranch in the evening.

BOND DRIVES

The Yellowstone established an unusual record in the Third War Loan Drive conducted in September and October and exceeded all expectations in fulfilling its quota. The park was designated as a unit of the Wyoming War Finance Committee and a quota of $11,800 was set, as against a quota of $7,000 in the Second War Loan Drive in April. Governor Lester C. Hunt of Wyoming offered a plaque to the county or unit in the State exceeding its quota by the largest percentage and at the end of the drive the park reported sales amounting to $48,919.34, or 415% of its quota, which was sufficient to easily win the Governor's award.

In the Fourth War Loan Drive, which closed on February 29, 1944, the Yellowstone finished with credited sales of $35,971.38, as against its quota of $12,600, or 285%. Because of its outstanding performance in connection with the Fourth War Loan Drive, the park was again the winner of a plaque offered by Governor Hunt. These two plaques were received and prominently placed in the Post Office in Mammoth Hot Springs. The Fifth War Loan Drive got underway on June 12 and by the end of the month the park was able to report exceeding its quota of $28,400, which quota was $4,000 in excess of the combined quotas for the Third and Fourth War Loan Drives. Yellowstone employees and operators have responded most generously in all War Loan Drives. Assistant to the Superintendent Joseph Joffe was Chairman of the Yellowstone War Finance Committee in all drives.

WAR FUND DRIVE

The Yellowstone's participation in the National War Fund Drive in November resulted in $971.68 being collected in the park and turned over to the Park County, Montana Chapter as a part of its quota. One hundred thirty-six families contributed an average of $7.17 per family. The total population of the park was less than 300 people, so that the sum collected averaged more than $3.25 per person. Almost every employee contributed a full day's salary or more. Assistant Superintendent Fred T. Johnston was chairman of the park committee.

RED CROSS DRIVE

Yellowstone Park residents contributed $480.61 to the Park County, Montana Chapter during the Red Cross Drive in March. Assistant Chief Ranger Albert E. Elliott was Chairman.

BISON

An important step in a program designed to place the bison, or buffalo, on a self-sustaining basis in the park was taken during January and February 1944, when 400 bison were eliminated from the Lamar herd. Three animals were shipped alive for restocking purposes and 397 were slaughtered. The reduction program was started on January 10 and completed on February 15 and the butchering work was contracted to Lyle and Walter Belden of Billings, Montana. The hides and all meat, amounting to approximately 164,725 pounds, were shipped to 17 Indian agencies and Indian schools.

Investigations of the extent of Brucellosis infection in bison in the Lamar area yielded the following results: total reactors - 82 or 20.7%; total suspects - 63 or 15.9%; non-reactors - 252 or 63.4%. These results show a lesser degree of infection than in 1942 when similar investigations were made.

A census of the bison in the park made during February and March of 1944, when conditions for counting were good, showed 352 in the Lamar area, 222 in the Pelican Creek area, 135 in the Hayden Valley area, and 38 in the Fountain Flat area, or a total of 747. During the month of May 1944 a total of 59 bison calves was counted in the Lamar area, but conditions were not favorable to determine the annual increase in other areas.

Due to the unusually mild character of the winter, bison in the Lamar area were fed only 13 tons of hay over a period of 14 days in March when weather and snow conditions were most favorable. This represents the shortest feeding period of record.

The old drift fence near the Lamar station was torn down in April by a park crew. The drift fence has been used for a number of years in connection with the rounding up of the buffalo at the buffalo stampedes which were held during the summers and for bringing the buffalo into the corrals during the winter in connection with reduction programs. During the past few winters it has been possible to entice the animals into the corrals by the feeding of hay. The "buffalo stampedes" are no longer held in the park.

An outline of proposed investigations and studies of the bison in the park was prepared and submitted for consideration and it was recommended that future bison management plans be based on the results of the investigations which should be carried on when sufficient personnel and funds are available for the work.

ANTELOPE CREEK BUFFALO PASTURE

On June 26 the Park received orders from the Director's Office, dated June 13, to discontinue future use of the Antelope Creek Buffalo Pasture, as a part of the program to put the buffalo on a self-sustaining basis. The instructions called for the elimination of the fence at the pasture to be included in the Project Construction Program and given a high priority rating.

ELK

The northern Yellowstone elk herd was reduced by 8,102 animals during the winter of 1942-1943. Accurate census figures secured by intensive and complete field counts revealed that this herd totaled approximately 7,363 elk in the spring of 1943 and it was estimated the calf crop increased this total to 8,651 by that fall. Weather conditions during the fall of 1943 were mild and the winter which followed was a period of unusually light snowfall. Elk remained in the park and hunters in adjacent areas of Montana took only 125 elk, while 9 were shipped alive for restocking purposes and an estimated 100 died of natural causes. With the addition of the annual increase, it is estimated that the northern Yellowstone elk herd will contain approximately 10,000 animals at the beginning of the 1944 hunting season. It was recommended to the Montana Fish and Game Department that 3,000 elk be removed from this herd by hunting outside the park boundaries in Montana. Such kill would reduce the herd to about 7,000 animals, which is a conservative estimate of the carrying capacity of the winter range.

The Gallatin elk herd is expected to contain about 2,700 animals by fall of 1944 and plans were made to effect a hunting kill of 500 elk from this herd which would reduce its size to the approximate carrying capacity of the winter range. Hunters harvested 305 elk from this herd during the hunting season of 1943, or about 100 less than necessary to maintain the herd at the desired size.

PRONGHORN

Eight hundred or more pronghorn, or antelope, range over the northern part of the park during the spring, summer and fall but spend the winter on a relatively small part of the northern winter range in the vicinity of Mammoth, Mt. Everts and the northern boundary of the park. Field observations produced conclusive evidence of over-use of certain forage plants on the lower winter range by pronghorns. It has been recommended that an open season on this species in southern Park County, Montana, adjacent to the Yellowstone River, with limited licenses, would relieve the pressure on the winter range by removing surplus animals and stabilizing the herd at optimum size.

MULE DEER

It is estimated that mule deer on the northern range at the end of the fiscal year would total about 700. Hunting in adjacent areas of Montana removes a part of the annual increase and the herd's size is not considered excessive at present. A marked decline of deer in some other areas, such as the Firehole River area and the intermediate and upper sections of the winter range lying along the Yellowstone and Lamar Rivers, is the subject of some concern.

BIGHORN

The last Bighorn census was conducted during March 1943 when 138 animals were counted. It is estimated that 300 Bighorn inhabit the park. This species has not shown a set rate of increase and their winter status is not encouraging. Improvement of the winter range and reduced competition with elk and other large animals for winter forage may eventually benefit the Bighorn in the park.

WINTER RANGE

The northern and Gallatin winter ranges, which support most of the large grazing animals which winter in the park, have shown remarkable improvement since the drouth period ended in 1937. Conditions for the growth of range vegetation were very favorable during June and gave promise of resulting in the production of the best range conditions since 1930. Continued favorable spring and summer precipitation, combined with the control of the numbers of grazing animals, particularly elk, will result in still further range improvement. It has been recommended that a complete reconnaissance be made of the winter ranges in the park as soon after the war as funds and the availability of trained personnel permit the undertaking of such a project.

BEARS

The Yellowstone Annual Wildlife Census Report for 1941 contains an estimate of 550 black bears and 300 grizzly bears for the park. This was the last census taken of these animals in the park.

Greatly reduced visitor attendance has been accompanied by a marked drop in reports of property damages and personal injuries due to bears. Roadside feeding has been discouraged and was not a matter of serious concern during the fiscal year. Some undesirable situations existed in the utility areas, where bears secured garbage, since adequate and satisfactory containers are not available. It has been occasionally necessary to dispose of some of the more troublesome or dangerous individual bears. Following is a tabulation of the bear injuries and damages which occurred during the 1943 season as compared with the 1942 season:

	1942					1943				
	June	July	Aug.	Sept.	Season	June	July	Aug.	Sept.	Season
Personal Injuries	9	7	12	0	28	1	1	3	0	5
Property Damages	24	45	46	2	117	4	16	17	1	38
Total Incidents	33	52	58	2	145	5	17	20	1	43
Bears Killed for Control	9	44	28	1	82	1	6	6	0	13*

*No grizzlies have been killed as control measures during 1943.

Every effort has been made to provide for prompt removal and disposal of garbage, which during the 1943 season was burned in pits well removed from the utility areas, since incinerators were not operated, and the same practice was followed in 1944. Since July 1943 a competent Fish and Wildlife Service Biologist, O. J. Murie, has been making intensive studies of the bear problems and ecology of the bears in the park. The results of this research will be very valuable in formulating a program which will discourage bears from frequenting the areas of human habitation and thereby reduce the friction between the visitors and the bears.

COYOTES

These prolific predatory animals are particularly abundant in the park since no control measures are taken to restrict their numbers. During the winter months many of them concentrate on the northern winter game range and exercise a direct influence on the deer, pronghorn and smaller animal populations.

TRUMPETER SWAN

The last census of trumpeter swan was made on August 15 and 16, 1941, when 44 adults and 15 cygnets were counted. There appears to have been very little change in the swan population of the park but another census is contemplated for August 15 and 16, 1944.

FISH AND FISH PLANTING

Following are summaries of the fish planted in Yellowstone waters in 1943 and the proposed plants for the 1944 season:

Species	1943 Total Plants	1944 Proposed Plants
Blackspotted Trout	9,109,519	7,515,000
Rainbow Trout	169,400	165,000
Loch Leven Trout	59,000	215,000
Eastern Brook Trout	44,468	35,000
Montana Grayling	1,940,153	0
Total	11,322,540	8,030,000

The principal Montana grayling waters in the park are stocked to capacity and it is not deemed advisable to add new stock for two years. The number of blackspotted trout to be planted was reduced for waters which have yielded poor results or which are subjected to much lighter fishing intensity. The proposed plants are considered adequate to keep park waters stocked during the present period of light travel. As the number of park visitors increases, it will be necessary to increase the planting of fish to keep the waters properly stocked.

Park visitors are pleased and frequently surprised to find good to excellent fishing in park waters at or near the roads and easily accessible. Few places in the United States offer such varied opportunities for recreation seekers to enjoy good sport fishing without long and expensive trips to remote waters. Visitor interest and participation in trout fishing is increasing and more people are availing themselves of the opportunity to fish in the Yellowstone where no license is required. The Madison River was closed to fishing at sunset September 30 and all remaining waters were closed at sunset on October 15. The 1944 fishing season opened on May 30. Fishing was unusually good in June, a total of 23,828 fish having been reported being taken by park visitors for that month, as compared with 10,281 for the same period the previous year. Trout Lake near Soda Butte was opened to fishing for the 1944 season for the first time in many years, as was also Glen Creek. The Fish and Wildlife Service hatchery at Grebe Lake was closed on June 20 after 1,747,000 grayling eggs were taken and eyed for shipment. No grayling were to be planted in park waters this year.

BILL FOR BEAR INJURY

On April 4, 1944 President Roosevelt signed a bill authorizing the payment of $1,894.95 to Mrs. Christine Hansen, mother of Miss Martha Hansen, Superintendent of Nurses, Twin Falls, Idaho, who was killed by a bear at Old Faithful during the summer of 1942. The attack occurred on the night of August 23, 1942 and Miss Hansen died four days later. This is the first relief bill of record due to an injury to a park visitor by a bear.

ACCIDENTS

No serious accidents occurred in the park during the 1944 fiscal year. One minor motorcycle accident occurred in August and three minor automobile accidents occurred during June.

ARRESTS

Only minor infractions of the park regulations occurred during the fiscal year. In July there were 11 arrests, 10 of which were speeding cases and one petit larceny. One speeding case and one theft of car by minor occurred in August. Only one arrest was made in September. Two youths who robbed a cabin outside the park near the east entrance were apprehended in the park and turned over to Wyoming authorities. On December 11 park rangers arrested Dewey Parker and Ronald E. Stratton of Rexburg, Idaho for attempting to kill elk within the park near the Gallatin ranger station. Parker was fined $200.00 and Stratton $100.00 and 30 days in the Mammoth jail. The car used by the men was confiscated but returned to the owner on February 10 on advice of the U. S. Commissioner. One arrest for traffic violation was made in June.

DEATHS

The National Park Service lost one of its most efficient and outstanding employees in February with the passing of George Moskey, Chief Counsel. Mr. Moskey and his wife were found dead in their apartment in Chicago from asphyxiation. Mr. Moskey visited the Yellowstone on several occasions during his more than twenty years of service with the National Park Service and had been very helpful in many legal matters affecting the Yellowstone.

Roy C. Brown, former Yellowstone Park Ranger from December 21, 1922 to September 30, 1933, died at Warm Springs, Montana on March 8, 1944. Mr. Brown was retired when he reached the age of 55. He was 57 years old at the time of his death.

The National Park Service and the Yellowstone lost a fine friend and adviser in the death of Richard Lieber in Indiana on April 15, 1944. Colonel Lieber was one of the country's leading conservationists and National Park Service enthusiasts. He visited the Yellowstone on a number of occasions and was intensely interested in its problems. His daughter, Jeannette, was employed in the Yellowstone some 20 years ago.

No deaths occurred within the park during the fiscal year.

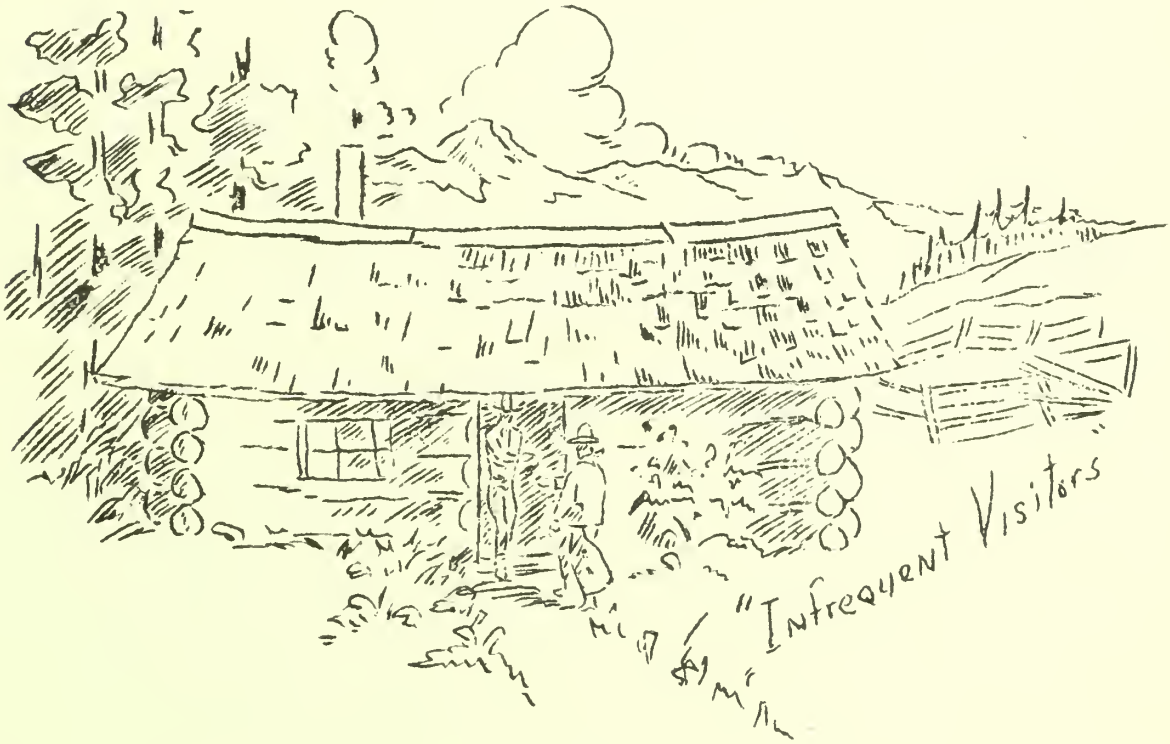
MILITARY VISITORS

Of the 64,144 persons who visited the park during the 1943 travel year, 7,379 men in uniform checked in at the park gateways. This was 11.5% of the total travel. Up to the close of the fiscal year, June 30, 1944, of the total of 20,886 visitors, 2,707, or 13%, were men in uniform. Some 430 soldiers from Fort Harrison, Montana entered the park on September 28 and spent the night at Old Faithful on a recreational bivouac. Another group of 225 soldiers from the same camp visited the park on October 5, traveling in 23 trucks. They spent two nights at Old Faithful and were given an especially conducted tour of the park during their stay.

VISITORS

There were few prominent visitors in the park during the 1943 season, but this was to be expected with the greatly reduced travel. Director Newton B. Drury and Congressmen James O. O'Leary and Lewis J. Capozzoli of New York and Walter C. Ploeser of Missouri were visitors in July. Senators Gerald P. Nye of North Dakota and Chan Gurney of South Dakota and Congressmen J. Hardin Peterson of Florida, Hugh Peterson of Georgia, J. W. Robinson of Utah, J. Edgar Chenoweth of Colorado and James F. O'Connor of Montana visited the park in August enroute to the Jackson Hole country in connection with the Jackson Hole National Monument. Michael J. Straus, First Assistant Secretary of the Interior, Director Drury, Regional Director Lawrence C. Merriam, Joel D. Wolfsohn, Assistant Commissioner, General Land Office, and R. H. Rutledge, Director of Grazing, also came into the park in August enroute to the Jackson Hole country. Other August visitors included Rear Admiral L. Sheldon, Jr., Assistant Chief, Bureau of Medicine and Surgery, Navy Department, Commander Francis J. Braceland, U. S. Navy, Kenneth Reid, Executive Director, Izaak Walton League of America, and Roane Waring, National Commander of the American Legion. September visitors included Congressmen Michael J. Kirwan of Ohio, William F. Norrell of Arkansas, Ben F. Jensen of Iowa and William E. Warne, Assistant Commissioner, Bureau of Reclamation, and Struthers Burt, internationally known author and Jackson Hole dude rancher.

Mrs. Helena Huntington Smith Pringle, author and magazine writer, visited the park in May to gather material for an article on buffalo for Collier's magazine. Regional Director Merriam visited the park in June.



United States
Department of the Interior
National Park Service

ANNUAL REPORT

1945

Yellowstone National Park

Edmund B. Rogers, Superintendent

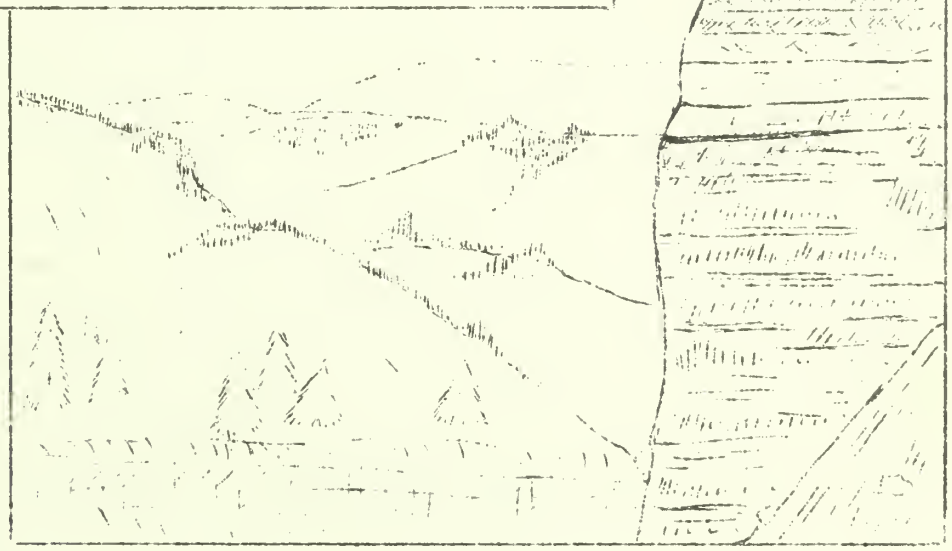
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

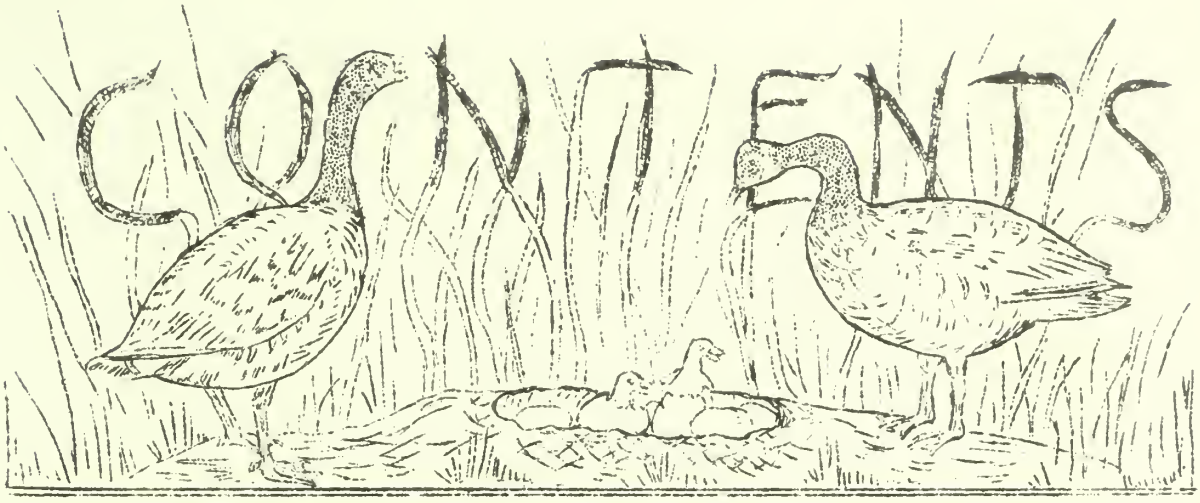
During the years 1927-1928 and 1931 to 1944, on account of a shortage of funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. Again in 1945 mimeographing is necessary.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

Illustrations in this issue are the work of Park Naturalist Harold J. Brodrick.

Edmund B. Rogers,
Superintendent.





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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

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Edmund B. Rogers, Superintendent

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Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933, to June 30, 1934, and subsequent reports have covered the fiscal year periods. This report, therefore, for 1945, covers the fiscal year July 1, 1944, to June 30, 1945.

The report for 1945, as was the case in 1944, 1943, and 1942, has been considerably curtailed as the requirements from the Director's office no longer call for details of various activities, but only the highlights of protection, development, visitor use, etc. The Superintendent's report is no longer needed in detail for inclusion in the Director's brief report to the Secretary of the Interior, but is prepared in order that the continuity of annual reports be not broken for historical and archive purposes.

TRAVEL

As has been the case during war years, when the 1944 travel season got under way only minimum accommodations were provided for visitors and no encouragement was offered the public to induce travel. None of the hotels, lodges, or cafeterias was operated. Tourist cabins were open during the season only at Old Faithful and Fishing Bridge, and the general stores at these two points served meals and provided overnight lodging. In Mammoth, meals were obtainable at the general store, and lodging at the Coffee Shop. No accommodations were available at West Thumb, Lake, Canyon, or Tower Falls. With restrictions more stringent than in previous war years, it was surprising that 85,347 persons could reach the Park gates, an increase of 33 per cent over the 1943 travel year when 64,144 visitors were recorded. No train service was available to the Park entrances, but the Northern Pacific Railroad ran daily bus service, except Sundays, from its main line at Livingston, Montana, to the North Entrance at Gardiner. Daily bus service was maintained from Ashton, Idaho, to West Yellowstone, Montana. No bus service was available within the Park. Park travel, therefore, was restricted to persons traveling in their own automobiles and to horseback parties.

Ten thousand eight hundred ninety-eight men in uniform viewed the Park wonders and obtained rest and recreation during the travel year from October 1, 1943, to September 30, 1944. This was 12.8 per cent of the total travel. Most of the other visitors were persons going across country in connection with war work or, to visit

members of their families or friends then engaged in war work or in the armed forces, also persons living near the Park who were able to save sufficient gasoline to make short trips.

Travel got off to an early start in May 1945, as soon as the roads were open, and it was apparent that the season would exceed that of 1944. However, accommodations were still of an informal character and were quite limited, with no hotels or lodges operating and only a comparatively few tourist cabins open for business - those at Old Faithful and Fishing Bridge. Nineteen thousand two hundred forty-seven visitors entered the Park during June as compared with 14,261 visitors for the previous June, an increase of 37.7 per cent. The total number of visitors for the period from October 1, 1944, the close of the last travel year, to June 30, 1945, the close of the fiscal year was 28,815, as against 20,886 for the same period a year ago, an increase of 37.9 per cent. The fact that travel restrictions were more rigid and there had been a decrease in gasoline allowances as compared with the previous year, it was even more surprising that so many motorists could visit this national park which is so far distant from large centers of population. As was the case during the last travel season, a large part of the travel consisted of service men and women and people traveling to and from war jobs, as well as members of families following service men and war workers across country. It was apparent that the 1945 travel would far exceed that of the previous year.

REVENUES

Revenues for the 1945 fiscal year totaled $54,877.89, which represents an increase of $7,771.31, or approximately 16.5% more than revenues for the 1944 fiscal year, when $47,106.58 was collected. This increase was reflected chiefly in the increased automobile travel, most of the park's revenues resulting from collection of the $3.00 motor vehicle license fee.

APPROPRIATIONS

The following appropriations for the 1945 fiscal year were made available to Yellowstone and coordinated areas:

1451000.100 & .333	Yellowstone National Park.....	$346,115.00
1451000.041	Big Hole Battlefield National Monument.....	1,155.00
1451000.041	Devils Tower National Monument.....	8,342.00
1451000.051	Emergency Reconstruction & Fighting Forest Fires - Yellowstone National Park	1,682.00
1451000.061	Forest Protection and Fire Prevention -YNP..	14,207.00
1451000.061	Forest Protection & Fire Prevention - DTNM..	111.00
1451000.711	Custer Battlefield National Cemetery.....	8,435.00
14-1252245(5).001	White Pine Blister Rust Control, Dept. of Agriculture (Trans. to Interior) 1945....	1,250.00
	Total All Appropriations.....	$381,297.00

PARK OPERATORS' BUSINESS

The policy of refraining from promoting Park travel continued in 1944 and the concessioners were required to keep open only such facilities as were deemed necessary to accommodate the number of motorists who might be able to reach the Park with their own transportation. No hotels, lodges, or cafeterias were operated, and no facilities were available at West Thumb, Lake, Canyon, or Tower Falls. There was no bus service available, and as during the previous year, the railroads did not deliver tourists to the Park gates. Furnished cabins at Old Faithful were closed on August 28, and both furnished and unfurnished cabins at Fishing Bridge were closed on September 5. Boat service at Fishing Bridge was discontinued the same day. The Hamilton store at Fishing Bridge served meals and took care of overnight guests until September 11. Accommodations were continued at Mammoth, where the general store served meals and the Coffee Shop had overnight facilities, until September 19. The general store and gasoline filling station at Mammoth remained open throughout the winter to take care of local residents. At Old Faithful the general store took care of late visitors, serving meals and providing lodging until October 31. Haynes Picture Shops at Old Faithful and Mammoth operated throughout the 1944 season.

For the 1945 season it was decided that accommodations would be similar to what they were during other war years, except that the tourist cabins at Old Faithful and Fishing Bridge would provide lodging accommodations from June 17, and that the Cottage Hotel would be open to take care of overnight guests at Mammoth beginning June 10. Cafeterias were open at Old Faithful and Fishing Bridge, but regular cafeteria service was not provided at these establishments. During the time that the Yellowstone Park Company provided overnight accommodations at Old Faithful and Fishing Bridge, the Hamilton stores were not to take in guests unless other accommodations were filled, nor were regular meals to be served at their establishments in these localities. Mr. Hamilton was to provide rooms and meals before the tourist cabins and cafeterias opened and after they closed. The Old Faithful store was open on May 7 and the Fishing Bridge store on the 14th. The Haynes Picture Shops at Mammoth, Old Faithful, and Fishing Bridge were to operate during the entire season. Pryor Coffee Shop at Mammoth started serving meals on June 1 and the Yellowstone Park Company established offices at the Cottage Hotel on June 10. Cabins at Old Faithful and Fishing Bridge and cafeterias at these locations started operations on June 17.

MEDICAL SERVICE

During the 1944 tourist season a permanent nurse was available at Mammoth and a nurse was provided for Fishing Bridge. Mrs. Lavina Lewis entered on duty August 1, 1944, as permanent Park nurse at Mammoth, succeeding Miss Elsie Kane. Nurses were provided at both Old Faithful and Fishing Bridge for the 1945 season. The hospital at Mammoth was not open during either the 1944 or 1945 season, and no resident physician was available.

COMPLAINTS

Few written complaints were received during the summer of 1944, but it was not possible to give the class of service which was available in the Park during normal years. Park concessioners attempted to give the best service possible with young, inexperienced help, and taking into consideration the restrictions of the O.P.A. and other Government agencies which made operating difficult. Large crowds over the 4th of July holiday taxed all concessioners to the utmost in providing satisfactory service. Park visitors appeared resolved to take what was offered them and not complain and it was probably due to this attitude that few written complaints were received. However, many oral complaints regarding accommodations and services were registered with the rangers at various stations throughout the Park. The same condition existed during the early part of the 1945 season, but no written complaints had been registered up to the end of the fiscal year.

PUBLICITY

As the general policy of the National Park Service was to not encourage travel to the Park Service areas, and due to the restrictions on press releases, the Park issued very little general publicity during the 1944 season, and no Publicity Director was appointed. No new folder was issued for the season, but the Park continued to distribute its old 1942 folder, a good supply of which was still available, and to issue an "Accommodations and Services" circular for distribution to visitors as they entered the Park gates and to persons writing in for information concerning operations. The circular was revised several times during the season. The same condition existed when the 1945 season got under way, and the Park still continued to distribute the old 1942 folder and to keep visitors currently informed of the activities by issuance of the accommodations and services circular. No Publicity Director was engaged for the 1945 season. During the pre-war years when a Publicity Director was available, this employee was engaged by the Park concessioners.

EMPLOYEES IN THE ARMED FORCES

Two Yellowstone employees were inducted into the armed forces early in 1945; Assistant Chief Ranger William S. Chapman going into the Army on January 16, and District Ranger Lloyd J. Astle into the Navy on February 9. Clerk Evelyn E. Kumor enlisted in the WAVES and entered on duty on March 8. Hugh Peyton, Assistant Chief Ranger, returned to duty from military furlough to his old position on March 28, following his release from the U. S. Coast Guard. Mr. Peyton is a veteran of World War I, and served during World War II from September 9, 1942. Aubrey L. Haines was discharged due to disability from the U. S. Army on March 22 and returned to duty from military furlough as a Park Ranger on May 2. He was the first of the Yellowstone employees to enter the armed forces, having served since June 1941. Lloyd K. Holman, Packmaster, was discharged from the U.S. Army on May 27 and returned to duty from military furlough on June 13. He entered the U. S. Army in November 1942.

MOTOR VEHICLE LICENSE FEE

Collection of the motor vehicle license fee for the 1944 season was discontinued on September 5, and collections for the 1945 season started on June 15.

RANGER SERVICE

As was the case in 1943, the Park operated during the 1944 season with the permanent force and only 15 seasonal rangers, as against 47 seasonal rangers in normal years. There were also several vacancies in the permanent ranger organization due to the men being called into the armed services and our inability to obtain suitable eligibles to fill the vacancies. Only 15 seasonal rangers were allowed for the 1945 season, 9 of whom were assigned to checking station duty, and when the season commenced there were still several vacancies in the permanent organization.

RANGER CONFERENCE AND FIRE SCHOOL

The 1945 Protection Conference was held at Mammoth from May 23 to 26, inclusive. The Conference was sponsored by the Ranger force and all rangers and a large group of other members of the Park staff, as well as a number of guests from Service areas and other agencies, were in attendance. A Standard First Aid course was held from May 18 to 22 for rangers unable to take advantage of the course conducted in March. The First Aid Course in March was conducted by George Gates, Field Representative of the American Red Cross. Thirty-one persons took the Standard Course, 16 the Advanced Course, and 14 the Instructors Course. Practically all were Park employees. Chief Ranger Barrows, Assistant Chief Ranger Peyton, District Rangers Ebert and Jacobson, and Park Ranger Haines attended the Regional Fire Training Conference at Rocky Mountain National Park, from May 14 to 20.

NATURALIST SERVICE

Only the Mammoth Museum was operated during the 1944 season and Naturalist activities were carried on by Chief Park Naturalist Bauer, and Park Naturalist Brodrick. The museum closed on September 5. No seasonal ranger-naturalists were employed, although in normal years the Park is allowed 22. The ranger headquarters at Old Faithful was in the Museum building and visitors who stopped were afforded an opportunity to view the exhibits. The Artist Point exhibit was opened for the first time in 1944 and many favorable comments were received on the character of this exhibit.

During the 1945 season the same conditions existed as in the previous year, with only the Mammoth museum being open with an attendant, and the Old Faithful museum housing the ranger headquarters.

CLOSING AND OPENING OF ROADS

The Red Lodge-Cooke highway was not open to travel in 1944 until July 13. The Portland Office of the Public Roads Administration was allotted $15,000 for maintenance of this section, but this amount did not provide for snow removal. A storm in late September closed this highway to travel, but cars came over it again on October 6. The road was again temporarily closed by snow on October 17, but cars started traveling over it beginning October 25. The previous year this highway was definitely closed on October 19, and the East and South entrances on October 23. The Red Lodge-Cooke highway was definitely closed on November 1, 1944, and all Park roads were closed to tourist travel the following day as a result of a severe rain and snow storm which occurred on November 1. Two rotary snowplows started the opening of roads on April 30. Plows were operated only one shift but by the end of May all Park roads were open to travel.

There was a serious shortage of labor throughout the war and it has been necessary that the maintenance crews be operated mostly with high school boys and men of advanced age. It was particularly difficult to obtain suitable truck drivers and grader operators. With the

return of many of the high school boys to school and inability to replace them, late maintenance work suffered. Also, it was necessary to operate early during the 1945 season with small crews due to the unavailability of high school students until the schools were closed in June. Competition with high wages being paid outside the Park also affected the labor market for the Park. During July 1944 the Park forces lost 22 of their employees due mainly to the payment of higher wages outside the Park.

Considerable work was done during the 1944 season on reprocessing and reshaping the Gallatin section of road on the west side of the Park, and with more than the usual amount of frost boils and heaving of roads, early maintenance of this section was required at the start of the 1945 season.

A severe windstorm which occurred in the Park on the evening of August 28 broke down numerous trees on the East side of the Park. It was necessary to remove 72 trees from the highway between Lake and Canyon in order to continue travel over this section.

The concrete rail on Chittenden Bridge was repaired during the 1944 season by shaping and painting the cracks with a cement grout. This work was only a temporary solution as the entire rail is deteriorating very badly and will have to be replaced with a new concrete rail within the next three or four years.

One of the old CCC cabins at Old Faithful was moved to the road camp at Madison Junction in October to be used as a bunkhouse for road maintenance crews. The crews at this location have been living in tents for several years.

A new plank deck was placed on the Gardiner Bridge about two miles north of Mammoth. A new log bridge was partially built at Soda Butte Creek near the Northeast Entrance in October. Work was discontinued due to bad weather, but was resumed again in the spring and completed prior to the opening of the 1945 season.

The Red Lodge-Cooke road had not been open to travel for the 1945 season by the end of June. Maintenance crews were organized and in operation at Mammoth, Madison Junction, Tower Falls, East Entrance, Gallatin, and the South Forest areas as well as special crews for repair of bridges, guard rails, etc. The labor situation was slightly better than in 1944, but there was still a lack of competent truck drivers and patrol grader operators.

CONSTRUCTION WORK

No new construction was under way in the 1944 season and no new construction was undertaken for the 1945 season.

WAR BOND DRIVES

The Fifth War Loan Drive which started on June 12, 1944, was concluded on July 8 and when all figures were compiled the Park was credited with 165 per cent of its interdepartmental quota and 249 per cent of its state quota. The Sixth War Loan Drive got under way on November 20 and the Park had exceeded its quota before the end of the month. The Drive was concluded on December 16 and the Park finished with sales totalling 116 per cent of its interdepartmental quota and 180 per cent of its state quota. The Park was the first unit in the State of Wyoming to meet its quota. Again in the Seventh War Loan Drive, which took place in May and June 1945, the Park greatly exceeded its quota, finishing with 294 per cent. Employees of the Park and all park operators responded generously during all War Loan Drives and the Park made an enviable record as a unit of the State of Wyoming in all drives. Assistant to the Superintendent Joffe has been Chairman of all Bond Drives in the Park, but during his absence due to illness, Assistant Superintendent Johnston was Acting Chairman of the Seventh War Loan Drive.

RED CROSS DRIVE

As has been the case in every Red Cross drive, the Park employees responded most generously during the one held in March 1945 and contributed $531.50. All employees were solicited and the 104 who contributed averaged $5.11 each. The funds were turned over to the Park County, Montana, chapter. Assistant Chief Ranger Elliott was Chairman of the Yellowstone Drive.

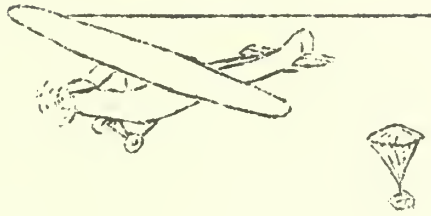
WAR FUND DRIVE

As in all other drives undertaken in the Yellowstone, the Park people gave generously during the National War Fund Drive, held in October 1944, contributing $722.50, which amount was turned over to the Park County, Montana, Committee. Contributions were received from 152 people, averaging $4.75 each, which was considerably above the average donation received by other communities in the vicinity of the Park and throughout the country. Assistant Superintendent Johnston was Chairman of the Yellowstone Committee.

BUILDING FIRE PROTECTION

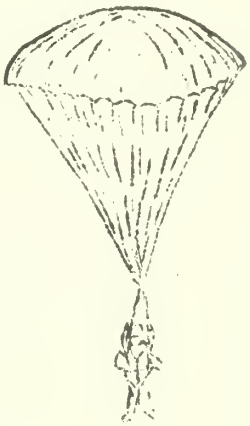
Regular annual inspections were made of all Government-owned and operator's buildings and a number of the more serious hazards found in Government buildings was corrected. The shortage of personnel and funds available prohibited accomplishment of all repair and maintenance work which was recommended as fire hazard remedies.

Only one building fire occurred during the year, when a small cabin used as a temporary quarters for seasonal personnel at Snake River Ranger Station burned down. The estimated property damage was $150.



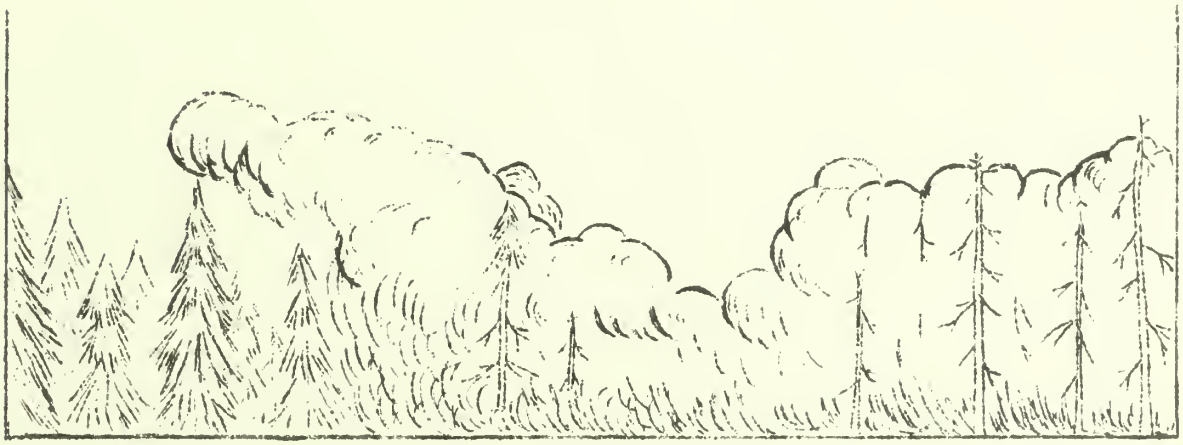
FOREST FIRE PROTECTION

Weather conditions were particularly favorable, from a fire protection standpoint, and only three forest fires were reported during the 1944 season. One was a grass fire in the extreme north end of the Park which burned over an area of approximately 65 acres of cheat grass and weeds. It was started from a railroad locomotive. One Class B lightning fire was found on Mirror Plateau. No fires occurred in the vicinity of the Park during the 1945 season up to July 1.



Visibility and seen area maps were prepared during the winter for a number of points which are being studied as possible sites for lookout stations.

Some research work was accomplished regarding forest fire occurrence, causes and discovery, and several maps and charts were prepared to facilitate use of the data obtained.



FOREST TREE DISEASES

Representatives of the Plant Disease Control Division of the United States Bureau of Entomology and Plant Quarantine, while scouting for evidence of white pine blister rust in the Park and vicinity, found rust infection on ribes in the Mammoth Hot Springs area during August. The actual presence of blister rust within the Park emphasized the necessity for expediting control work in the five needle pine areas where it has been agreed that control work is justified.

Arrangements were made for a 25-man side camp of CPS assignees from Camp No. 55 at Glacier National Park to conduct blister rust control work in the Mammoth Hot Springs area. The side camp was installed at Mammoth on June 14 and control work started immediately. Representatives of the Bureau of Entomology and Plant Quarantine rendered valuable technical assistance in getting the work started.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The regular annual meeting of the Board of Directors of the Yellowstone Library and Museum association was held in the Park Naturalist's Office on October 2, with Chairman Rogers presiding. Superintendent Rogers, Chief Ranger Barrows, Assistant Chief Ranger Evans, and U. S. Commissioner Wilcox were re-elected to three year terms. Superintendent Rogers was re-elected as Chairman, C. Max Bauer, Executive Secretary, and J. E. Haynes, Treasurer.

FEDERAL EMPLOYEES UNION

New officials for 1945 were elected by the Federal Employees Local Union No. 465 at the January meeting, consisting of Thomas M. Thompson, President, Philip Wohlbrandt, Vice President, Parke Soule, Treasurer, Ludwik Pilch, Guard. The Board of Directors elected consisted of Fred Nissen, Elmer Armstrong, Joseph Joffe, William Mardis, and Elmer Luer.

SAFETY COMMITTEE

Members of the Yellowstone Park Safety Committee, appointed January 10, 1944, to investigate and report on all accidents involving Park employees and equipment during 1944, were reappointed by the Superintendent on August 3, 1945, for the 1945 calendar year. The Board consisted of Albert E. Elliott, Chairman, William Wiggins, and Robert R. Robinson. Mary E. Deason acted as clerk of the Committee until the appointment of Edna Mae Allison on June 1, 1945.

BOARD OF SURVEY

On February 14, 1945, the Superintendent appointed a new Board of Survey for the 1945 calendar year, consisting of C. Max Bauer, Chairman, Philip Wohlbrandt, and Wyman Benson, with Elmer W. Ames and George McMullin as alternate members. Victoria L. Novicki acted as clerk of the Board until the entrance on duty on May 28 of John M. Banfield.

ABSAROKA CONSERVATION COMMITTEE

The Absaroka Conservation Committee, organized in the Yellowstone in September 1943, held its regular fall meeting in the Park on September 16-17. The first day was spent in automobile and horseback trips by various groups over the winter range and to Jardine and Cooke to investigate stream pollution in the Yellowstone River and Soda Butte Creek. One group looked over the buffalo range in Hayden Valley and Mary Mountain regions. The business session was held in the Lamar station on September 17.

The regular spring meeting of the organization was held in the Park on May 5 and 6. Inspections of range conditions and pollution of Soda Butte Creek and the Yellowstone River from mining activities were made on the afternoon of May 5. The business session was conducted the following day in the Canteen Building at Mammoth. A fine representative group of Government and State officials was present at this meeting. The Committee recommended that 3,600 elk be removed from the Northern Yellowstone herd by hunting outside the Park during the winter of 1945-46, and that 150 antelope be trapped along the north boundary of the Park and transported to less crowded areas in Montana. It also favored a program of tagging of coyotes, both inside and outside the Park, to determine the migration habits of these animals. Wesley D'Ewart, President of the Committee, was elected in June to the United States House of Representatives from the Second Montana District, succeeding former Congressman James F. O'Connor.

YELLOWSTONE RATION BOARD

The Yellowstone Ration Board No. 24 was re-organized in June 1944 upon the resignation of T. Paul Wilcox as Chairman. The new Board consisted of C. Max Bauer, Chairman, J. E. Haynes, W. Leon Evans, William Wright, and Wyman P. Benson. The Board functioned throughout the fiscal year.

MAMMOTH SCHOOL

On July 18, 1944, a new school board for the Park, consisting of Harold J. Brodrick, Chairman, Mrs. Deate T. White, Albert E. Elliott, and Philip Wohlbrandt was appointed by the Superintendent. The school term started on September 5 with Mrs. Irene Evans instructing the lower grades and Mrs. Catharine Onstott the upper grades. The school closed on May 18. Graduation exercises were held in the Canteen with Roy Hjelm, Elmer Armstrong, Jr., Harold Brodrick, Jr., and Sylvester Ames graduating. A new school board was appointed, effective May 18, consisting of Harold J. Brodrick, Chairman, Hugh B. Ebert, Secretary-Treasurer, and Mrs. Deate T. White.

LANDING OF PLANES IN THE PARK

On July 8, 1944, a CAA plane, piloted by Lieut. M. L. Jones of Salt Lake City, made a forced landing inside the Park near the North Entrance. Neither the pilot nor the one passenger was injured, but the plane was badly damaged. The flight was a pleasure trip and not Government authorized.

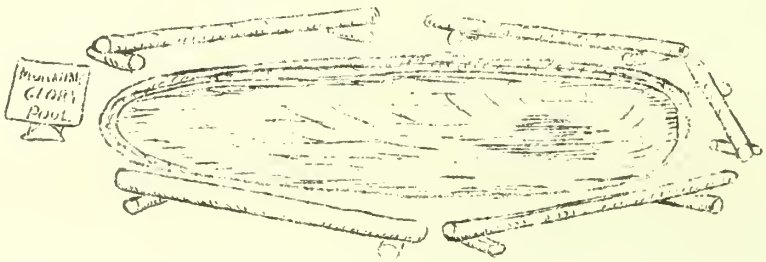
On September 20, a Taylorcraft BC-65, two-passenger plane, landed in the field inside the North Entrance to the Park. The landing and take-off were made without mishap. The owner of the plane delivered a passenger from Helena to Gardiner.

WRA USES NEZ PERCE CCC CAMP

The War Relocation Authority at Heart Mountain, Wyoming, was granted authority to use the old Nez Perce CCC Camp for housing groups of Japanese Boy Scouts, Girl Scouts, and Campfire Girls for weekly outings during the summer of 1944. The first group entered on July 8 and trips continued at weekly intervals until August 12.

MORNING GLORY POOL

Morning Glory Pool, one of the most beautiful in the Yellowstone, which erupted unexpectedly on June 10, 1944, and became a cloudy, unattractive feature, had regained all its beauty by the time the first visitors arrived for the 1945 season. The cause of the eruption or overflow of the pool is believed to have been due to the large amount of debris that had been thrown into the water from time to time by thoughtless visitors, closing in the pressure.



EARTHQUAKES

Earth tremors occurred in the Park at various locations on several occasions during the fiscal year, the first being reported at West Thumb on the late afternoon of August 12 and early morning of August 13, 1944. No damage occurred, and no other area in the Park reported this quake. Three distinct shocks were felt at the Snake River Ranger Station on the evening of October 2; dishes rattled and a hanging lantern was noticed swinging after the tremor subsided. The shocks were also felt by a number of persons at the Flag Ranch, about two miles south of the station. No material damage resulted. Twenty-six distinct shocks were felt by the winterkeepers at Lake during April 1945. Shocks were first noticed on April 21 and the last one felt on the 29th. A loud, roaring noise occurred before each shock. No apparent physical damage occurred. Twelve of the shocks were felt by the Canyon winterkeeper. A slight tremor was reported from Lake on the afternoon of May 4.

ORGAN FOR CHAPEL

A Hammond organ, donated to the Yellowstone residents for the Chapel at Mammoth Hot Springs, was installed on March 28. The entire cost of the organ, $1,702.00, was donated by Mr. & Mrs. C. A. Hamilton, Park concessioners, as a gift to the Park people in commemoration of their 25th wedding anniversary. They were married in the chapel on September 20, 1920. The organ was dedicated at a special Easter sunrise service held on April 1.

SHIP NAMED FOR PARK

On April 12, 1945, the destroyer tender, U.S.S. Yellowstone, named for Yellowstone National Park, was launched at Todd Pacific ship yard at Seattle, Washington. This is the largest vessel launched in Seattle since the battleship Nebraska in February 1904. Through special arrangements of the Coast Guard, six former employees of the Yellowstone ranger force, on duty with the Coast Guard on the West coast, were invited to attend the launching ceremonies.

ARRESTS

Only minor infractions of the park regulations occurred during the fiscal year. In July and August there were fifteen arrests, eight of which were speeding cases, one reckless driving, three with excessive fish, one petty larceny, one leaving a burning campfire, and one breaking through a Park barricade. One case in November was for killing a coyote in the Park, and it was postponed until February due to Commissioner Wilcox being on leave. In June of 1945 there were six cases - two for speeding and four for possession of an excessive number of fish. In all of the twenty-two cases fines totaled $465.50; $114.50 of which was remitted.

ACCIDENTS

Twenty-four traffic accidents were reported in the Park during the 1945 fiscal year. At least one accident occurred each month, with the exception of February. In only two cases was hospitalization necessary.

BISON

A census of the bison in the Park was made during March when conditions for counting were favorable. All areas known to be inhabited by bison during the winter months were covered by rangers traveling on skis, snowshoes, or on horseback.

Summary of the 1945 Bison Census

Lamar - Lower Yellowstone River Area	445
Fountain - Madison Junction Area	50
Mary Mountain - Hayden Valley	113
Pelican Valley	324
Grand Total	932

On May 29 and 30, a total of 98 bison calves was counted in the Lamar Area. This indicated an annual increase of about 22 per cent, but mortalities which occur during the first year will reduce the net increase to a lower figure.

The winter of 1944-45 was generally mild, but during early February a period of warm weather followed by low temperatures caused the formation of a heavy crust on the snow in the Tower Falls and Lamar district winter ranges. This condition made it necessary to feed the animals which gathered near Lamar headquarters. Feeding was carried on from February 24 through March 7, a period of 12 days. An average of $1\frac{1}{2}$ tons of hay was fed daily to an average of 410 bison or about 7.3 pounds of hay per animal per day. All hay remaining in the hay stacks at Lamar had been removed by the end of March and all stack yards and fences removed. This completes the landscape restoration program started in the Lamar area some years ago and the fields are now clear of all stacks and fences.

Largely due to criticism voiced by the American Veterinary Medical Association, the Director, National Park Service, placed a ban on the shipment of live bison from Yellowstone, and Dr. E. R. Quortrup, of the Fish and Wildlife Service, was detailed to carry on an intensive investigation of brucellosis in the Park bison. Dr. Quortrup arrived in the Park on December 2, 1944, and remained here through December 19. A complete report of his work was submitted through the Director, Fish and Wildlife Service.

ELK

The Northern Yellowstone elk herd was estimated to contain approximately 10,000 animals, before the Montana hunting season opened, during the fall of 1944, and it is planned to remove a sufficient number from the herd by hunting outside the park to reduce the herd to about 7,000 animals. However, the winter was mild with comparatively light snow and most of the elk remained in the Park; so the hunters removed only 403. Attempts were made to trap live elk for shipments outside the Park, but without success.

The natural increase enlarged the herd to approximately 10,900 animals by the summer of 1945 and in accordance with the recommendation of the Absaroka Conservation Committee, it is planned to remove 3,600 by hunting outside the park boundaries during the winter of 1945-46. Two successive light winters have been responsible for the present large size of the herd.

PRONGHORN

Pronghorns on the northern winter range were counted on February 21 and 22 by park rangers, Montana deputy game wardens, and the district forest ranger of Absaroka National Forest. A total of 773 animals was counted and of this number, 726 were inside the Park and 47 outside. The count was well organized and conditions for counting were favorable. It is estimated that a total of 800 pronghorns inhabit the northern winter range.

The lower portion of the winter range inside the Park shows evidence of considerable over-use by antelope and to correct this condition, the Montana Fish and Game Department plans to trap surplus animals north of the Park boundary and transport them to other less crowded ranges.

BEARS

The status of bears in the Park continued to be satisfactory. Both black and grizzly bears appear to be well distributed over the Park and have not concentrated along the roads and areas of human habitation, since with the greatly decreased travel there is little artificial food available to attract them from their natural habitats.

Comparative Bear Injuries and Damages

	1944			1945
	July	Aug.	Sept.	June
Personal Injuries....	0	1	0	0
Property damages.....	13	3	1	1
Total Incidents.....	13	4	1	1
Bears killed for control.....	8	2	1	0

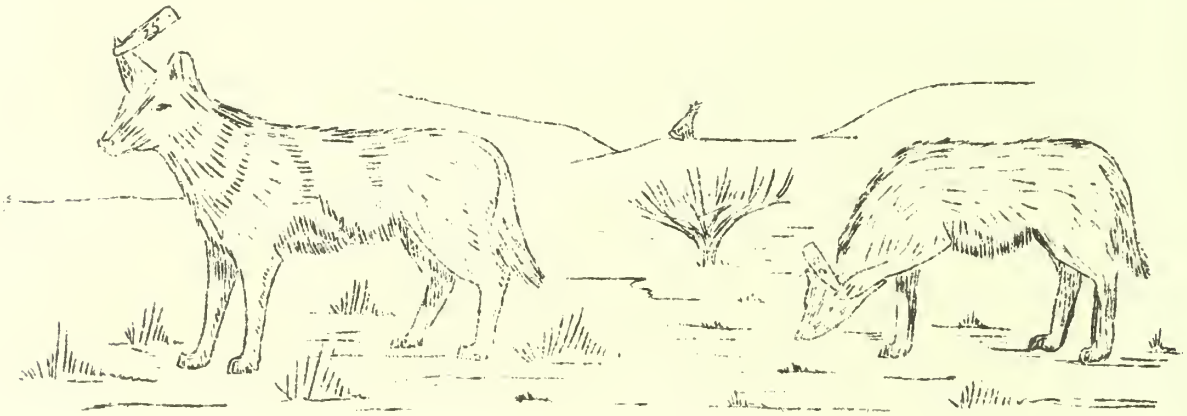
In October 1944, a female black bear and two cubs were collected for the Colorado Museum of Natural History. In June 1945, a pair of young black bears were shipped to the Salt Lake City Municipal park. During the 1944 season Mr. O. J. Murie, biologist, Fish and Wildlife Service, continued studies on the ecology of bears in the Park, giving special attention to possible means of discouraging bears from frequenting campgrounds and other areas inhabited by visitors.

BIGHORN

All accessible and known bighorn ranges were checked in March by park rangers and 206 of these animals were actually counted. The total number of bighorns in the Park is estimated at 280.

COYOTES

Under the direction of the Wildlife Research Laboratory at Denver, Colorado, biologists of that Service commenced work on a program of coyote migration investigation in the northern part of the Park. This work was undertaken to determine to what extent coyotes migrate outside the Park where they could cause damage to domestic livestock. During June 1945, a total of 25 coyote pups was tagged and released in the Park. It is anticipated that the work will be continued during the fall of 1945 and for several years thereafter.



RANGE CONDITIONS

Weather conditions during July 1944, and the balance of the growing season, were favorable and an excellent range forage crop was produced. During the ensuing comparatively light winter which followed there was an abundance of forage available for the native grazing animals which gather on the northern winter range.

Appreciable amounts of forage remained on the range after the snow disappeared in the spring of 1945 and conditions were similar to those which prevailed during the preceding winter which was also mild, but utilization was somewhat heavier during the latter winter largely due to the increased number of elk utilizing the range. Browsing on coniferous trees did not occur to any noticeable extent, indicating that ample palatable forage was available.

An abundance of moisture occurred during the early growing season of 1945, though the favorable effects of this moisture were not completely reflected in maximum plant growth due to prevailing low temperatures. However, by the end of June the vegetative growth had progressed sufficiently to give promise of a very good forage crop.

TRUMPETER SWAN

On August 15 and 16, 1944, a census of trumpeter swans in the Park and areas adjacent to the South boundary was made by park staff and members of the Forest Service and Fish and Wildlife Service. A total of 59 swans was counted which included 48 adults and 11 cygnets.

FISH

Park visitors reported taking 97,401 fish from Park waters during the 1944 season and 25,706 additional during the period from May 30 to June 30, 1945. Yellowstone Lake and the Yellowstone River continued to produce the bulk of the fish reported although other park waters yielded fine catches to anglers.

Summary - All Fish Plants
In Yellowstone Park - 1944

Blackspotted trout	6,984,043
Rainbow trout	97,441
Loch Leven trout	119,538
Eastern Brook trout	39,990
Total -	7,241,012

DEATHS

Only one death occurred in the Park during the fiscal year. On July 27, 1944, Mr. Clarence B. Rapp, 43, of Salt Lake City, Utah, died of unknown causes while hiking out from a fishing trip at Grebe Lake.

George McCluskey, Road Maintenance Foreman, died at the Veterans' Hospital at Fort Harrison, Montana, on November 30. He had been employed seasonally in the Yellowstone since June 1, 1934.

Dick Johnson, private flier, and Orange Olson, of the U. S. Forest Service, were killed in a plane crash while counting elk in the Jackson Hole on March 2. Pilot Johnson, well-known as a flier for the U. S. Forest Service in this region, had done considerable flying over Yellowstone Park in connection with forest fire suppression.

Word was received here on March 10 that Richard J. Smiley, Bozeman, Montana, seasonal ranger for several years, was killed in action with the U. S. Army in the European theater.

David H. Smith, Sergeant, U. S. Army, was killed in action in France on December 11. Sgt. Smith was a CCC enrollee at Mammoth Camp No. 1 during 1940 and 1941, and was Storekeeper with the National Park Service here during the 1942 season.

J. H. Quarles, 27, Lieutenant, U. S. Navy, who served as a seasonal ranger in Yellowstone Park during the seasons of 1940-41 was killed in action somewhere in the Pacific on January 18, 1945.

Lon Ebo, old-time employee of the Yellowstone, who resided on Duck Creek near West Yellowstone, died on March 23, 1945.

The entire country was shocked on April 12 at the death of President Franklin D. Roosevelt. All federal offices were closed at noon in honor of the late President and all flags were flown at half mast until May 14. The President and Mrs. Roosevelt and their party had spent two enjoyable days in the Yellowstone on September 25 and 26, 1937.

VISITORS

As in other war years, there were few prominent visitors to the Park during the 1944 season. U. S. Senator Burton K. Wheeler of Montana; U. S. Congressman Harris H. Ellsworth of Oregon; Andrew A. Stewart, photographer for the National Georgaphic Magazine; and Miss Sarah Carrighar, Saturday Evening Post writer and author, visited the Park in July 1944.

In August 1944, the Park was visited by Newton B. Drury, Director, National Park Service; Conrad L. Wirth, Chief of Lands, N.P.S., Lawrence C. Merriam, Regional Director, Region Two, N.P.S., Horace M. Albright, former Director of the National Park Service and former Yellowstone Park Superintendent; Congressman Horace D. Angell of Oregon; Major General Lewis B. Hershey, Director of Selective Service; Warren H. Atherton, National Commander of the American Legion, Roscoe Turner, Nationally known speed pilot and aviator; and Almendo Alfara, attache of Ecuador Embassy in Washington, D. C.

In September 1944, Park visitors included Alfred G. Arvold, Shrine Imperial Potentate; and Struthers Burt, nationally known author and Jackson Hole dude rancher and Mrs. Burt, also well known as an author.

Taygoara Fleury de Amorim, agricultural chemist, Department of Agriculture, Brazil, came in in November.

U. S. Congressman Harold Knutson, of Minnesota and John R. Murdock, of Arizona, made a trip to the Park from Livingston on the afternoon of January 24 and were able to get as far as the Lamar station. They had been in Livingston attending the funeral of the late Congressman James F. O'Connor.

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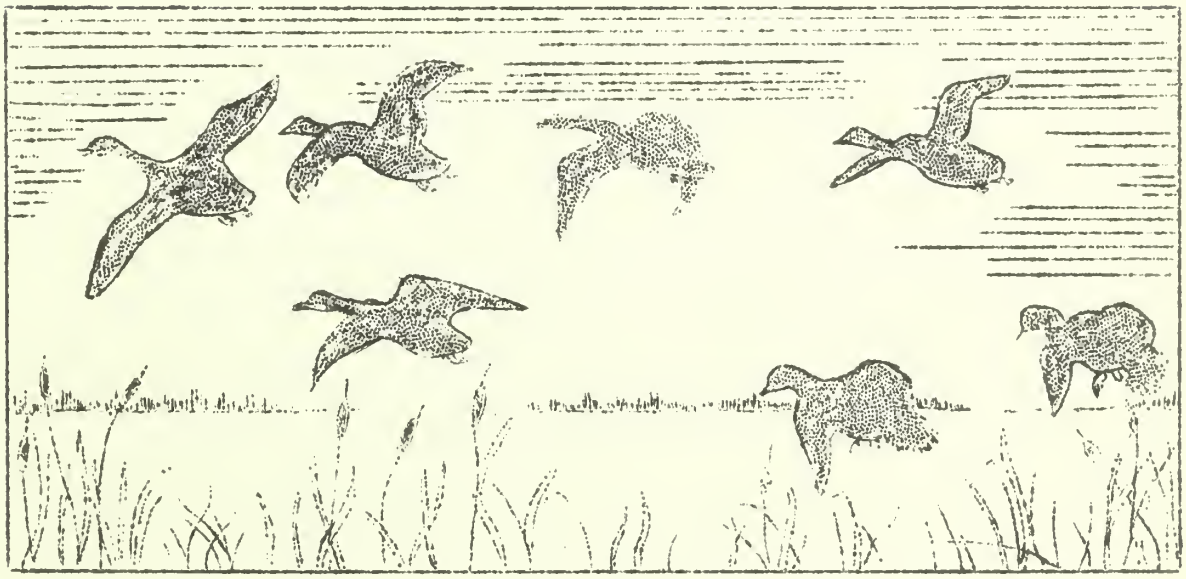

YELLOWSTONE NATIONAL PARK PERMANENT PERSONNEL - 1945 FISCAL YEAR

In order to have available for ready reference the names of Yellowstone Park employees on duty during the periods covered by the Superintendent's Annual Reports there follows a list of the permanent Yellowstone employees who served in the park during the 1945 fiscal year. Similar lists will be included in future reports of the Yellowstone Superintendent.

Edmund B. Rogers, Superintendent
Fred T. Johnston, Assistant Superintendent
Maynard B. Barrows, Chief Park Ranger
Parke W. Soule, Chief Clerk, (Transferred to Region Two, Omaha, June 4, 1945.
Ernest R. I. Anderson, Chief Clerk (Transferred from Mount Rainier National Park, June 21, 1945)
Joseph Joffe, Assistant to the Superintendent
Robert R. Robinson, Jr., Master Mechanic
William Wiggins, Master Plumber
Alice H. Quist, Accounting Clerk
Catharine L. Gillum, Purchasing Clerk
William A. Wright, Storekeeper
Verna R. Somerville, Clerk-Cashier
John G. Macbeth, Personnel Clerk
Grant D. Anderson, Property Clerk
LeRoy B. Van Cott, Accounting Clerk
Evelyn E. Kumor, Clerk (Enlisted in WAVES March 8, 1945)
Edna Mae Allison, Clerk (Transferred from Navy Department, Washington, D. C., June 1, 1945)
C. Wilma Smith, Clerk-Stenographer
Mary E. Deason, Clerk-Stenographer
John M. Banfield, Property Clerk
William N. Reeve, Property Clerk (Transferred to Bureau of Reclamation, Friant, California, Dec. 12, 1944)
Susanna A. Novicki, Clerk-Stenographer
Victoria L. Novicki, Clerk-Stenographer (Transferred from War Relocation Authority, Cody, Wyoming, July 7, 1944)
Dwight E. Richards, Clerk-Stenographer
Gerard Doezie, Clerk-Stenographer (Transferred from War Relocation Authority, Topaz, Utah, May 2, 1945)
Frances J. Ayers, Clerk-Stenographer (Transferred to Grand Canyon National Park, March 23, 1945)
Robert J. Carr, Warehouseman
Andrew A. Alley, Warehouseman
Elizabeth B. Allan, Telephone Operator
Gertrude E. Kocher, Telephone Operator
Aleda C. Joffe, Telephone Operator
Phyllis L. Wohlbrandt, Telephone Operator (Resigned March 18, 1945)
A. Irene Minish, Telephone Operator
Icel Wright, Telephone Operator
Irene C. Evans, Telephone Operator

C. Max Bauer, Chief Park Naturalist
Harold J. Brodrick, Park Naturalist
Philip H. Wohlbrandt, Park Engineer (Civil)
W. Leon Evans, Assistant Chief Park Ranger
Albert E. Elliott, Assistant Chief Park Ranger
Hugh Peyton, Assistant Chief Park Ranger (Returned from military furlough, March 26, 1945)
William S. Chapman, Assistant Chief Park Ranger (Inducted into U. S. Army, January 17, 1945)
Deate T. White, Road Foreman
John Bauman, District Park Ranger
Marion R. Crowell, District Park Ranger (Resigned April 9, 1945)
Lee L. Coleman, District Park Ranger
Arthur Jacobson, District Park Ranger
DeLyle R. Stevens, District Park Ranger
Roy B. Hansen, District Park Ranger
Hugh B. Ebert, District Park Ranger
Rudolf L. Grimm, District Park Ranger
Lloyd J. Astle, District Park Ranger (Inducted into U.S. Navy, February 9, 1945)
Harvey B. Reynolds, District Park Ranger
Herman R. Biastoch, Foreman-Plumber
George McMullin, Foreman-Electrician
Almon E. Dewing, Foreman-Mechanic (Enlisted in U.S. Navy, July 27, 1944)
Wyman P. Benson, Foreman-Plumber
Thomas M. Thompson, Master Painter
Thomas A. Bowman, Foreman-Carpenter
William C. Mardis, Carpenter
Elmer W. Ames, Automobile Mechanic
Howard S. Kocher, Automobile Mechanic
Earl F. Hochstrasser, Blacksmith
William A. Olson, Painter
Harry Trischman, Park Ranger
Joe J. Way, Park Ranger
Everette L. Arnold, Park Ranger
Ray E. Lavender, Park Ranger
Anthony E. Stark, Park Ranger
Robert J. Murphy, Park Ranger
Aubrey L. Haines, Park Ranger (Returned from military furlough, May 2, 1945)
Hollis R. Hope, Park Ranger
Russel B. Noah, Park Ranger
Thomas F. Ela, Park Ranger
George C. Blake, Park Ranger (Transferred to Carlsbad Caverns National Park May 4, 1945)
Charles C. White, Park Ranger
Charles M. Rector, Foreman-Electrician
Edward L. Link, Automobile Mechanic
Anthony B. Nelson, Automobile Mechanic

Rudolph F. Lueck, Park Ranger
James C. Kimberlin, Buffalo Herder (Resigned, June 30, 1945)
Eri A. Allan, Electrician
Bernhard L. Werner, Electrician
Walter W. Stebbins, Operator, Motor Equipment
Elmer F. Armstrong, Operator, Motor Equipment
Fred J. Nissen, General Mechanic
Lloyd K. Holman, Packmaster (Returned from military furlough June 13, 1945).
Paul Hoppe, Packmaster (Released due to reduction in force, June 12, 1945)
Leonard A. Selle, Janitor
Ralph Reed, Plumber's Helper
William L. England, Plumber's Helper
Francis J. Coy, Watchman-Janitor (Resigned June 30, 1945)
Ludwik Pilch, Janitor
J. Stanley Fillmore, Heavy Duty Truck Driver (Inducted into U. S. Army, April 15, 1945)
Warren K. Leland, Park Ranger (Transferred to Badlands National Monument, July 3, 1944)
Robert G. Fleet, Park Ranger (Resigned September 15, 1944)

ADDITIONAL PERMANENT PERSONNEL IN MILITARY SERVICE AT THE CLOSE OF 1945 FISCAL YEAR

Francis D. LaNoue, Chief Park Ranger
Ladd S. Shorey, Purchasing Clerk
Francis P. Roylance, Property Clerk
Lester C. Abbie, Warehouseman-Truck Driver
Curtis K. Skinner, Asst. Chief Park Ranger.
Lloyd W. Seasholtz, Electrician
Frank H. Anderson, District Park Ranger
John W. Jay, District Park Ranger
Earl M. Semingsen, District Park Ranger
Wayne B. Alcorn, District Park Ranger
Roger H. Miller, Foreman-Mechanic
William A. Nyquist, Park Ranger
Walter H. Gammill, Park Ranger
Frank F. Kowski, Park Ranger
Ruben O. Hart, Park Ranger
Merritt S. Johnston, Park Ranger
W. Verde Watson, Park Ranger
Frank T. Hirst, Park Ranger
David W. Pierson, Buffalo Herder

PERMANENT PERSONNEL ON WAR TRANSFER AT THE CLOSE OF 1945 FISCAL YEAR

Edwin E. Bird, Clerk-Cashier
Alice Dvarishkis, Clerk-Stenographer (Enlisted in SPARS October 31, 1944)
Berl W. Sexton, Foreman-Electrician

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United States
Department of the Interior
National Park Service

ANNUAL REPORT

1946

Yellowstone National Park

Edmund B. Rogers, Superintendent

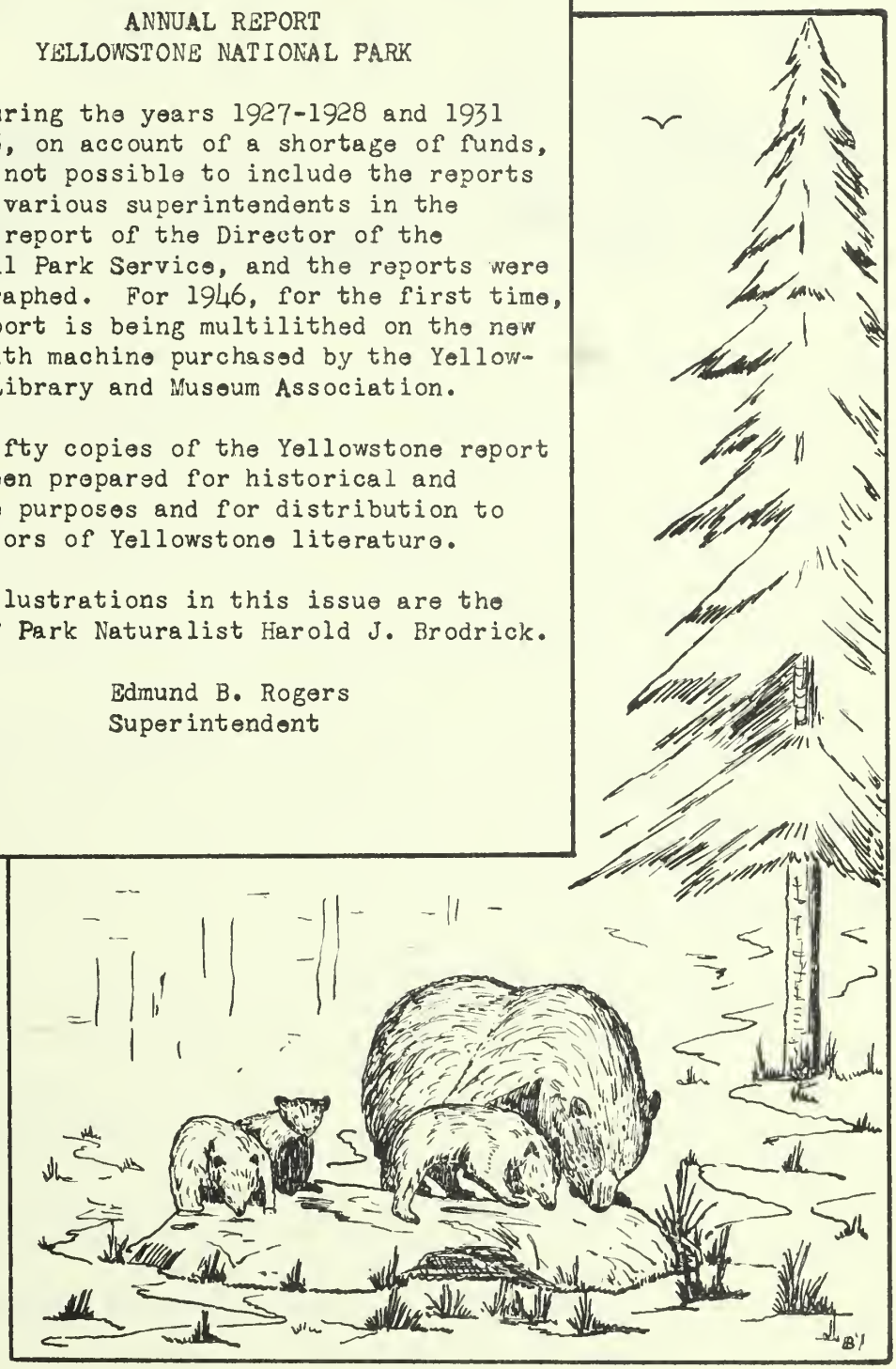
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-1928 and 1931 to 1945, on account of a shortage of funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. For 1946, for the first time, the report is being multilithed on the new multilith machine purchased by the Yellowstone Library and Museum Association.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

Illustrations in this issue are the work of Park Naturalist Harold J. Brodrick.

Edmund B. Rogers
Superintendent



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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

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Edmund B. Rogers, Superintendent

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Up to 1934 the reports of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933, to June 30, 1934, and subsequent reports have covered the fiscal year periods. This report, therefore, for 1946, covers the fiscal year July 1, 1945, to June 30, 1946.

The report for 1946, as was the case in 1945, 1944, 1943, and 1942, has been considerably curtailed as the requirements from the Director's office no longer call for details of various activities, but only the highlights of protection, development, visitor use, etc. The Superintendent's report is no longer needed in detail for inclusion in the Director's brief report to the Secretary of the Interior, but is prepared in order that the continuity of annual reports be not broken for historical and archive purposes.

TRAVEL

An increase in gas rationing during the early summer, redeployment of the armed forces to the Pacific after the end of the war in Europe, and the shifting of war workers caused an increase in travel of 56.4% up to VJ-Day. Immediately following VJ-Day a surge of visitors came into the park and daily travel practically doubled and continued at the greatly increased rate to the end of the travel year on September 30. The termination of gasoline rationing provided opportunities for persons from all walks of life to enjoy recreation and rest, and thousands of persons who had occasion to move across the country were able to make side trips to the park and enjoy the scenery, fishing and other recreation offered. While most of the travel from adjacent states was recorded on week-ends there was a marked increase in the number of automobiles from states considerable distances from the park. One hundred and seventy-eight thousand two hundred and ninety-six persons visited the park during the travel year ending September 30 against 85,347 in 1944, an increase of 108.9%.

Fifty-two thousand one hundred and fifty-nine motor vehicles entered the park during the 1945 travel year, an increase of 115.15% or 29,957 over the 24,202 which entered the previous year. Of the 178,296 persons who visited the park this travel year, 177,147 came by automobile, 203 by motorcycle, 276 on horseback and the balance of 670 were bicyclists, hikers, or members of special tours. Members of

the armed forces visited the park in increased numbers with 25,848 entering in 1945 as compared with 10,898 in 1944.

The West Entrance continued as the most popular gateway with 64,681 visitors, a marked increase over the 28,887 who entered that gate in 1944. East Entrance was second with 45,402 as compared with 25,306 the previous year. South Entrance recorded the largest percentage of increase and was third with 21,649 this year and 12,438 in 1944. North was fourth with 25,667 and 13,979 last year, and Northeast was fifth with 10,897 compared with 4,740 in 1944.

Exit travel was also largest through the West Gate with 18,520 cars leaving the park via that gateway. East was second with 10,787, North was third with 10,458, South was fourth with 9,551, and Northeast was fifth with 2,843.

Travel by states was classified during the period from June 15 to September 30, incl., and showed visitors registered from every state in the Union, Alaska, Canada, Hawaii, Phillipine Islands, Mexico, Canal Zone and Australia. Montana headed the list in cars entering the park with 6,417, California second with 4,630, Idaho third with 4,614, Wyoming fourth with 4,539 and Utah fifth with 3,520.

While it was expected that travel would be heavy during the 1946 season, no one would have dared predict what actually happened as soon as operation for the season got underway. A deluge of visitors descended upon the park in May as soon as the roads were cleared of snow and travel was permitted over them. The crowd continued to swell as the season progressed. By June 28 more visitors had entered the park gates than came in during the entire 1945 travel year and to June 30 a total of 199,390 persons had checked in at the five gateways as against 143,816 to the same date in 1941, the banner travel year, an increase of 38.6%. For the month of June alone 158,338 persons entered as against the previous June record of 96,202, in 1941, an increase of 64.6%.

REVENUES

Revenues for the 1946 fiscal year totaled $196,375.93, of which $169,518.00 was from motor vehicle license fees and $16,491.71 was from business concessions.

APPROPRIATIONS

The following appropriations for the 1946 fiscal year were made available to Yellowstone and coordinated areas:

1461000.100 & .333	Yellowstone National Park.....	$363,235.00
1461000.041	Big Hole Battlefield National Monument.....	1,160.00
1461000.041	Devils Tower National Monument	8,490.00

APPROPRIATIONS (cont'd)

1461000.051	Emerg. Reconst. & Fight. Forest Fires - YNP.	1,201.85
1461000.061	Forest Protection & Fire Prevention - YNP...	13,877.00
1461000.711	Custer Battlefield National Monument	8,318.00
1461622.	Payments to Henry Weibert or Successors, Int.	50.00
14X1010.001	Roads & Trails, National Park Service - YNP.	24,175.00
14-12622A5(5)	.001 White Pine Blister Rust Control, Dept. of Agriculture (Trans. to Interior), 1946.	8,390.00
	Total All Appropriations	$430.896.85

CONCESSIONERS

While the war was in progress the park was operated on a strictly war-time basis and only minimum accommodations were provided for the relatively few visitors who were expected to be able to reach the park. The impact of tremendously increased travel which was experienced after August 15, 1945, found the available tourist cabins, the single hotel (old Cottage hotel at Mammoth) and the cafeterias unprepared to handle the influx of visitors who were often forced to secure food and lodging outside the park and to occasionally spend the nights in their cars. The Cottage hotel at Mammoth provided only a limited number of rooms but tourist cabins and cafeterias were operated at Old Faithful and Fishing Bridge during the 1945 season. Meals were also obtainable at the Coffee Shop at Mammoth. An acute shortage of personnel made it impossible for the concessioners to expand their services sufficiently to meet the demand for meals and lodging during the peak travel. No facilities were open at Canyon, Lake, Tower Falls, and West Thumb but general stores and gasoline filling stations were operated at Mammoth, Old Faithful and Fishing Bridge. Rooms at the general stores at the two latter locations helped to provide sleeping accommodations for the overflow from the tourist cabins.

Plans were made during the winter to have all operations underway in the park for the 1946 season on a pre-war basis. However, all of the hotels and lodges and a number of other facilities having been closed throughout the war and considerable repair and maintenance work necessary, it was not possible to have all operations opened on schedule because of the scarcity of materials and the general attitude of labor expecting to receive high wages with little work. Positions were difficult to fill and food supplies were hard to obtain. The numerous OPA, building, and other restrictions further prevented the concessioners from getting everything in readiness for the 1946 visitors. The various park concessioners started opening their operations for the summer during the month of May, and by June 20 all facilities which were to become available had been opened. Lake Hotel did not open for the summer and by the end of June the Haynes Picture Shop, cafeteria, and general store in the Mammoth campground were not operated. While Camp Roosevelt was opened on June 20, as scheduled, it was necessary to close it before the end of the month due to a labor

shortage. Employees who had been engaged there were moved to other operations in the Park. Only about 75% of the accommodations ordinarily available were open to handle the 1946 crowds and all sleeping accommodations were taxed to capacity each night. Many visitors were obliged to seek accommodations outside the park or sleep in their cars. Conditions were very much the same outside. Never before have eating and sleeping establishments, curio shops, grocery stores, and other merchants done such a land-office business. New and inexperienced help greatly retarded the proper handling of visitors, resulting in numerous complaints and dissatisfied tourists. A deluge of requests for reservations (letters, telegrams, and long distance calls) poured into the office of the Yellowstone Park Company, and they found it extremely difficult to meet the situation. While in ordinary years two clerks have been able to handle the requests for reservations, the Company put on a force of over a dozen workers, and was still unable to keep current with requests. Inability of the Company to secure additional typewriters and other office equipment further handicapped their efforts. Delay in acknowledging requests for reservations also resulted in a number of complaints being lodged against the Company. Unprecedented travel, deterioriated equipment and transportation, numerous restrictions on the purchase of food, materials, and supplies, new and inexperienced help, additional labor restrictions and the inability of the concessioners to get people with the right attitude to carry on their work, as well as the lack of sufficient accommodations to take care of all visitors, presented a condition in the park which was very difficult to meet and which had not been experienced in even the banner year of 1941.

In spite of all difficulties experienced by the concessioners the Yellowstone Park Company up to the first of July took care of 50% more people in the hotels than they did during the same period in 1941, the lodges took care of 5,000 more people and the tourist cabins accommodated 8,400 more people. In 1941 the main telegraph office at Mammoth was handling about 200 messages a day in and out while this year it ran 800 to 900 messages a day due to numerous telegrams for reservations. During the month of June 260 employees left the service of the Yellowstone Park Company for some reason or other. Many of them stayed only a day or so and left without any particular cause. Others had to be discharged on account of drunkenness, which was more prevalent this year than any previous year, and never before had there been such a large turn-over in personnel.

Limitations on National Park Service operations due to war-time appropriations, ceilings on personnel, and new and inexperienced help as well as the many new Government regulations and shortages of meat and food supplies had a very material effect on the efficiency and operations of the Government facilities and services.

The Yel. Pk. Company reopened its garage at Gardiner on March 1, 1946. Mr. F. E. Kammermeyer returned as Superintendent of Transportation. He has been in charge of transportation for the company for more than 25 years. The garage has been closed since 1942. The buses of the Company began operations again on June 20. Bus service was discontinued in the park in August 1942.

The Yellowstone Park Company's print shop at Mammoth was reopened on March 2, 1946, having been closed since 1942. Mr. Joe Bill who was in charge before the war and who left to serve in the Army resumed charge of the shop.

The Yellowstone Park Company established a temporary office in the Cottage Hotel on May 6, but moved to its regular offices in the Mammoth Hotel on May 27. The tourist cabins started taking care of the overflow from the Hamilton stores on May 23 and on May 29 the Company opened the tourist cabins at Mammoth, Old Faithful, and Fishing Bridge. The Canyon cafeteria and tourist cabins opened on June 8. The Mammoth Grill was opened on June 18, Thumb tourist cabins and cafeteria, Old Faithful, Lake, Canyon and Roosevelt Lodges, Mammoth, Canyon and Old Faithful hotels and the Mammoth swimming pool on June 20.

The Western Air Lines started regular flights delivering passengers to West Yellowstone beginning June 20 and the railroads began delivering their rail passengers to the various entrances on the same date. This service had been discontinued during the war.

On June 17, 1946, the Acting Secretary of the Interior approved the operation of the Old Faithful swimming pool until the fall of 1949. The pool was opened this year on June 23.

MEDICAL SERVICE

The hospital at Mammoth, which had been closed since August 30, 1942, was not open during the 1945 season. Medical service was furnished by a permanent nurse at Mammoth Hot Springs and nurses at Old Faithful and Fishing Bridge. However, for the 1946 season the Mammoth Hospital was reopened on June 14. Dr. Alfred M. Lueck, who has the medical contract with Dr. G. A. Windsor, moved to the park with his family on June 5 and a new resident physician, Dr. Burke Scagnelli, arrived in the park on June 11. Registered nurses were available for the summer at Canyon Lodge, Canyon Hotel, Lake Lodge, Old Faithful Inn, Old Faithful Lodge, and Fishing Bridge, in addition to the hospital staff at Mammoth. Dr. G. A. Windsor came to the park on June 30 for a week's stay. Medical service was available for the 1946 season on the same basis as before the war.

A new business concession permit for one year, in the names of Drs. G. A. Windsor and Alfred M. Lueck, was approved on March 21, 1946.

PUBLICATIONS

The National Park Service was compelled to continue the use of its 1942 folder during the 1945 season, as no new folder was issued during the war. Through the issuance of a mimeographed sheet outlining various services and accommodations available it was possible to dispense information to the comparatively small number of visitors while the war was going on. However, it was expected that a new and up-to-date folder would be available for the 1946 season, but by the end of the fiscal year the park was still forced to distribute its remaining supply of 1942 folders. Much of the information in this folder, particularly the rates, was out of date and misleading and resulted in a considerable annoyance and extra expense to visitors and was the cause for a large number of verbal complaints. The supply of Government folders was augmented by folders issued by the Yellowstone Park Company, which became available shortly after the season got underway, and helped considerably in getting correct information to visitors and persons contemplating a park trip. The supply of Government folders was insufficient to meet even the needs of the park and it was impossible to fill numerous requests from chambers of commerce, tourist bureaus, tour agencies and others dispensing information to the general public.

As the general policy of the Service not to encourage travel continued in effect during the 1945 season and due to the restrictions on press releases during the war, very few press releases were sent out from the park and no publicity director was engaged for the 1945 season. During the pre-war years, when a publicity director was available, this employee was engaged by the park concessioners. However, because of the concessioners' inability to get all of their operations underway, their inability to get sufficient and qualified employees and because of the tremendously large numbers of requests received for reservations before the 1946 season opened, it was evident that the park would not be able to take care of all those seeking accomodations and no effort was made to encourage travel. Very few press releases were issued and no publicity director was engaged for the 1946 season.

EMPLOYEES IN THE ARMED FORCES

By the end of the 1946 fiscal year, June 30, 1946, all permanent employees who had served in the armed forces had been discharged and returned to duty in the Yellowstone with the exception of Chief Ranger Francis D. LaNoue, who was still on duty in Korea. The Yellowstone established a rather unique record in that while almost a third of its permanent employees served in the armed forces there were no casualties and none received serious injuries; also, each one expressed the desire to return to his or her former employment and the jobs of all were retained for them, although two were transferred to other agencies after they had returned to their former jobs in the Yellowstone. Lloyd K. Holman, Packmaster, transferred to the Navy Department,

Mare Island, Vallejo, California, in August 1945, and Hugh Peyton, Assistant Chief Ranger, transferred to the Millerton Lake Reservoir Area as Custodian on December 16, 1945.

Francis P. Roylance, Property Clerk, was released from the U. S. Navy on August 13, 1945, and returned from military furlough on October 12, 1945, having served with the Navy since February 1943; Frank H. Anderson, District Park Ranger, was discharged from the Navy in August and returned from military furlough on October 15, 1945, having served since June 1943. Roger H. Miller, Foreman Mechanic, was discharged from the Navy on August 3, 1945 and returned from military furlough on October 1, 1945, after having served with the Navy Seabees since December 1942; Alice Dvarishkis, Clerk-Stenographer, returned to duty October 15, 1945, after having served with the SPARS since October 1944; Frank T. Hirst, Park Ranger, returned October 30, 1945, having served with the Navy since January 1942; Lloyd W. Seasholtz, Foreman-Electrician, returned October 30, 1945, having served with the Navy since February 1943; David H. Pierson, Buffalo Herder, returned from military furlough on November 1, 1945, having served with the Navy since August 25, 1942. Assistant Chief Ranger William S. Chapman returned from military furlough on December 26, 1945 after having served with the Army since January 17, 1945. Park Ranger Frank F. Kowski returned from military furlough on January 2, 1946, after having served with the U. S. Coast Guard since October 2, 1942. Almon E. Dewing, Mechanic, returned from military furlough on January 9, 1946, having served with the Navy since July 27, 1944. Curtis K. Skinner, Assistant Chief Park Ranger, returned on January 9, 1946, having served with the Coast Guard since October 6, 1942; Ruben O. Hart returned on January 15, 1946, after having served with the Air Corps since June 23, 1943. Merritt S. Johnston, Park Ranger, returned on February 4, 1946 after having served in the Coast Guard since October 5, 1942 and Walter H. Gammill, Park Ranger, returned on February 5, 1946, after having served with the Coast Guard since October 13, 1942. Park Naturalist David de L. Condon returned to his old job in the Yellowstone on March 1, 1946 after having been away since February 8, 1943. He transferred to Rocky Mountain National Park in February 1943 and served with the Navy beginning June 15, 1944. District Park Ranger Wayne B. Alcorn returned to duty on March 5, 1946 after having served with the Coast Guard since November 2, 1942. Park Ranger W. Verde Watson returned on March 11, 1946 after having served with the Coast Guard since October 13, 1943 and Park Ranger William A. Nyquist returned on March 28, 1946 after having served with the Coast Guard since October 2, 1942. Lester C. Abbie returned to the position of Warehouseman-Truck Driver on April 1, having served in the Navy since October 2, 1943; John G. Lewis returned to the position of Park Ranger on April 7 by transfer from Grand Teton National Park after having been discharged from the Army on March 8, 1946; Lloyd J. Astle returned to the position of District Park Ranger on April 9, having been released from the Navy on February 18, 1946. He served from February 10, 1945. District Park Rangers Earl M. Semingsen and John W. Jay returned to duty on May 1 after service in the Coast Guard since October 7, 1942

and October 16, 1942, respectively; Ladd S. Shorey returned to the position of Purchasing Clerk on May 29, 1946 having served in the Army since May 18, 1944. Miss Evelyn E. Kumor, Clerk-Stenographer, returned from military furlough on June 10, having served with the WAVES since March 7, 1945. She was the last employee on military furlough excepting Chief Ranger LeNoue.

MOTOR VEHICLE LICENSE FEE

Collection of the motor vehicle license fee for 1945 was discontinued at the close of September 9, and collections for the 1946 season started on June 5.

RANGER SERVICE

The park operated with only 15 seasonal rangers during the 1945 season as against its normal force of 47. A number of these positions were abolished during the war, but all positions were restored before the 1946 season started and 7 new positions were added. Due to limited appropriations and ceilings, however, it was necessary to hold off until July 1 before engaging the full force, and the park was operated during June with reduced personnel making operations very difficult. As with the ranger-naturalist service, the 40-hour week had a material effect on service provided by the ranger force in a park operating 7 days a week.

REGIONAL FIRE TRAINING CONFERENCE

During the period May 13 to 17, 1946, a Regional Fire Training Conference was held at the park headquarters. Ninety-four employees were in attendance, making this the largest attended conference of its kind held here. National Park Service personnel, totaling 77, were from the Yellowstone, Director's Office, Region Two Office, five national parks, seven national monuments, and one national memorial. Representative from other agencies included nine from the U. S. Forest Service, seven from the Indian Service, and one from the Bureau of Entomology.

RANGER ATTENDS F.B.I. SCHOOL

Assistant Chief Ranger W. Leon Evans was selected by the National Park Service to attend the Federal Bureau of Investigation National Academy in Washington, D. C., from January 7 through March 28, 1946, and received a Certificate of Graduation upon completion of this intensive course of law enforcement training.

FOREST FIRE PROTECTION

Five forest fires, all lightning caused and all less than one-fourth of an acre in area, were discovered and suppressed after July 1, 1945. Four other lightning-caused fires were discovered and re-

ported, but were rained out before they could be reached by smoke-chaser crews. For the second time in the history of the Park some smokejumpers were used for the suppression of fires in the Park. Two fire fighters parachuted to a fire which occurred in an isolated area on Pitchstone Plateau and were successful in controlling the fire within a period of several hours before the fire could have been reached by ground crews.

WHITE PINE BLISTER RUST CONTROL

A Blister Rust Control Program was conducted in the Mammoth Hot Springs area during the summer of 1945. The labor was performed by C.P.S. Camp No. 55 at Glacier National Park. Progress of the work was very satisfactory until the assignees were recalled to Glacier during the last week in August and first week in September to suppress forest fires. However, most of the work in the Mammoth area was completed with the exception of a few small spots in the buffer strip. Work in these spots was discontinued due to defoliation of Ribes plants caused by frost and insects.

Work in the Mammoth area was resumed early in June 1946, and most of the contemplated work was completed, there being some mop-up work to be accomplished later in the summer. Preparations were made to start blister rust control work on the Mt. Washburn area and actual working operations were started on June 24. It was first necessary to establish a camp for a blister rust control crew of approximately 38 men. To accomplish this, a portable barracks building was moved from the abandoned CCC camp at Lake Yellowstone to the road maintenance camp at Canyon, along with two other buildings which will be used for tool storage and office space. The Plant Disease Control Division of the Bureau of Entomology and Plant Quarantine has rendered invaluable service in supplying technical supervision and instruction.

NATURALIST SERVICE

No naturalist activities were carried on during the 1945 season other than by the regular force of naturalists who kept open the Mammoth Museum. All seasonal naturalist positions were abolished during the war, and while the 22 positions were again reestablished for the 1946 season and 4 new positions added, it was not possible to fill all of them before July 1 due to limited appropriations and ceilings. All museums were open for the 1946 season and ranger activities were carried on in the form of lectures, hikes, automobile caravans, etc., but with the limited personnel and the 40-hour week the park was prevented from giving the amount and type of service which was in evidence before the war.

YELLOWSTONE NATURE NOTES

The Yellowstone Library and Museum Association resumed publication of Yellowstone Nature Notes with the January-February 1946 issue after having been discontinued with the May-June 1942 number.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The annual meeting of the Yellowstone Library and Museum Association was held in the Park Naturalist's Office on October 4, 1945. A special meeting was also held on October 17. Owing to the fact that Mr. J. E. Haynes wished to resign as Treasurer, the number of members of the Board was increased to eleven. New members elected were John G. Lovelace, Bozeman, and Mrs. Marguerite L. Arnold, of Mammoth. Mrs. Arnold was elected Treasurer.

A special meeting of the Board of Directors was held in the Chief Naturalist's Office on May 3 at which time it was decided to purchase a multilith machine for use by the Association in preparing Nature Notes and other duplicating work.

LANDSCAPE ARCHITECT ASSIGNED TO PARK

Frank E. Mattson, whose intra-agency transfer as Landscape Architect, Region Two, to the same position, Yellowstone National Park, was approved on April 4, 1946, reported in the park on May 20 for permanent assignment.

CLOSING AND OPENING OF ROADS

The Red Lodge-Cooke road was the first to close to travel, as usual, and travel over it was discontinued on October 28. All roads in the park were closed to travel on November 1 with the exception of the Gardiner-West Yellowstone highway, which was closed on the 6th. The road from Mammoth to Gardiner and the Northeast Entrance and Cooke is kept open the year around.

The park's rotary plows started opening the roads on April 15, 1946, some two weeks earlier than the previous year. It was necessary to get the roads open to Canyon and Old Faithful in order to give the park concessioners an opportunity to get their facilities in shape for the summer. The plows reached Norris on April 18, Canyon April 23 and Old Faithful on April 25. The plows returned from Old Faithful to Canyon by way of Norris and opened the road to Lake on the 29th and West Thumb on the 30th. All roads inside the park and all approach roads were open and in good condition for travel by the end of May, except the road to the Northeast Entrance from Red Lodge, which was opened to travel on June 15. The Sunlight Basin road from Cody to the Northeast Entrance was open to travel on May 4. The North and West Gates were open to travel on May 6, as was also the road from

Madison Junction to Old Faithful, and on the same date the road from Moran to the South Gate, outside the park, was opened by the Wyoming State Highway Department. On May 19 travel was permitted over the road from Norris to Canyon, to Lake, West Thumb and the South Entrance and over the Continental Divide from Old Faithful to West Thumb. The East Gate was opened to motorists on May 29 and the following day the last section of the Grand Loop Road from Canyon to Tower Falls was opened.

RED LODGE-COOKE ROAD

Much controversy arose during the winter and spring in connection with the maintenance of the Red Lodge-Cooke highway. Both the states of Montana and Wyoming refused to take any responsibility for the maintenance of this section or its opening for travel. Pressure from Red Lodge, Billings, and other communities affected by this highway and from members of Congress from Montana resulted in the National Park Service assuming the responsibility for its opening and maintenance. Snow removal was started on May 27 with a new rotary plow brought from Chicago, which reached the park on May 23. The highway was opened to travel on June 15 and three road camps were established along the route to provide for maintenance during the summer.

ROAD CONSTRUCTION

Bids were opened by the Public Roads Administration, Denver, on April 25, for bituminous surfacing of 7.01 miles of Section 1-D1-D3, Old Faithful to Isa Lake. Peter Kiewit Sons Company, Sheridan, Wyoming, was the low bidder, with a bid of $133,327. Only three bids were received. Award was made to the low bidder but work had not started on this project by the end of the fiscal year. No construction work was undertaken in the park during the war years. This particular project had been contracted before the war but work was not completed on it by the end of the 1942 season, so that it was necessary to readvertise it.

BOND DRIVES

Yellowstone was second in the State of Wyoming in the sale of war bonds during the Seventh War Loan Drive, with 258% of the quota set by the State for the park. The War Finance Committee from Wyoming presented the park with a quota flag and prizes of a captured German rifle and a miniature jeep. The prizes were displayed in the Post Office where they created much interest.

The Victory Loan Drive started on October 29, 1945, with the Park quota set for $13,000. Yellowstone exceeded its quota as a unit of Wyoming on the opening day of the drive, being the first Wyoming unit and probably the first in the Nation to go "over the top." The drive closed on December 8 but sales were credited to the end of December.

The park finished with sales to Park Service employees 242% over its Interdepartmental quota and as a unit of the State of Wyoming the park finished 448% over ita quota. The Yellowstone finished first in percentage of quota over all Wyoming counties and units.

NATIONAL WAR FUND

The Yellowstone collected a total of $188.75 during the National War Fund Drive in October 1945, which amount was turned over to Park County, Montana. Assistant Superintendent Fred T. Johnston was chairman of the Yellowstone committee.

MAMMOTH SCHOOL

The school term started on September 4, 1945, with Mr. Thomas D. Ellis instructing the upper grades and Mrs. Alberta Stebbins the lower grades. School closed on May 20, 1946. Park Naturalist Condon gave the commencement address on May 16 at which three pupils were graduated, namely; Mary Dewing, William Arnold, and Peggy Hochstrasser.

A new school board was appointed by the Superintendent on April 19, 1946, consisting of Edwin E. Bird, Chairman, Mrs. Deate T. White, Secretary-Treasurer, and Hugh B. Ebert, Member. Mr. Bird succeeded Harold J. Brodrick and was appointed for a three-year term. Mrs. White will complete her three-year term in May 1947 and Mr. Ebert will have two more years to serve on his three-year term.

FEDERAL EMPLOYEES UNION

New officers for 1946 were elected by the National Federation of Federal Employees, Local No. 465, at the January meeting, consisting of Roger H. Miller, President; Francis P. Roylance, Vice President; Edwin E. Bird, Secretary-Treasurer, and Charles M. Rector, Guardian. The Board of Directors elected consisted of Albert E. Elliott, Chairman, Mary E. Deason, William A. Wright, Harold J. Brodrick, and Arnold G. Quist.

SAFETY COMMITTEE

A new Yellowstone Park Safety Committee was appointed by the Acting Superintendent on January 14, 1946, to investigate and report on all accidents involving park employees and equipment during the calendar year. The committee consisted of Curtis K. Skinner, Chairman; Edna Mae Allison, Clerk; Deate T. White, Member, and William A. Wright, Member.

RED CROSS DRIVE

A Red Cross membership drive was conducted in the park during March 1946 for which 111 people contributed a total of $199.50.

Receipts for the drive were turned over to the Park County Chairman, Montana, and was included in the Park County quota. Assistant Chief Ranger Albert E. Elliott was chairman of the Yellowstone committee.

BOARD OF SURVEY

On January 14, 1946 the Acting Superintendent appointed a new Board of Survey for the 1946 calendar year, consisting of Philip H. Wohlbrandt, Chairman; John M. Banfield, Clerk; Roger H. Miller, Member; Maynard B. Barrows, Member; Lloyd W. Seasholtz, Alternate Member, and Joseph Joffe, Alternate Member.

RATIONING

Rationing of gasoline and most other items, except meat, butter, fats, tires, cheese and sugar was discontinued on August 15, 1945. The release of gasoline rationing caused an immediate influx of visitors to the park - more than double previous travel.

War Price and Rationing Board No. 24 at Mammoth was discontinued on September 28, 1945. All products still rationed were to be handled by the Livingston Board with members of the Yellowstone Board acting as a screening committee for applications in the park.

ABSAROKA CONSERVATION COMMITTEE

The Absaroka Conservation Committee held its annual fall meeting at the Lamar Ranger Station on September 29 and 30. The first day was devoted to riding the winter range on Lower Slough Creek and to checking the progress made toward reducing the pollution of Soda Butte Creek by mine wastes from the mines near Cooke, Montana. Protection and management of natural resources were topics discussed at the meeting held the second day. All officers were reelected to serve another year.

The annual spring meeting of the committee was held at Mammoth on May 18 and 19. Members of the group visited various sections of the park on the 18th, observing range conditions, improvements toward stream pollution and other matters in which the organization is interested. The general meeting was held in the Canteen on May 19, at which Honorable Wesley D'Ewart, U. S. Congressman from Montana and Chairman of the Committee, presided.

TRI-STATE YELLOWSTONE PARK CIVIC ASSOCIATION

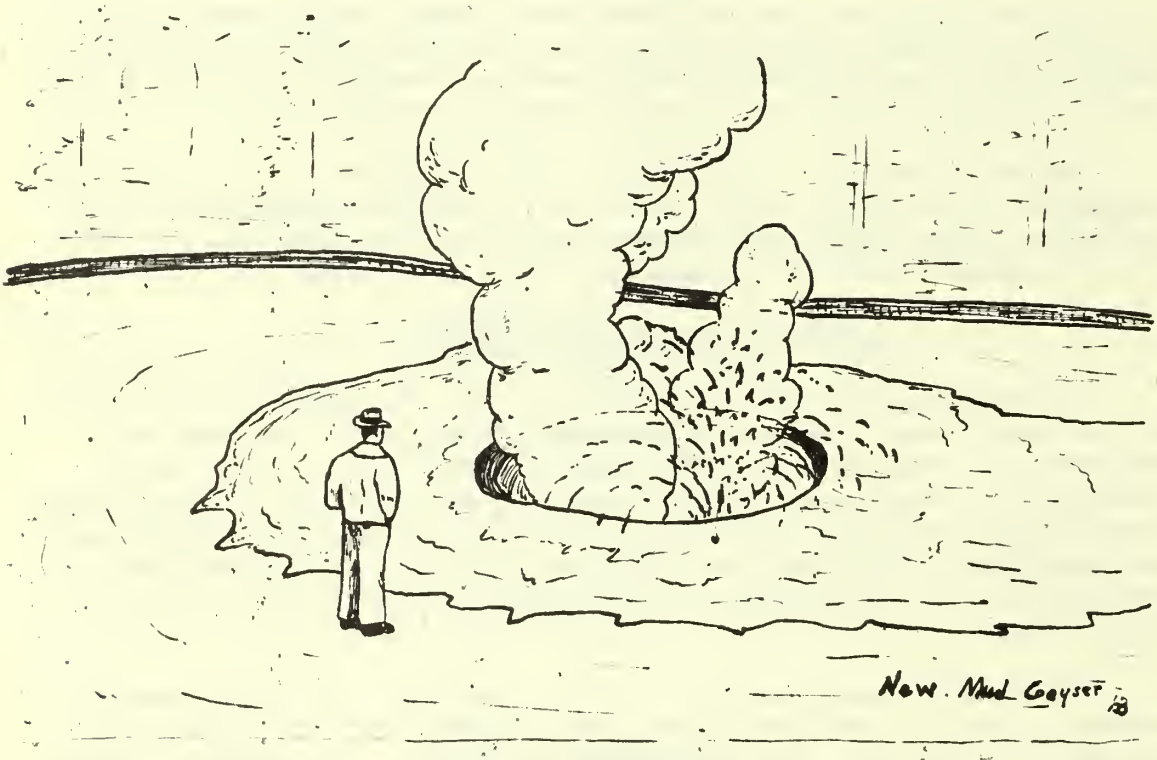
Directors of the Tri-State Yellowstone Park Civic Association met in June at West Yellowstone for the first time in four years to revive operations of the organization. A regular meeting of the organization was planned for September in Cody.

U. S. EMPLOYMENT SERVICE

The United States Employment Service opened an office on the third floor of the Barracks Building on May 23, with Robert Chase, of Big Timber, Montana, in charge. The office was established to assist in recruiting employees for the National Park Service, the contractors and the various park concessioners.

GIANTESS GEYSER ERUPTS

Giantess Geyser, one of the largest in the park, erupted on May 20, 1946. The last previously recorded eruption of this spectacular geyser occurred on September 1, 1944.



NEW GEYSER

A new geyser broke out in the Norris Geyser Basin on May 22, as a welcome to the first post-war visitors for 1946. This thermal feature went into action about 9:33 a.m. in the center of the rest room parking area behind the museum building. The original outbreak was witnessed by Mr. and Mrs. L. F. Albinger and son and daughter-in-law of Lytton, Iowa. The geyser increased rapidly in size during the first few hours from a small crack in the pavement from which water and steam were emitted to a vent having a diameter of 12 feet or more and a depth

of about 4 feet to the water surface some 24 hours later, at which time it had practically stabilized itself. The new feature has not been named.

CHURCH SERVICES

Regularly scheduled church services, both Catholic and Protestant, commenced at various points in the park on June 23, 1946. This service had been discontinued during the war years.

EASTER SERVICES

A special candlelight Easter service was held in the Mammoth Chapel at 6:30 a.m. on Easter Sunday, April 21, with Rev. A. N. Seebart of the Congregational Church in Livingston in charge. Special music was provided by residents of Mammoth and Gardiner.

U.S.S. YELLOWSTONE COMMISSIONED

The U. S. S. YELLOWSTONE, Destroyer Tender, was commissioned at the Todd Pacific Shipyards, Inc., Seattle, Washington, on January 14, 1946. This ship is of 13,000 tons displacement, 514 feet long and built to maintain a speed of 18 knots. It was launched on April 12, 1945 at a special ceremony held by the U. S. Coast Guard. Six Yellowstone employees on duty with the Coast Guard attended the launching ceremony.

NEW SECRETARY OF INTERIOR

On March 18, 1946, Honorable Julius A. Krug, of Madison, Wisconsin, entered on duty as Secretary of the Interior, being appointed by President Truman, to succeed Honorable Harold L. Ickes who had served as Secretary of the Interior since 1933.

NEW MEAL RATES

New meal rates were approved on June 28, to be effective June 30, 1946 authorizing a charge of $1.50 per day for board, or 70¢ for single meals.

FORTY HOUR WEEK

On September 9, 1945, the forty hour week became effective in the Yellowstone for all National Park Service employees, pursuant to the Secretary's Order No. 2092 of August 23, 1945.

POSTMASTER RETURNS FROM MILITARY SERVICE

On February 1, 1946, Joseph D. Kurtz returned to duty as Postmaster in the Yellowstone Park Post Office, following discharge from

the U. S. Navy. Mr. Kurtz is a resident of Cody, Wyoming and has served as Postmaster in the Yellowstone since March 1, 1940. He enlisted in the U. S. Navy on August 31, 1942.

Alfred A. Bowman was Acting Postmaster from November 16, 1945, succeeding Mrs. Katherine Chew. Mrs. Chew served as Postmaster during the period when both Mr. Bowman and Mr. Kurtz were in the military service.

ARRESTS

Twenty-nine cases, during the fiscal year, were presented before the United States Commissioner, who assessed fines totaling $788.00 and jail sentences totaling 19 days. All cases were misdemeanors involving violations of park regulations.

ACCIDENTS

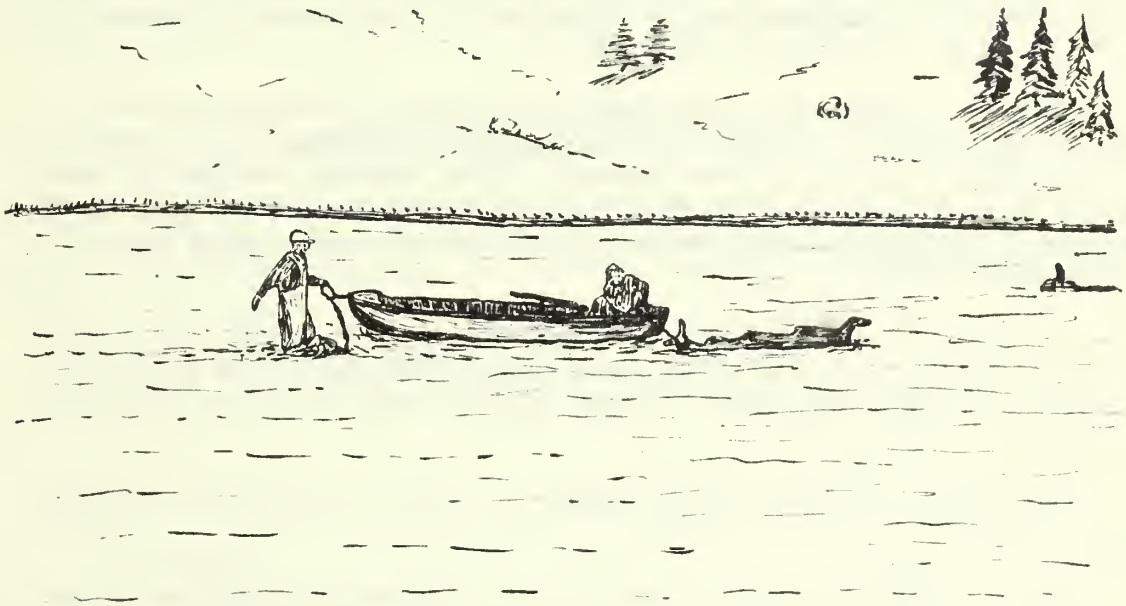
Forty-four traffic and motor vehicle accidents were reported in the park during the 1946 fiscal year, as compared with 24 for the preceding year. The accident rate increased with the increase in travel, the greatest number of accidents in one month was recorded in June. Two persons, both employees of the National Park Service suffered in motor vehicle accidents. One employee, a truck driver, died of injuries received when his truck went over a steep bank on the East Entrance road. The other, a seasonal park ranger, was struck by an automobile during the early morning of Labor Day as he was walking from Mammoth to North Entrance.

BISON

In the late fall of 1945, approximately 550 bison returned from higher summer ranges to winter in the Lamar Valley area. Of these, 383 were corralled early in January 1946 and 200 were slaughtered for reduction purposes. Slaughtered animals included 104 females and 96 males, twenty of which were calves about seven or eight months of age. Carcasses, hides, and what heads were desired were allotted and delivered to eight Indian agencies in the Rocky Mountain region. Cost of slaughter operations, which was borne by receiving agencies through exchange of funds, varied from $8.32 to $10.325 per carcass - depending upon manner of shipment.

Pathological investigations to determine incidence of brucellosis infection (Bang's disease, or contagious abortion) were carried on concurrently with slaughter operations by Dr. Don R. Coburn, of the Fish and Wildlife Service. From a group of 296 animals tested, incidence of infection was 20.93 per cent, being somewhat lower than similar determinations of recent previous years.

In March 1946, census of all bison in the Park was made. Results showed 384 in the Lamar Valley, 233 in Pelican Valley, 126 in Hayden Valley, and 86 in the Old Faithful-Madison Junction area - or a grand total of 791.



An unusual winter loss of 38 bison occurred sometime during January 1946 through drowning in the Yellowstone River, at a point about four miles below the outlet of Yellowstone Lake. These animals, apparently migrating westward toward Hayden Valley through 3½ to 4 feet of snow, had broken through the ice and become hopelessly trapped. In early May, when roads were cleared of snow, all carcasses were removed from the river and buried.

During the early part of the 1946 travel season small groups of bison were commonly seen by Park visitors from the roads. By the end of June, however, all animals had migrated to the summer ranges of higher plateaus.

ANTELOPE CREEK BUFFALO PASTURE

The practice of bringing a herd of bison into the Antelope Creek pasture was discontinued for the duration of the war. No animals were placed in the enclosure this summer and it is not contemplated that the practice will again be resumed. As buffalo have been in evidence in the Hayden Valley, Pelican Creek, and Fountain Flat areas each summer, many visitors will be able to see some of these animals in a more natural state.

ELK

Elk which make their year-long habitat in the Park are divided for management purposes into the Northern Yellowstone, Gallatin, and Interior herds. In respect to the first, it was estimated that this herd would number 10,900 in the fall of 1945. Consequently, a reduction of 3,600 was recommended, as 7,000 is the approximate average capacity for the available winter range.

Through cooperation of the State of Montana, particularly the Fish and Game Commission, the hunting season in Montana to the north of the park was kept open until March 1, 1946, making possible a total hunters' kill of 2,094. Winter migrations from the park to open hunting areas in Montana did not occur to any marked degree until the latter part of January.

In addition to elk removed by legal hunting, 73 were trapped and shipped alive to the Idaho State Game Department, Salt Lake City (Utah) Zoo, and two private reserves. Three animals were killed accidentally in trapping operations.

The 1945-46 reduction, thus, totaled 2,170 or 1,430 short of the reduction goal.

In March 1946 a census of the Northern Yellowstone herd was made, the Montana State Fish and Game Commission and the U. S. Forest Service cooperating by furnishing experienced men for the extensive counting operation. Elk actually seen by observers totaled 8,513, or only 217 below the theoretical population figure (after reduction) or 8,730.

Subsequently, during April, checks were made of the range and natural winter losses (death from old age, etc.) were estimated at 250.

It is estimated that the Northern Yellowstone elk herd will number between 9,700 and 9,800 by the fall of 1946, and a reduction of 2,800 animals has been set for the winter of 1946-47.

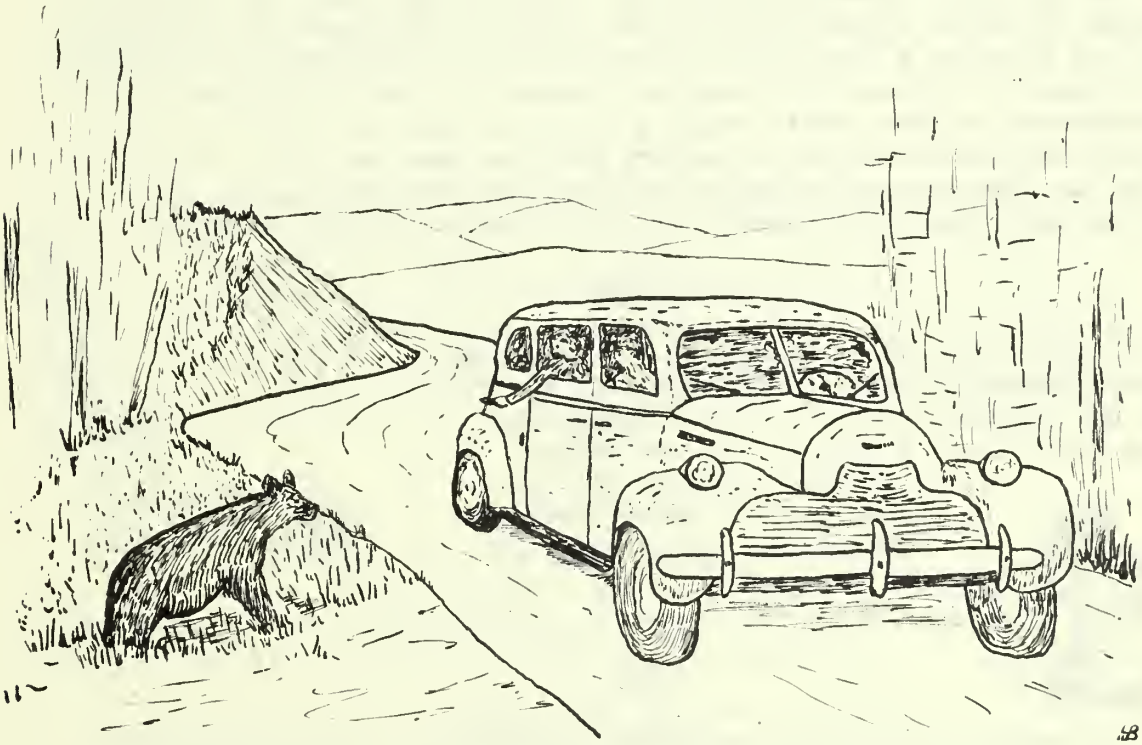
Winter range conditions during 1945 were generally good. Some over-utilization occurred in the lower areas during the spring of 1946. Generally cold weather and lack of sufficient rainfall in May and June 1946 were detrimental to range plant growth, particularly in lower range areas, and the outlook for winter forage in these sections is poor.

The Gallatin elk herd was reduced in the fall of 1945, through legal hunting outside the park, by 738 animals. A census of this herd has not been made since 1943, but its size by the fall of 1946 has been variously estimated from 2,500 to 2,700. Since the estimated winter range capacity determined for this area is 2,000, a reduction of 600

to 700 would be desirable. Certain critical winter range areas within the park in the Gallatin region have been heavily utilized and are showing deterioration.

Elk in other sections of the park (generally referred to as elk of the "Interior") are distributed in small bands and pose no particular management problems. These scattered groups are estimated to number about 800.

Summarizing the present elk population in the park, it is estimated that distribution at this time is approximately as follows: Northern Yellowstone herd, 9,800; Gallatin herd, 2,700; and park interior, 800 - a grand total of 13,300 elk. These figures do not include a considerable number of elk from the Jackson Hole area which summer in southern sections of the park, but which winter in outside areas to the south.



BEARS

Black bears are believed to number about 450 and grizzlies about 250. During the war years, 1942-45, the visitor-bear problems was of minor importance and very few control measures were exercised. Elimination of all artificial feeding grounds since 1941 and the small number of visitors for a number of years may place a slightly different aspect upon the old conflict problem, particularly in certain areas.

Only two personal injuries and seven property damages were reported from bears in 1945. Five personal injuries and one property damage have been reported to July 1, 1946. Considering that 199,390 persons have visited the park for the season to date, this is an injury incidence of about one in 40,000 visitors, or .0025 per cent.

With the large volume of travel anticipated for the 1946 season, it is probable that the visitor-bear problem may again assume serious proportions.

GRIZZLY BEAR GROUNDS AT CANYON

During the period May 27 to 31, inclusive, the structures at the former Canyon grizzly bear feeding grounds were razed. Many of the structural facilites were found to be in a dilapidated condition from lack of maintenance during the war years and were no longer adequate for further use. This marks the end of a feature which has been operated since the summer of 1931, has attracted thousands of visitors, and has provided a spectacular exhibition for those persons who were privileged to witness it. However, removal of the structures and abandonment of bear feeding will give the animals a chance to live in a more natural existence in keeping with the park and will tend to carry out the general policy of the National Park Service to allow all of the park wildlife to carry on without the assistance of man.

BIGHORN

Although these animals have not shown any marked increase, those observed during the winter of 1945-46 appeared to be in generally good condition. A census of these animals was made in March 1946, a total of 176 being counted. Estimated population is 280.

DEER

A census of mule deer was made in connection with the elk and pronghorn counts during the spring of 1946. This method was not more than nominally successful, since these animals should be counted separately for higher degree of accuracy and completeness of coverage. Animals seen totaled 516. It is estimated that the present population is 700.

PRONGHORN

A pronghorn census was made in March 1946, six hundred ninety-eight animals being enumerated. Subsequently it was learned that

several small bands had been seen down the Yellowstone River Valley outside the Park, but unreported. Since there have been only nominal losses, it is estimated that the total population remains at about 800. The winter pronghorn range in the vicinity of Reese and Stevens Creeks has shown marked deterioration, specifically gradual to rapid elimination of sagebrush, and it is hoped that some successful means of reducing the number of these animals may be undertaken in the near future.

MOOSE

Moose population for the entire park is estimated at 600. These animals are widely distributed throughout the area summer and winter, and are commonly seen by park visitors from the roads. Both Wyoming and Montana have limited hunting seasons for this animal in areas adjacent to the park, and the small annual increase probably is just about taken up by legitimate hunting of animals which drift outside the park boundaries.

COYOTES

During the past year 103 coyotes in and adjacent to the park have been captured, tagged and released in a study to determine migratory habits. This work is being carried on by the Fish and Wildlife Service. The project was instigated in 1945 to determine whether or not coyotes protected in the park are detrimental to livestock interests in Montana - a claim frequently made by livestock interests. During the winter of 1946-47 it is planned to collect as many tagged animals as possible for purpose of this study.

MOUNTAIN LION

On June 15, 1946, Road Foreman George R. Swainston, old-time resident of Utah, and his crew of five men reported seeing an adult mountain lion and two yearling cubs along the old road between Mammoth and Gardiner. This animal is rare in the Park.

TRUMPETER SWAN

No census of these rare birds was made in 1945 because of an acute shortage of personnel. It is planned to conduct a count in August 1946.

PARK RANGER RETIRES

Park Ranger Harry Trischman was retired at the close of December 31, 1945, after more than 34 years of government service. Mr. Trischman first entered the government service in Yellowstone as a Scout on December 8, 1907, when the park was under the U. S. Army regime. He

served as a Scout and Packer until September 30, 1916, when he received an appointment as a First Class Park Ranger. It was on August 25, 1916 that the National Park Service was created and that bureau of the Department of the Interior assumed charge of the Yellowstone. During the years from 1916 to 1935 Mr. Trischman served as Scout, Assistant Chief Park Ranger and First Assistant Chief Park Ranger. On January 1, 1935, he became Chief Buffalo Keeper, which position he held until he resigned on July 2, 1940. He was reappointed as a Park Ranger on June 15, 1944 and served until the end of 1945. All of Mr. Trischman's government service was in this park. Following his retirement, at the age of 59, he assisted his sisters, Mrs. Anna K. Pryor and Miss Elizabeth Trischman, in the operation of their concessions in the Park.

MARRIAGES

Miss C. Wilma Smith was married to Mr. Aubrey L. Haines in the Mammoth Chapel on Sunday, April 14. Miss Smith is the Secretary to the Superintendent while Mr. Haines is a Park Ranger, having been the first Yellowstone permanent employee to enter the military service for World War II. He returned from military furlough on May 2, 1945, having served since June 4, 1941.

Miss Margaret A. Bowman, Telephone Operator, and daughter of Carpenter-Foreman Thomas A. Bowman, was married to Ensign Vaughn Phelps, of Laurel, Montana, in the Mammoth Chapel on June 23. The bride was born in the park and had spent most of her life here.

DEATHS

A serious accident occurred in the park in July 1945, resulting in the death of William W. Parr, National Park Service truck driver. Mr. Parr lost control of the truck he was driving while dumping a load of dirt over the bank at Sylvan Pass. The truck was a total loss and Mr. Parr suffered injuries which resulted in his death at the Park Hospital, Livingston, the following day.

Lloyd J. Weikal, Eldorado, Kansas, an employee of the Stanolind Oil Company, Powell, Wyoming, drowned in Yellowstone Lake August 16, 1945.

Seasonal Ranger George O. Harris, 23, Nyack, New York, was fatally injured about 3:00 a.m. September 3, 1945, when struck by an automobile on the Gardiner highway about 1.5 miles from Mammoth. An intensive investigation failed to disclose the identity of the driver of the car or to locate the automobile which did not stop to render aid to the injured man or to report the accident.

Vernon D. Marquis, 50, Bozeman, Montana, was reported lost in the park on September 2, 1945. A search was instigated and he was found on September 3 on Fan Creek about one mile from the junction of the Gallatin River. Apparently he had sat down and died of natural causes.

John Joseph Blair, 77, father of Mrs. Earl Hochstrasser (Mr. Hochstrasser is the park blacksmith) died of a heart attack at the Hochstrasser residence at Mammoth at noon September 20. Mr. Blair had just come to the park to visit his daughter.

Mrs. Thelma Edwards, wife of Guy D. Edwards, died of a heart attack at Puyallup, Washington, on September 23. Mr. Edwards was Assistant Superintendent in the Yellowstone from April 1930 to September 1934 and was well known in the park.

John C. Merriam, father of Regional Director Merriam, died at Berkeley, California, on October 29. Dr. Merriam was one of the country's leading paleontologists and a long-time friend of the National Park Service.

Charles C. White, Park Ranger, 27, was killed in a fall from a cliff while hunting deer on Cinnabar Mountain, near Electric, Montana, on November 13.

William C. Gregg, Yellowstone Park enthusiast and friend, died at his home in Hackensack, New Jersey, on January 22, 1946. In 1920 Mr. Gregg conducted explorations in the southwest corner of the Yellowstone, naming a number of features in that area. In 1930 the Gregg Fork of the Bechler River was named for him in honor of his exploration.

Warren H. Hutchings, former buffalo keeper in the Yellowstone from 1920 to September 1927, died at the Park Hospital in Livingston on March 9, 1946, at the age of 63.

One of the few remaining old-timers of the park, Charles Johnson, died of a heart attack in the Lott Hospital in Livingston on April 20. Burial was in the Mountain View Cemetery in Livingston on the 25th. Mr. Johnson is the step-father of Eivind T. Scoyen, Associate Regional Director, Region Three, and Clarence Scoyen, an employee of the Post Office at Mammoth. He took up residence in the park in 1895 and worked in the Yellowstone since that time as a teamster for the War and Interior Departments and handled wood cutting and hauling contracts.

Mrs. Ella Mae B. Avancena, Silver Springs, Maryland, 46, a waitress at the Mammoth Grill, died of a heart attack at the Mammoth Hotel on June 25.

VISITORS

Prominent visitors during July 1945 included Enrique Elqueta, Civil Engineer, Chilean Government Headquarters, Washington, D. C.; Gabriel M. Caldevilla, Sub-Director, Roosevelt (Carrasco) National Park, Montevideo, Uruguay, accompanied by Julio C. La Fitte, Montevideo and Alfredo Pinillos, Guatemala; Brigadier General Ralph Talbot; G. D. Rawlings, State Forest Service, Wellington, New Zealand; J. K. Mayfield and A. N. Sexton, of New Zealand.

August visitors included Margaret O'Brian, juvenile movie star, and party consisting of her mother, Bill Lyons, Publicity Director, Marshall Thompson, romantic star of the picture "Bad Bascombe," N. D. Hopcroft, cameraman, Miss Choate, teacher and governess, and J. Carroll Naish, villian of the picture. The group were "on set" in the Jackson Hole photographing MGM picture "Bad Bascombe." Congressman W. H. Stevenson of Wisconsin, Congressman Hugh Peterson of Georgia, and Edward N. Scheiberling, National Commander of the American Legion and Mrs. Scheiberling, his aide, James J. O'Connor and Roscoe Turner, noted aviator, were also August visitors.

In September, Major General Ralph Royce, U. S. Army, Congressman Jack E. Anderson of California, Admiral Ray Spear, U. S. Navy, retired, Mr. and Mrs. Struthers Burt, nationally known authors, Governors Lester C. Hunt, of Wyoming, Same C. Ford of Montana and Dwight Griswold of Nebraska visited the Park. Other September visitors included: Dr. Joao Moojen, Head Curator of Zoology of the Natural History Museum of Rio de Janeiro; Joao Roscalla, Geologist of the Natural History Museum, Rio de Janeiro, and a Norwegian journalist party consisting of Messrs. Olav Brunvand, Bergen, Norway; Oskar Hassenkneppi, Oslo, Norway; Per Thomson, Stavanger, Norway; C. Kirkeboe, Oslo; Gunnar N. Martin, Oslo; and Miss Jorum Johnson, Oslo.

On November 23 a Moral Rearmanent Group, enroute from Mackinac, Michigan, to Seattle, Washington, came to Livingston on a special train and were transported through the park by Livingston cars and drivers. There were 166 members of this party in 42 cars. The group was led by Dr. Frank N. D. Buchman, the initiator of the Oxford Group Movement and was in charge of Ray Foote Purdy of New York City. This was the largest number of winter visitors ever recorded in one caravan. The Trapp Family, concert singers, who had given a concert in Livingston on November 11 came to the park the next day. They traveled in their own bus but on account of heavy snow could only reach Mammoth. The party consisted of 12 members.

Archduke Felix of Austria was the first important visitor for the 1946 season, arriving in the park on April 17, and was able to travel only the section from Gardiner to Cooke as none of the other roads were open. Carlos Hoerning, Santiago, Chile, Third Vice President

of Rotary International with Mrs. Hoerning and Mr. and Mrs. Walter Savage of Butte visited the park on April 25. They were the first 1946 visitors to see Old Faithful.

June visitors included Judge Eugene Black of the Tax Court of the United States, a party of Swiss newspapermen in charge of Herbert C. Sargent of the Department of State, Rear Admiral C. T. Durgin, formerly in command of the Escort Carrier Force of the Pacific during the last year of the war, Nelson Rockefeller, a party of four Egyptian newspaper editors in charge of Gillespie Evans of the Department of State, and Gust de Muynck, Belgian representative in America of National Belguim Radio.

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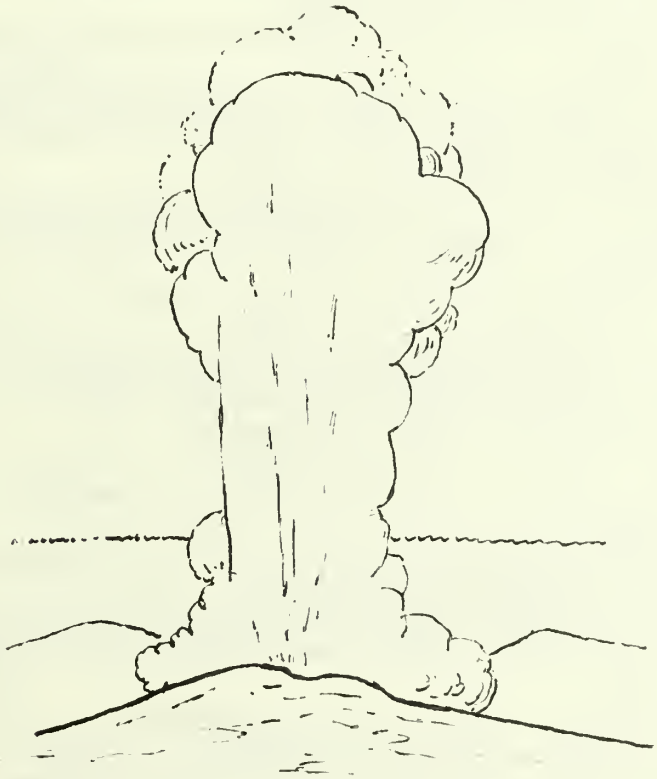

YELLOWSTONE NATIONAL PARK PERMANENT PERSONNEL
1946 Fiscal Year

For ready reference the names of Yellowstone Park employees on duty during the period covered by this report are given below:

Edmund B. Rogers, Superintendent
Fred T. Johnston, Assistant Superintendent
Maynard B. Barrows, Chief Ranger
Ernest R. I. Anderson, Chief Clerk
Joseph Joffe, Assistant to the Superintendent
Robert R. Robinson, Jr., Master Mechanic
William Wiggins, Master Plumber
Alice H. Quist, Accounting Clerk
Catharine L. Gillum, Purchasing Clerk (Returned to old Position as Accounting Clerk, June 16, 1946)
Ladd S. Shorey, Purchasing Clerk (Returned from military furlough May 29, 1946)
William A. Wright, Storekeeper
Edwin E. Bird, Clerk-Cashier (Ret. from War Transfer, Nov.18, 1945)
Verna R. Somerville, Clerk-Cashier (Resigned Nov. 7, 1945)
John G. Macbeth, Personnel Clerk (Transferred to Mt. Rainier National Park Aug. 31, 1945.)
Victoria L. Novicki, Personnel Clerk (Pro. Sept. 10, 1945)
Francis P. Roylance, Property Clerk (Ret. Mil. Furl. Oct. 12, 1945.)
Grant D. Anderson, Property Clerk (Ret. to old Position as Warehouseman Oct. 12, 1945)
LeRoy B. Van Cott, Accounting Clerk (Returned to old position as Clerk-Stenographer, June 16, 1946.)
Edna Mae Allison, Clerk-Stenographer
Alice B. Murphy, Clerk-Stenographer, (Resigned April 12, 1946)
Evelyn E. Kumor, Clerk-Stenographer, (Ret. Mil. Furl, June 10, 1946)
Mary E. Deason, Clerk-Stenographer (Resigned June 15, 1946)
John M. Banfield, Property Clerk
Wilma S. Haines, Clerk-Stenographer (formerly C. Wilma Smith)
Alice Dvarishkis, Clerk-Stenographer (Ret. Mil. Furl. Oct. 15, 1945.)
Dwight E. Richards, Clerk-Stenographer
Gerard Doezie, Clerk-Stenographer
Robert J. Carr, Warehouseman (Resigned October 3, 1945)
Andrew A. Alley, Warehouseman
Lester C. Abbie, Warehouseman-Truck Driver (Ret. Mil. Furl. April 1, 1946)
Elizabeth B. Allan, Telephone Operator
Irene C. Evans, Telephone Operator

Aleda C. Joffe, Telephone Operator, WAE
A. Irene Minish, Telephone Operator, Part-time
Margaret A. Bowman, Telephone Operator, WAE Appointed February 6, 1946
Mary V. Bartee, Telephone Operator, WAE (Appointed June 2, 1946)
C. Max Bauer, Chief Park Naturalist
Harold J. Brodrick, Park Naturalist
David de L. Condon, Park Naturalist (Ret. from Mil. Furl. & Transfer from Rocky Mountain NP, March 1, 1946
Philip H. Wohlbrandt, Chief Park Engineer
W. Leon Evans, Assistant Chief Ranger
Albert E. Elliott, Asst. Chief Park Ranger
William S. Chapman, Asst. Chief Park Ranger (Ret. from Mil. Furl. Dec. 26, 1945)
Hugh Peyton, Asst. Chief Park Ranger (Trans, to Millerton Lake Reservoir Area, Dec. 16, 1945)
Curtis K. Skinner, Asst. Chief Park Ranger (Ret. from Mil. Furl. January 9, 1946
Deate T. White, Road Foreman
Lloyd W. Seasholtz, Chief Electrician (Ret. from Mil. Furl. Oct. 30, 1945)
Frank H. Anderson, District Park Ranger (Ret. from Mil. Furl. October 15, 1945)
John Bauman, District Park Ranger
Wayne B. Alcorn, District Park Ranger (Ret. from Mil. Furl. Mar. 5, 1946)
Lee L. Coleman, District Park Ranger
Arthur Jacobson, District Park Ranger
DeLyle R. Stevens, District Park Ranger (Returned to old Park Ranger position May 19, 1946)
Hugh B. Ebert, District Park Ranger
John W. Jay, District Park Ranger (Ret. from Mil. Furl. May 1, 1946)
Roy B. Hansen, District Park Ranger (Resigned Dec. 14, 1945)
Earl M. Semingsen, District Park Ranger (Ret. from Mil. Furl. May 1, 1946)
Rudolf L. Grimm, District Park Ranger
Walter H. Gammill, District Park Ranger (Ret. from Mil. Furl. March 5, 1946, and promoted to District Ranger June 30, 1946)
Lloyd J. Astle, District Park Ranger (Ret. from Mil. Furl. April 9, 1946 and changed to Park Ranger June 30, 1946)
Harvey B. Reynolds, District Park Ranger (Changed to Park Ranger, April 7, 1946)
Herman R. Biastoch, Foreman, Plumber
George McMullin, Foreman, Electrician
Roger H. Miller, Foreman-Mechanic (Ret. from Mil. Furl. Oct.1, 1945)
Thomas M. Thompson, Master Painter
Wyman P. Benson, Foreman, Plumber
Thomas A. Bowman, Foreman, Carpenter
William C. Mardis, Carpenter
Elmer W. Ames, Automobile Mechanic

Almon E. Dewing, Automobile Mechanic (Ret. from Mil. Furl. Jan. 9, 1946)
Howard S. Kocher, Automobile Mechanic
Earl F. Hochstrasser, Blacksmith
William A. Olson, Painter
William A. Nyquist, Park Ranger (Ret. from Mil. Furl. March 28, 1946)
Ray E. Lavender, Park Ranger (Resigned, March 8, 1946)
Harry Trischman, Park Ranger (Retired December 31, 1945)
Joe J. Way, Park Ranger
Everette L. Arnold, Park Ranger
Anthony E. Stark, Park Ranger
Thomas F. Ela, Park Ranger
Aubrey L. Haines, Park Ranger
Hollis R. Hope, Park Ranger (Resigned March 12, 1946)
Frank F. Kowski, Park Ranger (Ret. from Mil. Furl. Jan. 2, 1946)
Merritt S. Johnston, Park Ranger (Ret. from Mil. Furl. Feb.4, 1946)
W. Verde Watson, Park Ranger (Ret. from Mil. Furl. March 11, 1946)
Russel B. Noah, Park Ranger (Resigned Jan. 7, 1946)
Frank T. Hirst, Park Ranger (Ret. from Mil. Furl. Oct. 30, 1945)
Ruben O. Hart, Park Ranger (Ret. from Mil. Furl. Jan. 15, 1946)
Charles C. White, Park Ranger (Died November 13, 1945)
Rudolph F. Lueck, Park Ranger
John G. Lewis, Park Ranger (Trans, from Grand Teton NP, April 8, 1946)
Charles M. Rector, Foreman, Electrician (Chg. to Electrician May 5, 1946)
Edward L. Link, Automobile Mechanic
Anthony B. Nelson, Automobile Mechanic
David W. Pierson, Buffalo Herder (Ret. from Mil. Furl. Nov. 1, 1945)
Eri A. Allan, Electrician
James M. Bartee, Electrician (Appointed July 29, 1945)
Walter W. Stebbins, Operator, Motor Equipment
Elmer F. Armstrong, Operator, Motor Equipment
Fred J. Nissen, General Mechanic
James C. Kimberlin, Packmaster (WSA Indef. Nov. 1, 1945)
Aaron S. Williams, Packmaster (WSA Indef. Appt. July 21, 1945, Resigned October 28, 1945)
Lloyd K. Holman, Packmaster (Trans. to Navy Dept. Aug. 15, 1945)
J. Stanley Fillmore, Warehouseman-Truck Driver (Ret. from Mil. Furl. March 7, 1946)
Leonard A. Selle, Janitor
Arnold G. Quist, General Mechanic, (Ret. from Mil. Furl. Dec. 3, 1945 and promoted from Auto. Mech. Helper June 2, 1946)
Ralph Reed, Plumber's Helper
William L. England, Plumber's Helper
Ervin F. Coy, Watchman-Janitor (Appt. Dec. 18, 1945)
Alfred D. Palmer, Watchman-Janitor, (Appt. Nov. 4, 1945, Resigned December 12, 1945)
Ernest E. Winning, Watchman-Janitor, (Appt. July 1, 1945, Resigned October 31, 1945)

Ludwik Pilch, Janitor.

ADDITIONAL PERMANENT PERSONNEL IN MILITARY SERVICE AT THE CLOSE OF 1946 FISCAL YEAR

Francis D. LaNoue, Chief Park Ranger

PERMANENT PERSONNEL ON WAR TRANSFER AT THE CLOSE OF 1946 FISCAL YEAR

Berl W. Sexton, Foreman-Electrician.

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United States
Department of the Interior
National Park Service

ANNUAL REPORT

1947

Yellowstone National Park

Edmund B Rogers, Superintendent

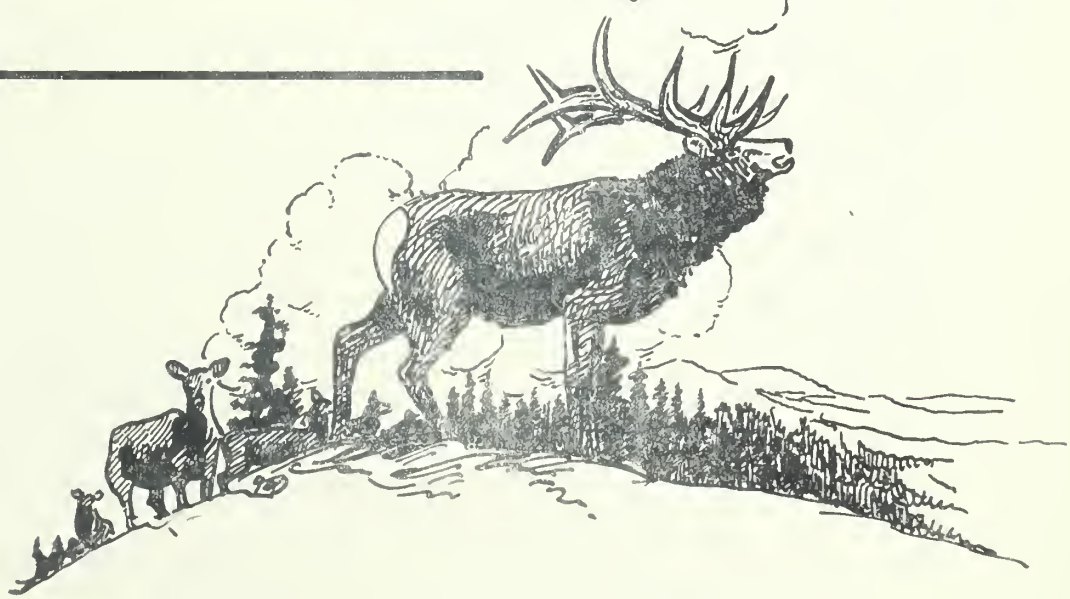
ANNUAL REPORT
YELLOWSTONE NATIONAL PARK

During the years 1927-1928 and 1931 to 1946, on account of a shortage on funds, it was not possible to include the reports of the various superintendents in the annual report of the Director of the National Park Service, and the reports were mimeographed. For 1946, for the first time, the report was multilithed on the new multilith machine purchased by the Yellowstone Library and Museum Association. This report is also multilithed.

Fifty copies of the Yellowstone report have been prepared for historical and archive purposes and for distribution to collectors of Yellowstone literature.

Illustrations in this issue are the work of Assistant Chief Ranger William S. Chapman.

Edmund B. Rogers,
Superintendent.



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ANNUAL REPORT OF YELLOWSTONE NATIONAL PARK

- 1 9 4 7 -

Edmund B. Rogers, Superintendent

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Up to 1934 the report of the Superintendent of Yellowstone National Park covered the construction season and included the period from October 1 to September 30. The 1934 report covered the period from October 1, 1933 to June 30, 1934, and subsequent reports have covered the fiscal year periods. This report, therefore, for 1947, covers the fiscal year July 1, 1946 to June 30, 1947.

This report for 1947, as was the case in 1946, 1945, 1944, 1943, and 1942, has been considerably curtailed as the requirements from the Director's office no longer call for details of various activities, but only the highlights of protection, development, visitor use, et cetera. The Superintendent's report is no longer needed in detail for inclusion in the Director's brief report to the Secretary of the Interior, but is prepared in order that continuity of annual reports be not broken for historical and archive purposes.

DIAMOND ANNIVERSARY

On March 1, 1947, Yellowstone National Park celebrated its seventy-fifth birthday, having been created as the first national park by Act of Congress signed by President Ulysses S. Grant on March 1, 1872. Due to the extremely heavy travel which the park has been receiving and the shortage of personnel, along with the forty hour week in an area which must operate seven days a week to take care of the visiting public, no special ceremonies are scheduled to be held in the park to commemorate this outstanding date in Yellowstone history. However, some of the communities around the park, notably Livingston, Montana, and Cody, Wyoming, are planning special celebrations to mark this anniversary.

WEATHER

Heavy rains during October and continuing through December accounted for a considerable increase in precipitation over the past four years. The 1946-1947 snow depths taken at ten representative stations throughout the park in March revealed an increase of approximately 15 per cent over the past ten year average. Ice layers were distributed through the snow, particularly near the ground, caused by rains and warm weather during the early part of the winter. This icy condition of the snow caused considerable hardship on the big game animals foraging for food and also hindered the snowplow operations in opening the roads.

TRAVEL

The 1946 travel year, extending from October 1, 1945 to September 30, 1946, established a new all-time record as 817,907 visitors were recorded at the five park gateways. This represented an increase of 357 per cent over the 178,296 persons who entered during the 1945 travel year (which was a war year) and 40 per cent over 1941, the previous record year when 581,781 persons entered. The 1946 travel year recorded more people visiting the park than the entire populations of the bordering states of Montana and Wyoming, and about 10 per cent of all the people who have visited the park during its 75 years of existence.

The large increase in travel was due largely to the American public having been deprived of its vacations during the war years. With conditions reaching near normal again and many people having a surplus of cash due to war work, increased wages, veterans' mustering out pay, terminal leave pay, et cetera, the whole nation appeared to be taking to the highways. Of Yellowstone's 814,907 visitors more than 98 per cent came in their own transportation. Visitors included people from all walks of life and many traveled long distances in reaching the Yellowstone - every state in the Union having been represented before the end of June. Many visitors included war workers who were "just traveling" with no definite destination in view, some used their trailer houses they had lived in at manufacturing centers. The majority seemed to be "letting off steam" after having been denied the use of gasoline for several years. A good many families, mostly from the farming sections of the country, converted their trucks into small houses on wheels and were moving across the country to see the beauties of the West. Some of the more fortunate entered the park with new automobiles.

Immediately following V-J Day last fall visitors started pouring into the Yellowstone and all indications pointed to a banner year in 1946. However, the travel exceeded even the wildest expectations, considering available accommodations. A deluge of visitors descended upon the park in May as soon as the roads were cleared of snow and travel was permitted over them and the number continued to increase throughout the summer. By June 28, 1946 more visitors had entered the park gates than came in during the 1945 travel year and by the end of June 1946 an increase of 38.6 per cent was recorded over the same period in 1941. Practically the same percentage of increase continued throughout July and August and September's increase raised the percentage to 40.

Two hundred and forty five thousand seven hundred and fifty five motor vehicles entered the park during the 1946 travel year as compared with 52,159 during 1945 and 172,688 during the 1941 travel year, an increase of 371.1 per cent over 1945 and 42.3 per cent over 1941.

Of the various modes of travel 15,500 persons entered by train, 408 by bus, 162 by plane, 797,621 by private automobiles, including 407 miscellaneous, and 1210 by motorcycles. The 1946 year had 86 pack horse parties and 474 people on horseback.

The west entrance continued as the most popular gateway with 290,256 visitors as compared with 146,082 for 1941, an increase of 76.8 per cent; east gate was second with 208,867 visitors as against 180,131 for 1941, an increase of 15.9 per cent. In 1941 the east gate led in travel. South gate was third with 134,057 as against 105,514 for 1941, an increase of 27.0 per cent; north gate fourth with 114,998 as against 72,607 for 1941, an increase of 59.7 per cent; and northeast fifth with 66,729 visitors for 1946 as compared with 59,427 in 1941, an increase of 12.3 per cent.

Automobile travel by states was classified during the period from June 5, 1946 to September 30, 1946, inclusive, and showed visitors from every state in the Union, Alaska, Canada, Mexico, Cuba, Guam, Bolivia, Virgin Islands, Hawaii, Switzerland, Canal Zone, Philippines and West Indies. California was at the head of the list with 28,143 vehicles or 112.2 per cent more than the 12,704 vehicles from Washington, which was second. Montana was third with 11,862 vehicles. The other seven leading states among the first ten were Utah with [illegible],906 cars, Illinois 10,867, Idaho, 8,630, Wyoming 7,066, Ohio 6,[illegible] Minnesota 6,002 and Oregon 5,995.

While post-season (beginning October 1, [illegible]) and pre-season travel for the 1947 travel year was slightly below [illegible] the 1947 Decoration Day holiday crowds swelled the totals so that by June [illegible] travel was showing a slight increase over the same period a year ago and by the end of the fiscal year (June 30, 1947) a total of [illegible],514 persons had been recorded as against 199,390 in 1946, an increase of 6.1 per cent. Every indication pointed to a new travel record for the Yellowstone during its diamond anniversary.

REVENUES

Revenues for the 1947 fiscal year totaled $661,488.11, of which $575,350 was from Yellowstone motor vehicle license fees and $57,025.29 was from business concessions. These figures represent increases of 237 per cent, 239 per cent and 246 per cent, respectively, over the same period for the 1946 fiscal year.

APPROPRIATIONS

The following appropriations for the 1947 fiscal year were made available to the Yellowstone and coordinated areas:

1471000.040	Big Hole Battlefield National Monument.....	$ 1,391.00
1471000.040	Devils Tower National Monument.....	11,346.00
1471000.040	Custer Battlefield National Monument.....	11,183.90
1471000.051	Emerg. Reconst. & Fight. Forest Fires - Devils T.	1,915.00
1471000.051	Emerg. Reconst. & Fight. Forest Fires - YNP.....	45,976.35
1471000.100	Yellowstone National Park.....	493,083.00
14-1272245 (5) .001	White Pine Blister Rust Control, Dept. of Agriculture (Transfer to Interior), 1947.....	28,850.00
14X1010.001	Roads & Trails, National Park Service - Big Hole.	192.00
14X1010.001	Roads & Trails, National Park Service - Devils T.	11,052.00
14X1010.001	Roads & Trails, National Park Service - Custer...	4,413.00
14X1010.001	Roads & Trails, National Park Service - YNP.....	350,961.00
14X1018.001	Physical Improvements, Buildings & Utilities, National Park Service - Devils Tower.....	900.00
14X1018.001	Physical Improvements, Buildings & Utilities, National Park Service - Custer.....	4,000.00
14X1018.001	Physical Improvements, Buildings & Utilities, National Park Service - YNP.....	90,600.00
14X6690	Payments from Proceeds of Sales, Motor-Propelled Vehicles, etc., Department of the Interior....	9,799.00
	T O T A L.....	$1,065,662.25

CONCESSIONERS

Operations of most of the park concessioners during the 1946 season were not up to pre-war standards and numerous complaints, both verbal and written, were justly received. The labor problem was one of the worst which the park has experienced. After being closed during the war years the hotels, lodges, transportation system and most of the other operations lost many of their key employees and they had to start the season with mostly green help. It was difficult to find sufficient employees to fill all of the jobs and many of those employed to report failed to show up on the appointed dates. There was a tremendous turnover of employees during the season and because of the long distance from large labor markets it was difficult to keep the crews to the required capacity. Camp Roosevelt was closed shortly after it had opened due to insufficient personnel and the closing of this operation materially reduced the number of accommodations available for the traveling public. The unprecedented travel started immediately after the season opened and continued until well after Labor Day. Much of the personnel was inexperienced, indifferent and had little interest in the visitor or the concessioners for whom they were working. Sanitation conditions were particularly bad and many complaints were heard on the concessioners' facilities as well as those of the government.

The outlook for the employment situation for 1947 appears considerably brighter. The Yellowstone Park Company received an unusually large number of applications for employment this summer and therefore were more particular in their selections. Also, there is a sufficiently large reserve list to take care of declinations and turnover after the season becomes advanced. The type and attitude of applicants who sought employment seem improved and from observations made after operations got underway it appears that the labor situation will be much more stable during the summer.

The complaints with regard to handling reservations should be considerably decreased this season (1947) as the Yellowstone Park Company has a large staff of clerks to take care of reservations. Also, there will be a considerably larger number of accommodations available for visitors due to the fact that Camp Roosevelt, which was closed last year, is open for overnight guests, and some sleeping quarters which were used by employees last year will be available for guests. Also, an improved laundry service and more and better employees will tend to increase the number of accommodations available as with sufficient personnel and small turnover it should be possible to operate all facilities to capacity. New equipment has been installed in most of the kitchens and with conditions improved in securing materials, supplies and food stuffs there should be little complaint with regard to the serving of food at the various establishments. Lake Hotel is to open for the months of July and August and thus provide additional sleeping accommodations.

A marked improvement in conditions and service at the various service stations throughout the park was noticeable as soon as the stations were opened for business for the 1947 season. A superintendent of service has been engaged to look after the operation of all stations throughout the park and hereafter service should be comparable with any found outside the park.

All concessioners are cognizant of the unsatisfactory service rendered last year in most of the operations, which was not peculiar to this park alone but was general throughout the country, and all are anxious to improve conditions and service to surpass what they were even before the war years.

On May 10 the tourist cabins, cafeteria and garage at Old Faithful opened. The Hamilton store opened at Fishing Bridge on May 16 and on the 20th the Fishing Bridge cabins, cafeteria and garage opened, as well as the Canyon store and service station. On May 30 the Canyon, Thumb and Mammoth tourist cabins, Thumb and Canyon cafeteria and Canyon and Mammoth garages opened. Pryor's coffee shop opened on June 1 and Haynes Tower Falls store on June 4. On June 7 Camp Roosevelt and Old Faithful Lodge opened for cabins only, and on June 8 the Lake Lodge opened for overnight guests. On June 20 the hotels and lodges officially opened for the 1947 season. The Canyon campground cafeteria opened on June 22, as did the Mammoth swimming pool.

The Yellowstone Park "Help Special" bringing in employees from the West Coast arrived at West Yellowstone and a similar special from St. Paul on the Northern Pacific arrived at Gardiner on June 16. Airplane service into West Yellowstone started on June 16 from Salt Lake City by Western Air Lines. Train service started to the park on June 20, as well as bus service within the park.

MEDICAL SERVICE

The hospital at Mammoth was reopened for the 1946 season after having been closed during the war years. Dr. Alfred M. Lueck, who had the medical contract with Dr. G. A. Windsor, was in charge of operations in the park and the new resident physician, Dr. Burke Scagnelli, who had arrived on June 11, 1946, was his assistant. Registered nurses were available throughout the summer at Canyon Lodge, Canyon Hotel, Lake Lodge, Old Faithful Inn, Old Faithful Lodge and Fishing Bridge, in addition to the hospital staff at Mammoth. Dr. George A. Windsor came to the park on June 30 and stayed during the first week in July. Medical service was available for the 1946 season on the same basis as before the war and the service was operated under a new business concession permit for one year, in the names of Drs. George A. Windsor and Alfred M. Lueck, which permit had been approved on March 21, 1946.

The Mammoth hospital was closed for the season on September 10, 1946 and Dr. Tom Clemons arrived on September 9, 1947 to become resident physician, succeeding Dr. Burke Scagnelli.

On May 26, 1947 Dr. George A. Windsor, who had held the park medical contract since 1924, died in the Park Hospital in Livingston, Montana.

The dispensary at Old Faithful was opened for the 1947 season on May 15. The hospital at Mammoth was reopened for the 1947 season on June 5 and nurses became available at the dispensaries in the hotels and lodges throughout the park the same as during the 1946 season. Dr. Alfred M. Luedk and Dr. John A. Pearson took over the operation of the medical service for the park with the passing of Dr. Windsor, operating under a one year business concession permit similar to the one in effect during 1946.

PUBLICATIONS

No publicity director was engaged for the 1946 season and no attempt was made to encourage travel as the park was receiving more visitors than it was able to take care of with less accommodations than were available before the war. Very few press releases were sent out during the 1946 season.

For 1947 the Yellowstone Park concessioners [illegible] a publicity director and Reuben M. Monson, of Minnesota, was [illegible] handle the publicity work. It was not expected to send out many [illegible] releases during the summer but as new pictures of park features and activities were needed Mr. Monson expected to concentrate [illegible] graphic work.

The first supply of the 1946 Yellowstone folder [illegible] did not arrive in the park until August 12, 1946 and [illegible] capped due to its inability to supply up-to-date [illegible] At the time of the arrival of the 1946 folder it was [illegible] continue distribution of the old 1942 folder, some of [illegible] much out of date and resulting in considerable [illegible] from visitors.

At the end of April 1947 the park was furnished a supply of "Accommodations and Services" leaflets issued by the Yellowstone Park Company which contained information as to rates [illegible] accommodations. These leaflets proved very useful in advising persons contemplating a trip to the park as to rates and accommodations and also assisted visitors after they arrived in the park. In May the "A" and "B" folders issued by the Yellowstone Park Company became available and [illegible] also aided in dispensing park information to prospective visitors. The entire supply of the 1946 folder or broadside was exhausted by [illegible] the 1947 issue was not expected for several weeks. Visitors were seriously inconvenienced by the lack of a good road map of the park and the useful information contained in this publication, resulting in the registering of numerous verbal complaints each day at the information stations when it was found that maps were not available. The publications issued by the Yellowstone Park Company which were made available for distribution helped a great deal to alleviate some of the criticism which was being directed to the park and Service because of the unavailability of [illegible] permanent literature.

MOTOR VEHICLE LICENSE FEE

Collection of the motor vehicle license fee for 1947 was discontinued at the close of business October 15 and collection for the 1948 season started on May 20.

RANGER SERVICE

There were 30 permanent rangers on duty July 1, 1946. During the 1947 fiscal year seven permanent rangers transferred to other park [illegible] agencies or divisions or received promotions in the Yellowstone. Four new permanent rangers were appointed on an emergency status pending their passing the next civil service examination for park rangers. Fifty four seasonal park ranger positions were authorized for the 1946 season of which 52 were filled.

All protection division personnel attended the ranger conference and forest fire protection school held in Mammoth on May 7, 8 and 9. They also attended and participated in the general In-Service training program held in Mammoth.

One district park ranger attended a four day In-Service training and fire control conference held in Glacier National Park from May 26 to 29.

All permanent rangers moved to their summer stations during May and three seasonal park ranger positions were filled during the month. The protection division was faced with the problem of operating the entrance stations largely with permanent ranger personnel until June 17 when most of the seasonal park rangers reported for duty. This condition prevented permanent rangers from carrying on important field work to a large extent. On June 30, 1947 there were 52 seasonal park ranger positions filled. Four ranger patrol cars were operated full time to control violations, assist the large number of visitors and assist in investigating reported accidents.

Chief Ranger Maynard Barrows transferred to the position of Forester, P-4, in the Region Two office effective January 7, 1947. Francis D. LaNoue returned to duty as Chief Ranger on February 3, 1947 after having served in the U. S. Army since May 12, 1943. He was the last of the Yellowstone employees to return to his old job upon completion of military service, making a total of 27 permanent employees to return here of the 28 who were furloughed from Yellowstone for military duty during World War II.

PARK BIOLOGIST POSITION ESTABLISHED

On November 26, 1946 a new position of Park Biologist was established for the Yellowstone in grade P&S-3. This position was not filled until June 16, 1947 when Walter H. Kittams became available by transfer from the Fish and Wildlife Service at Billings.

CHIEF CLERK AND CHIEF RANGER CONFERENCE

Four representatives from the Yellowstone, Assistant to the Superintendent Joffe, Chief Ranger LaNoue, Chief Clerk Anderson and Accounting Clerk Bird attended the conference of Chief Clerks, Chief Rangers and Field Auditors held in the Director's Office in Chicago March 17-21, 1947. The trip was made by automobile and a stop was made in the Region Two office on the return journey. The men reported a most successful conference and were very complimentary of the fine manner in which the Chicago officials handled and discussed the various subjects.

IN-SERVICE TRAINING PROGRAM

An In-Service Training Program for all National Park Service employees was conducted from April 15 to May 13. Meetings of one and a half hours duration were held each Tuesday and Thursday during which the Superintendent, Assistant Superintendent, Assistant to the Superintendent and all division heads conducted the programs and informed in detail those in attendance of the operations and workings of their various divisions. The 1947 staff of seasonal park rangers and park rangers naturalists also participated in an In-Service training program prior to entry on duty to better acquaint them with the operations of the park and the phenomena contained therein.

FOREST FIRE PROTECTION

Twenty nine fires were reported during the 1946 season. Of this number the only fire which reached major proportions was the Lewis River fire. Its gross area of 821 acres included 277 acres which had been burned in the Lewis Lake Outlet fire of 1943, leaving a newly burned area of 544 acres. This fire was thought to have originated on July 10 when a lightning storm passed over the area.

Construction of a new fire lookout on Purple Mountain was begun on June 27, 1947. The fire control aid training school was held June 17 through 19, and most of the men were sent to their summer stations on June 20. The Mount Washburn Lookout was the only point manned during the month of June. No fires had been reported for 1947 up to the close of the fiscal year.

FOREST INSECTS

No serious forest insect infestation was observed in the park during the year but there has been some concern over an infestation in the Caribou and Targhee National Forests. This infestation appears to be spreading to the north and east toward Yellowstone Park. The Forest Service and Grand Teton National Park plan to attempt some control measures during the 1947 working season.

WHITE PINE BLISTER RUST CONTROL

A white pine blister rust control project for the protection of whitebark pine in the vicinity of Mount Washburn and Craig Pass was active during the 1946 season. It was originally planned to complete initial work of about 3,000 acres but due to the instability of weather and time devoted to forest fires only 436 acres were worked.

Plans for the 1947 working season contemplate completion of initial work of the entire Washburn and Craig Pass control units.

BUILDING FIRE PROTECTION

Regular inspections of all government and concessioners buildings were made during the 1946 season and many of the unsatisfactory conditions observed were corrected.

For the 1947 season the Yellowstone Park Company has, for the first time, employed a fire chief who will make regular inspections of all of the establishments and organize employee fire brigades in all of the larger establishments.

CAMPGROUNDS

During the war years, when travel through the park was relatively light, many of the campgrounds received a breathing spell and had some chance for vegetative recovery. At the same time, however, many of the facilities which previously had been installed became badly deteriorated from natural causes. Because of the extremely heavy travel during the 1946 season campground usage was considerably in excess of any previous year. Without an opportunity to replace such facilities as fireplaces, barrier logs, tables, etc., before the rush of travel started the developed areas suffered from overuse to such an extent that the benefits gained during the years of comparatively light travel were almost completely lost.

MAMMOTH TENNIS COURT

The tennis court east of Opal Spring at Mammoth Hot Springs, which has been an eyesore for years and which retarded the natural spread of this beautiful terrace was eliminated during the winter and a dike was constructed which has given the area a more pleasant appearance and has added considerably to the beauty of this feature at park headquarters.

NATURALIST DIVISION

The naturalist division resumed activities on a pre-war basis on the first of July, 1946, or at the beginning of the 1947 fiscal year, when 26 seasonal park ranger naturalists were employed and a full program of interpretive activities were again resumed after more than four years in which such a program has been kept to a minimum. The five Yellowstone museums were opened for use for the first time in over three years and thousands of persons benefited from visiting these interpretive units. A total of over 1,200,000 personal contacts were made by members of the naturalist division with people who were in attendance at the various interpretive programs and activities conducted by this division. This service to the visiting public was of inestimable value.

By June 16, 1947 all Yellowstone museums were open to the public and the program of walks, talks, hikes, et cetera, began in all their detail on the following day.

A special phase of Yellowstone Park interpretation started for 1947 was the inauguration of a junior nature program being given to children from 6 to 14 years of age each afternoon for five days each week. The program consists of special exploring trips for the youngsters and a treatment of nature lore with some work being done on nature craft

On November 15, 1946 Dr. C. Max Bauer, Chief Park Naturalist, was transferred to the Director's office in Chicago as Geologist. David de L. Condon was promoted to fill Dr. Bauer's vacancy, effective November 17.

VANDALISM

Early in October a special project was started for the purpose of cleaning our pools, springs and geysers which had debris thrown into them by careless or thoughtless visitors and had been otherwise damaged by acts of vandalism. This work was carried on until such time as the funds which were available to conduct same were expended. Although only a portion of the work which should be done had been completed, that which has been done is in those places of greatest use and abuse and as a result has been highly beneficial to the thermal features and to the general appearance of Yellowstone's most valuable natural assets, the thermal phenomena.

YELLOWSTONE LIBRARY AND MUSEUM ASSOCIATION

The Yellowstone Library and Museum Association has continued to cooperate with the National Park Service by securing books, having periodicals bound and hiring a librarian for the improvement of the research library; it has acquired physical equipment in the form of a multilith for use in the preparation of materials which need duplication; and it has procured supplies and materials for the publication of Nature Notes. In addition, it has financed the preparation of the skins of several animals for museum use and study purposes.

ROAD MAINTENANCE

The park roads did not receive the maintenance to which they were entitled during the 1947 fiscal year due to shortage of equipment, insufficient, indifferent and inexperienced personnel, excessive costs and difficulty in obtaining material, an extremely heavy turnover of personnel and other general conditions which contributed to operating conditions. Difficulty was experienced in picking up surplus equipment to replace that loaned to the war effort and to meet increased demands of maintenance, but additional surplus equipment obtained during the winter and spring should help maintenance operations materially. Supplies and materials are still excessively high and difficult to get. If increased appropriations are made available to meet the changing conditions, increased costs of operations will be reflected in the maintenance work. While the surface of the roads held fairly well during the war the heavy post-war travel has wrecked it with a vengeance.

CLOSING AND OPENING OF ROADS

Very little snow fell on the Red Lodge-Cooke road during the early storm of September 8 and 9, which blocked some of the roads in the park, but on September 22 a light snowfall caught several tourists on this road without chains and they had to be helped by the maintenance crew. The Dunraven Pass road was closed to traffic on October 19 and the roads to the east and south gates on the 23rd and the road to the west gate on the 28th. The road from Gardiner to the northeast entrance and Cooke was kept open throughout the winter.

The park's snowplows began the spring opening of the roads on April 8, 1947. About eight miles of the Tower Falls to Canyon road was plowed to allow late skiing on the Mount Washburn slopes. On April 30 the roads from Mammoth to Old Faithful and West Yellowstone were opened to the public. Spring snow plowing operations were completed in the park on May 29 when the Canyon to Tower Falls road was opened. Snow plowing started on the Red Lodge-Cooke road on May 13 and on June 18 the highway was officially opened to travel. It was temporarily closed on June 27 and reopened again the next day On May 12 the Teton National Park plows opened the road from Moran to the south gate. On May 16 the road was opened to motorists from Norris to Canyon and Lake and the east entrance was opened to motorists on May 20. The south entrance and continental divide roads were opened to motorists on May 25 and Dunraven Pass was opened on May 30.

RED LODGE-COOKE ROAD

The Red Lodge-Cooke highway was closed to motorists after September 22 and was not reopened in the spring to the public until June 18. The snowplows had actually cleared through by June 12 and some cars started coming over the highway on June 13.

On the evening of June 20 a severe snowstorm hit the top of the mountains on this highway, which reaches an elevation of 11,000 feet, stranding a number of cars. Part of the road maintenance crew from the Beartooth road camp went out with one of the 3-auger SnoGos, a truck and pick-up to give aid to the stranded motorists. In attempting to pass one of the stalled cars the snowplow ran off the shoulder of the road and high-centered. Efforts to clear the plow were unsuccessful and in attempting to bring out some of the stranded motorists the truck and pick-up also became stalled in the high drifts. The road men, after becoming exhausted in attempting to dig the truck and cars out of the drifts, crawled into the cabs of the truck and pick-up to keep out of the storm and await daylight. Three National Park Service employees, Veron E. Kaiser, John P. Baker and Richard N. Huckels, who were caught in the storm in the pick-up, died due to asphyxiation in an heroic effort to aid the stranded motorists.

Superintendent Rogers, Congressman Wesley A. D[illegible]wart, Assistant Director Hillory A. Tolson and Chief Landscape Architect Thomas C. [illegible]nt attended a conference in Red Lodge with officials of the Red Lodge Chamber of Commerce on September 22, 1946, with regard to the opening and closing dates, snow removal, and maintenance of the Red Lodge-Cooke highway.

ROAD CONSTRUCTION

No new construction projects were underway in the park during the summer of 1946. Peter Kiewit Sons' Construction Company, low bidder on the bituminous surfacing of Old Faithful to Isa Lake, moved their heavy oiling equipment out of the park on June 27 and 28.

Bids were opened by the Public Roads Administration in Cheyenne on April 23 for constructing Project 1-D-1, D-3, bituminous surfacing of 7.01 miles, Old Faithful to Isa Lake. The award was made to McLaughlin, Inc. on June 5, which contractor was low bidder with a bid of $130,094. While the contractor was setting up his camp on Spring Creek and moving in his heavy equipment for the job in June no actual work on the job had been undertaken by the end of the fiscal year.

Bids were opened on June 4 in Cheyenne for construction project 1-F3-G4, grading and base surfacing 2.830 miles of [illegible] line and 2.173 miles of connecting roads and parking areas at Canyon. No bids were received.

MAMMOTH SCHOOL

The school term started on September 3, 1946 with Mrs. Alberta Stebbins teaching the lower grades and Miss Jean [illegible]son as principal and as teacher of the upper grades. School closed on May 23, 1947 and the following pupils were graduated: Donna Mae [illegible], Jack Roylance, Bud Wohlbrandt and Norman Hjelm.

On April 1 a Yellowstone Park Parent Teachers Association was organized by a group of the members of the community vitally interested in the school problems of the park. Chief Park Naturalist Condon was elected president, Frank Mattson, Vice President and Mrs. Francis P. Roylance, Secretary-Treasurer.

On March 21, 1947 the Superintendent appointed a new Yellowstone Park school board, to become effective May 1, 1947, consisting of W. Verde Watson, Chairman, Mrs. Elmer F. Armstrong, Secretary-Treasurer, and Mrs. Deate T. White, member. Mr. Watson succeeded Mr. [illegible]n E. Bird and was appointed for two years to complete his three year term. Mrs. Armstrong succeeded Mrs. White as Secretary-Treasurer and was appointed for a three-year term and Mrs. White succeeded Mr. Hugh Eberle and was appointed for a term of one year.

FEDERAL EMPLOYEES UNION

Regular monthly meetings of the Federal Employees Union No. 465 were held except during the summer season. New officers for [illegible] were elected at the January meeting consisting of Francis P. Roylance, President, Ladd S. Shorey, Vice President, Aubrey L. Haines, Secretary-Treasurer, W. Verde Watson, Guardian. The board of directors elected consisted of Earl M. Semingsen, Chairman, David de L. Condon, Lester C. Abbey and Wayne B. Alcorn.

SAFETY COMMITTEE

A new Yellowstone Park Safety Committee was appointed by the Acting Superintendent on January 14, 1947 to investigate and report all accidents involving park employees and equipment during the calendar year. The committee consisted of Curtis K. Skinner, Chairman, William G. Proper, Clerk, William Wiggins and Robert R. Robinson, Members.

BOARD OF SURVEY

On January 14, 1947 the Acting Superintendent appointed a new Board of Survey for the calendar year, consisting of Philip H. Wohlbrandt, Chairman, John M. Banfield, Clerk, Roger H. Miller, Member, Lloyd W. Seasholtz, Member, Joseph Joffe, Alternate Member and W. Leon Evans, Alternate Member.

CHAPEL COMMITTEE

On November 5, 1946 the Superintendent appointed a Yellowstone Park Chapel Committee consisting of David de L. Condon, President, Ladd S. Shorey, Secretary-Treasurer, and Mrs. Joe Joffe.

ABSAROKA CONSERVATION COMMITTEE

On September 21 and [illegible], 1946 the regular fall meeting of the Absaroka Conservation Committee was held at Mammoth. A group of interested conservationists inspected the Tower Falls-Hellroaring-Lower Lamar Valley range area by horseback on the 21st and the following day the business meeting was held at Mammoth with about 40 in attendance. Among the more important actions taken by the Committee were the recommendation of a reduction of 2,200 elk in the Northern Yellowstone herd during the coming winter and appointment of a special committee to determine boundaries of an administrative enclosure north of the park intended to facilitate elk migration beyond the park line. All officers were reelected to serve another year.

The annual spring meeting of the Committee was held at Mammoth on May 24 and 25, 1947. Congressman Wesley A. D'Ewart of Montana, Chairman of the Committee, was present and presided at the meeting on the 25th. A number of the members rode some of the park range on the 24th.

TRI-STATE YELLOWSTONE PARK CIVIC ASSOCIATION

Director Drury and Yellowstone officials met with representatives of the Tri-State Yellowstone Park Civic Association at Mammoth on July 22, 1946 to discuss matters of benefit to the Yellowstone and National Park Service.

Assistant Director Tolson, Chief Landscape Architect Vint and Assistant to the Superintendent Joffe attended the fall meeting of the Association held in Cody, Wyoming on September 14, 1946.

On May 31, 1947 the Association held its spring meeting at the Museum building at Old Faithful. Messrs. Rogers, Joffe and LaNone of the Yellowstone organization and Huntley Child, Jr. of the Yellowstone Park Company attended.

U. S. EMPLOYMENT SERVICE

The U. S. Employment Service office was operated during 1946 season on the third floor of the Barracks Building with Robert Chase, of Big Timber, Montana, in charge. For the 1947 season the Employment Service office was operated under the jurisdiction of the State of Wyoming Employment Service Office and was opened in the Barracks Building on May 26. Mr. Robert Brand of Cody was in charge.

CHURCH SERVICES

Regularly scheduled church services, both Catholic and Protestant, were held in the park during both the 1946 and 1947 seasons. Such service was not held during the war years.

EASTER SERVICES

Special candlelight Easter services were held in the Mammoth Chapel at 6:00 a.m. on Easter, April 6. Dr. Arthur W. Seebart, Minister of the Holbrook Congregational Church in Livingston officiated. About one hundred people were present.

RED CROSS DRIVE

The annual Red Cross Drive conducted in the park during March was very successful. A total of $116.50 was collected in the park and turned over the Park County, Montana Chapter.

NEW MEAL RATES

On May 20, 1947 the Director's office approved a new meal rate of $1.60 per day or 70¢ per meal. The new rates were put into effect on June

LOCAL CIVIL SERVICE BOARD

Mr. William G. Proper, Personnel Clerk, was appointed a member of the Local Civil Service Board in June 1947, succeeding Mrs. Wilma S. Haines. The other members of the Board are Joseph Joffe, Secretary, and Ernest R. I. Anderson.

PARK CENSUS

A population census of visitors and employees at all points in the park was taken by the Protection Division on three days, August 7. 9 and 11, 1946. The count revealed a total of 2,850 employees, including 673 at hotels, 384 at lodges, 196 at tourist cabins, 784 National Park Service and families 722 for other operators, 4 contractors and 87 others. Average number of guests in the park during the three days was 9,847, which included 1,285 at hotels, 2,075 at lodges, 3,296 at tourist cabins and 3,191 in auto camps. Average population for the three days of both employees and visitors was 12,697.

SUPERINTENDENT'S CONFERENCE

A conference of park superintendents was held at Mammoth Cave, Kentucky, from October 8 to 11, 1946. Superintendent and Mrs. Rogers attended from Yellowstone.

LAW ENFORCEMENT

Eighty-two cases were presented before the United States Commissioner, who assessed fines totaling $2,432, during the 1947 fiscal year. Two cases were bound over to the United States District Court and one case was dismissed. The cases were classified as follows: traffic violations 52, killing animals in the park 2, illegal fishing 6, thefts 11, disorderly conduct 4, assault 1, damaging government property 2, armed robbery 1, and miscellaneous 4.

ACCIDENTS

Traffic accidents increased with the park travel as 109 accidents were reported during the 1947 fiscal year. One accident resulted in the death of an employee of the Yellowstone Park Company while several persons involved in other accidents required hospitalization.

ANTELOPE

For umber of years an excessive number of antelope have been carried on the limited winter range in the Gardiner-Reese Creek area. Unsuccessful efforts were made by the State of Montana during the early winter of 1946 to remove a portion of those wintering immediately outside the park. Because of continued serious depletion of the antelope range within the park, authority was granted by the Secretary of the Interior in the fall of 1946 to live trap and transplant a sufficient number to reduce the park herd from an estimated 800 to 400. Through cooperation with the State of

Montana portable traps were secured and set up in the Stevens Creek area in January 1947, and 235 animals were captured and allotted to the State of Montana for transplanting in suitable areas in Park and Gallatin Counties. It is anticipated that removal of 150 to [illegible] additional antelope will be accomplished in 1948.

BEARS

For the past 16 years conflict between park visitors and roadside bears has been recognized as a special problem and [illegible]ous efforts have been directed toward minimization of personal injury and property damage from these animals. Notwithstanding the all-time travel of 1946, only [illegible] personal injuries from bears were reported. This was an injury incidence of two thousands per cent, or one personal injury for each 54,300 visitors. Likewise, reported property damages from bears ([illegible]) reached a proportionately all-time low. Since the black bear population has remained practically constant at 450, the fortunate summer record of 1946 may have been due to the fact that greatly reduced travel for the five previous years caused the animals to lead more natural existence disassociated with human enterprise. It is possible also that the long-time educational program carried on to emphasize danger in association with wild bears may have caused the average visitor to exercise safeguards and caution. Grizzly bears, the population of which remains rather constant at 200, caused no conflict with human visitors during the year. The grizzly bear grounds near the Canyon, which was not in operation during the war years, has not been resumed and there were comparatively few complaints although many visitors made inquiry with regard to this one-time feature in the Canyon area and some expressed dissatisfaction in not being able to see grizzly bears during their visit in the park.

BUFFALO

Buffalo which range in four rather widely separated sections of the park numbered approximately 930 in the fall of 1946. With the birth of calves in the spring of 1947 they now total about 1,100. Small herds transplanted to Hayden Valley and Fountain Flats in 1936 have increased during the ten years by about 300 per cent in spite of difficult winters. No buffalo reduction was made in the Lamar area, where numbers are controlled between 300 and 400, but a reduction of from 200 to 230 is planned in early 1948.

About 300 buffalo were corralled at Lamar station in January, 1947, for testing and vaccination. This was for the purpose of continuing pathological studies to determine extent of brucellosis infection (Bang's disease or contagious abortion) in the herd and effectiveness of brucella vaccine. Technical work was performed by and under the direction of Dr. Don R. Schoff of the Fish and Wildlife Service. Similar studies will be made in connection with reduction operations in 1948, from which data it is expected definite conclusions can be drawn.

Forage conditions for buffalo, as well as for other grazing animals, were critical during March and April due to crusted snow and ice over the range, but actual losses for malnutrition were relatively small.

ELK

It is estimated that the 1947 summer elk population within the park, including calves born in May and June, is in excess of 12,000 distributed approximately as follows: northern Yellowstone herd, 7,155 to 7,262; Gallatin 2,200; interior minor areas, 800; and southern area (portion of the Jackson Hole herd) 2,000. During the past winter elk numbers within the park were considerably less because many migrated to winter ranges outside the Yellowstone.

Only two of the four groups listed above involve local management problems at the present time. A portion of the Gallatin herd winters within the park where certain sections of the range have been seriously depleted by overpopulation with elk. In the fall of 1946 approximately 900 elk were removed from this herd by local hunting just outside the park and it is estimated that 300 died from malnutrition and other causes during the winter. It is anticipated that further similar reductions will be made in the fall and winter of 1947 and that the number of elk wintering on the Gallatin will be more in balance with available forage.

The northern Yellowstone elk herd has presented a serious overpopulation problem for many years. Since 1934 definite measures have been undertaken to drastically reduce surpluses. In the thirteen year period a total of 32,671 elk have been removed from this herd through legal hunting outside the park, slaughter and live shipments within the park, and natural deaths. This is an average annual drain of slightly more than 2,500. During the winter of 1946-1947 total reduction was 3,620, including 475 winter deaths, principally from malnutrition. Continued annual reductions will be necessary to maintain size of winter herd around 7,000, or the approximate number the critical range will support without damage.

TRUMPETER SWAN

Yellowstone National Park is now practically the only place in the United States where the rare, at one time almost extinct, trumpeter swan continues to live his natural or primitive existence. In the very few other areas where this great bird still exists, artificial feeding in winter and other forms of direct aid or management are practiced. A census in August 1946 accounted for 47 adults and 1[illegible] cygnets on lakes and streams of the park and a few immediately adjacent areas. Because of limited suitable swan habitats and severe winter climate, it is believed that the optimum swan population for this area would not exceed [illegible] or 70 birds. For a number of years the swan population in the park has approximated this figure.

HANDICAPS OF OPERATIONS AFTER WAR YEARS

For six months of each year (approximately Octo[illegible] 15 to Apri[illegible] 15), Yellowstone is closed to tourist travel. The roads are [illegible]ow-bound and activities are reduced to those which can be accomplished by the limited staff of permanent employees stationed in the park. Game protection, repair and reconditioning of equipment, building maintenance at park headquarters, preparation of plans and reports, research activities, and work of a similar nature is accomplished during this period. This is the only period of park operations during which employee requirements and working conditions are stable.

From April 15 through October 15, the work [illegible] and park activities fluctuate greatly. Plowing of snow from the [illegible] normally commences in April. Four crews of six to eight men each are employed to do this. They work day and night shifts in order to take advantage of plowing conditions and to open the roads as quickly as possible so that maintenance and rehabilitation of park facilities may be completed in readiness for the park tourist season. As rapidly as the roads are opened and the season progresses, temporary employees are engaged to supplement the permanent organization in manning all phases of operations. Road crews, plumbers, truck drivers, mess help, pump operators, incinerator operators, trail crews, fire guards, rangers, naturalists, clerks, carpenters, painters, warehousemen, electricians, linemen, survey crews, telephone operators, power plant operators, mechanics, general laborers, and other seasonal help are employed. The main tourist season and period of heaviest operations falls between June 15 and September 15, each year. During this period 90 per cent of the annual park visitation is recorded. All park facilities, both government and concessioner, which include water systems, sewer systems, checking stations, campgrounds, museums, pumping plants, power systems, hotels, lodges, tourist cabins, cafeterias, garages, filling stations, stores, etc., are in full operation seven days per week and in most instances they are manned from 18 to 24 hours per day. This is the period of maximum employment in the park. Following this period, summer seasonal employees and operations are terminated.

Recruitment for a large force of employees of many divergent skills and professions in a short period of time and for a short period of work is essential each year. The entire force of seasonal employees is transient due to the isolated location of the park. There is no resident population in the park from which recruitment may be made and the park is located a long distance from labor markets.

The most serious handicap to cope with during the 1947 fiscal year was the lack of funds the latter part of the 1946 fiscal year. During the 1946 fiscal year the park was operated on a war time budget, sufficient only for the bare minimum of protection and maintenance. During the latter part of the fiscal year supplemental funds were provided for the salaries of the veterans who returned to their regular permanent positions but [illegible]ching was prov[illegible] [illegible] comparable to that [illegible] [illegible]ing ready for the

tremendous influx of vacationists who were to descend on the park. As a result, what labor was available in April and May (the time work is normally begun to get ready for the rush season of June, July and August) would not wait until July 1, when the new fiscal year funds would become available, to accept employment with the National Park Service. Consequently, the park was desperately short of competent seasonal help.

Another serious handicap was the lack of adequate equipment. During the war years the park disposed of approximately 70 pieces of automotive and heavy equipment in accordance with the program of the government that all equipment not needed for war uses be released to assist in the prosecution of the war. No funds were provided during the 1946 fiscal year for equipment replacements which were desperately needed the latter part of the 1946 fiscal year and the early part of the 1947 fiscal year. When the 1947 fiscal year funds were made available it was too late to secure equipment in time for use during the rush season due to depleted market conditions. Neither was it possible to secure the type of Army surplus equipment needed due to the fact that such equipment was reserved for veterans. What equipment was available was old and required an unusual amount of maintenance to keep it in operation. Coupled with the labor shortage, the equipment situation added immeasurably to the difficulty of maintenance, operation and protection problems.

Recognizing the inability to accomplish all protection and maintenance work it was known would be required but could not be accomplished, the keynote was to concentrate on the most obvious items that were or would be hazardous from the standpoint of the public. The roughest stretches of roads were touched up. Platforms, stairways and railings on vista overlooks, used by visitors, were repaired, strengthened and made as safe as possible. Patrolmen were on regular schedules to assist with and prevent accidents. Water and sewer systems were continuously inspected to insure proper purification of these facilities for public safety. Many things had to be neglected but there was a concentration on public safety.

BIRTHS

A daughter was born to Park Ranger and Mrs. Thomas F. Ela at the Mammoth Hospital on July 3, 1946. A son was born to Mr. and Mrs. Bruce Bauer at the Mammoth Hospital on August 23, 1946. A son was born to Maintenanceman and Mrs. Arnold Quist at the Park Hospital in Livingston, Montana on Christmas Day, December 25, 1946. A daughter was born to Assistant Postmaster and Mrs. Alfred A. Bowman at the Park Hospital, Livingston, Montana, January 17, 1947.

MARRIAGES

Marva Wilcox, daughter of U. S. Commissioner and Mrs. T. Paul Wilcox, was married to James Milligan in the Mammoth Chapel on July 19, 1946.

Miss Marvis Dunlap, of Great Falls, Montana, was married to Joseph Hardman of Ashland, New Jersey, in the Mammoth Chapel on August 29, 1946.

Miss Victoria L. Novicki, Personnel Clerk, National Park Service, was married to Mr. Joe Kurtz, Yellowstone postmaster, in the Mammoth Chapel at 12:00 noon February 16, 1947.

Miss Alice Dvarishkis, Clerk Cashier, National Park Service, and Park Ranger Frank T. Hirst were married in Billings, Montana, on May 24, 1947.

DEATHS

Victor Falen, 62, of Gardiner, Montana, died of a heart attack at the Mammoth Hospital on August 21, 1946.

Morton B. Hamilton, 21, of New York City, died as a result of an automobile accident which occurred in the park in August.

Lois Christyne Fenner, 11 month old daughter of Mr. and Mrs. Roger E. Fenner, of Firth, Idaho, died from carbon-monoxide poisoning after being stricken near Madison Junction on September 8, 1946. Death actually occurred in West Yellowstone, Montana, after the child was rushed from the park to the doctor in West Yellowstone.

Miss Mary Fitz, long-time employee of Fryor, Stores, Inc., at Mammoth Hot Springs, died October 4, 1946 at the Park Hospital in Livingston, Montana, after an illness of about a year.

Burton C. Lacombe, Chief Buffalo Keeper in the Yellowstone from October 1916 to July 1930, died in Spokane, Washington, on January 30, 1947.

Frank Reedy, 74, of Dallas, Texas, died in Dallas on April [illegible] 1947. Mr. Reedy was one of the first persons to conduct organized parties in the Yellowstone and gave many lectures in connection with the park. He started bringing tourists into the Yellowstone some thirty years ago.

On May 26, 1947, Dr. George A. Windsor, Park Medical Officer since 1924, died in the Park Hospital in Livingston at the age of 60. Burial was in Mountain View Cemetery in Livingston.

VISITORS

Prominent visitors during July 1946 included the Director of the National Park Service, Newton B. Drury; Regional Director Lawrence C. Merriam; Albert M. Day, Director, Fish and Wildlife Service; Jean Speiser (writer) and Alfred Eisenstaedt (photographer) for Life Magazine; Dr. Berta Lutz, representing Brazilian Park Service; Honorable Fred G. Aandahl, Governor of North Dakota; Mrs. John Levin, nationally known photographer for Northern Pacific Railway; Perry Faulkner, Chief, Veterans Employment Service; Bernard DeVoto, nationally known author and magazine writer; John L. Lewis, President, C. I. O. United Mine Workers and [illegible] leader; Tamara Andreva, newspaper and magazine writer; Harold J. Coolidge, member, Board of Trustees, National Park Association, representing American

Committee for International Wildlife Protection; Senor Valeriano Salas and Senora Salas, Madrid, Spain, Spanish writers; Lafayette Patterson, Special Adviser to the Secretary of Agriculture and former Congressman from Alabama; John C. Hill, Federal Prison Industries; and a party of Czech journalists consisting of Miss Alena Bernaskova, Frantisek Meloun and Karl Zieris. Admiral Nimitz and his party also visited the park in July, which party consisted of Admiral Chester A. Nimitz, Senator Edward V. Robertson, of Wyoming, Rear Admiral Richard E. Byrd, Rear Admiral William G. Tomlinson, Vice Admiral Arthur W. Radford, Commander George C. Bullard, Commander Eugene B. Fluckey and Comm nders Walkinshaw and Clove.

August visitors included Oliver G. Taylor, Superv or of Concessions, National Park Service; Colonel C. T. Wright, Senior Sanitary Engineer, U. S. Public Health Service, Denver; John Sieker, Chief, Division of Recreation and Lands, U. S. Forest Service, Washington, D. C.; George Albert Smith, Mormon Church Leader, Salt Lake City, Utah; E. E. Nelson, Pa nger Traffic Manager, Northern Pacific Railway; Dr. Ralph W. Chaney, University of California, High, nationally known writer and roving editor for Readers Digest; Congressman Jerry Voorhis of California; Mrs. Katherine K. Brown, Vice Chairman, National Republican Committee; Congressman Homer D. Angell of Oregon; Congressman Hal Holmes of Washington; Congressman Harris Ellsworth of Oregon; David Fredenthal, Fortune Magazine artist; Congressman Charles A. Hallack of Indiana; Bradley Smith, special photographer for Holiday Magazine and other magazines and newspapers; Paul Hoefler, Photographer; B. Harold Reese, Chairman, National Republican Committee; Herbert Hoover, former President of the United States; Congressman Walter Norblad of Oregon; Igor Sikorsky, aero engineer; Senator C. Wayland Brooks of Illinois; John Stelle, National Commander of the American Legion; Roscoe Turner, renowned aviator; Struthers Burt, nationally known author and dude rancher; Bruce Gould, Editor-in-Chief, Ladies Home Journal; Frank Jenifer, President, Death Valley Hotel Company and Pacific Borax Company; O. D. ert, Field Representative, American Automobile Association; Senator Ernest McFarland of Arizona; M. M. Goodsill, General Passenger Agent, Northern Pacific Railway; Joan Delacour and Georges Olivier, who were visiting the Yellowstone in the interest of the French Colonial Parks and Wildlife Sanctuaries.

September visitors included Assistant Director Hillory A. Tolson; Chief Landscape Architect Thomas C. Vint; B. W. Matteson, District Engineer, P. R. A., Denver; Julius A. Krug, Secretary of the Interior; Dr. Clarence Cottam, Assistant Director, Fis dlife Service; Lord Inverchapel, Brisish Ambassador to the United States; Colonel Karl Lukas, Czechoslovakia Military and Air Attache and M. H. Haushofer, Czech Embassy, Washington, D. C.; Irving W. Swenson, Reading Clerk, House of Representatives; Edward K. Thompson, Managing Editor, Time Magazine; R. M. Evans, Governor of Board of Governors, Federal Reserve System; Governor John C. Vivian of Colorado; Lawrence Brookwell, Photographer for Tru-Vue, Inc.; Congressman Wesley A. D'Ewart of Montana; and Ansel Adams, Yosemite Park photographer and concessioner.

Mrs. Leon A. Spaulding of East Sebago, Maine, and Mrs. Mark Goodgard and Mrs. Arthur R. Fritz of Rochester, New York, with a chauffeur and maid entered the park on April 25, 1947, and made the trip to Old Faithful. They were the first 1947 visitors to view Old Faithful geyser. Congressman Wesley A. D'Ewart of Montana came into the park on May 24 to attend the Absaroka Conservation Committee meeting. Goran H. Friberg, Editor of a Swedish newspaper, was also a visitor in May. June visitors included A. G. Mezerik, Writer for Nation Magazine; Paul Dumont, National Broadcasting Corporation, Inc.; Count Etienne De Grasset of France; and Vernon Brewster, Assistant Secretary of the National Geographic Society.

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1947 FISCAL YEAR

For ready reference the names of Yellowstone Park employees on duty during the period covered by this report are given below:

Edmund B. Rogers, Superintendent
Fred T. Johnston, Assistant Superintendent
Francis D. LaNoue, Chief Park Ranger (Returned from military furlough February 1, 1947)
Maynard B. Barrows, Chief Park Ranger (Transferred to Region Two Office as Forester January 7, 1947)
Ernest R. I. Anderson, Chief Clerk
Joseph Joffe, Assistant to the Superintendent
Robert R. Robinson, Jr., Master Mechanic
William Wiggins, Master Plumber
Alice H. Quist, Accounting Clerk (Resigned January 15, 1947)
Edwin E. Bird, Accounting Clerk (Transferred to Lake Texamo Recreational Area April 25, 1947)
Leonard L. Johnson, Fiscal Accounting Clerk (Transferred from Glacier National Park May 13, 1947)
Ladd S. Shorey, Purchasing Clerk
William A. Wright, Storekeeper, CAF-6
Alice D. Hirst, Clerk-Cashier (Promoted from Clerk-Stenographer CAF-4 September 10, 1946)
Victoria N. Kurtz, Personnel Clerk
Francis P. Roylance, Property Clerk
Catharine L. Gillum, Accounting Clerk
William G. Proper, Personnel Clerk (Transferred from Region Two November 25, 1946)
Edna Mae Allison, Personnel Clerk (Transferred to Crater Lake National Park February 9, 1947)
Evelyn E. Kumor, Clerk-Stenographer, CAF-4
LeRoy B. VanCott, Clerk-Stenographer, CAF-4
John M. Banfield, Property Clerk, CAF-4
Stanley R. Jackson, Clerk-Stenographer, CAF-4 (Promoted from seasonal Clerk-Stenographer position April 9, 1947)
Wilma S. Haines, Clerk-Stenographer, CAF-4
Agnes E. Welch, Clerk-Stenographer, CAF-4 (Transferred from O.P.A., Casper, Wyoming December 22, 1946)

Dwight E. Richards, Clerk-Stenographer, CAF-4
Gerard Doezie, Clerk-Stenographer, CAF-4
Grant D. Anderson, Warehouseman, CAF-4
Besse M. Carr, Clerk-Stenographer, CAF-3 (Temporary Appointment, April 11, 1947)
Josephine Cudney, Clerk-Stenographer, CAF-3 (Resigned July 19, 1946)
Patricia C. Brisnehan, Clerk-Stenographer, CAF 3 (Resigned October 4, 1946)
Julia K. Seasholtz, Clerk-Stenographer, CAF-3 (Temporary Appointment, April 13, 1947)
Andrew A. Alley, Warehouseman, CAF-3
Elizabeth B. Allan, Telephone Operator, CAF-2
Irene C. Evans, Telephone Operator, CAF-2
Icel Wright, Telephone Operator, CAF-2, WAE
Aleda C. Joffe, Telephone Operator, CAF-2, WAE
A. Irene Minish, Telephone Operator, CAF-2, WAE
Margaret A. Bowman, Telephone Operator, CAF 2, WAE (Resigned September 21, 1946)
Valjher G. Jacobson, Telephone Operator, CAF 2, WAE (Terminated June 12, 1947)
Mary V. Bartee, Telephone Operator, CAF-2, WAE (Excepted Appointment June 13, 1947)
Helen M. Abbie, Telephone Operator, CAF-2, WAE (Excepted Appointment September 13, 1946)
C. Max Bauer, Chief Park Naturalist (Transferred to Director's Office November 15, 1946)
David de L. Condon, Chief Park Naturalist (Promoted from Park Naturalist, P&S-2 November 17, 1946)
Harold J. Brodrick, Park Naturalist, P&S 2 (Transferred to Petrified Forest National Monument August 13, 1947)
W. Verde Watson, Park Naturalist, P&S-2 (Promoted from Park Ranger January 12, 1947)
Aubrey L. Haines, Engineer (Civil) (Promoted from Park Ranger November 17, 1946)
Walter H. Kittams, Biologist (Transferred from Fish & Wildlife Service, Billings, Montana June 16, 1947)
Philip H. Wohlbrandt, Engineer (Civil) - Chief Park Engineer
W. Leon Evans, Assistant Chief Park Ranger
Albert E. Elliott, Assistant Chief Park Ranger
William S. Chapman, Assistant Chief Park Ranger
Curtis K. Skinner, Assistant Chief Park Ranger
Deate T. White, Road Foreman
Lloyd W. Seasholtz, Chief Electrician
Frank H. Anderson, District Park Ranger
John Bauman, District Park Ranger
Wayne B. Alcorn, District Park Ranger
Lee L. Coleman, District Park Ranger
Arthur Jacobson, District Park Ranger

William A. Nyquist, District Park Ranger (Promoted from Park Ranger January 26, 1947)
John W. Jay, District Park Ranger
Earl M. Semingsen, District Park Ranger
Rudolf L. Grimm, District Park Ranger
Walter H. Gammill, District Park Ranger
Herman R. Biastoch, Plumber Foreman
George McMullin, Electrician Foreman
Roger H. Miller, Automotive Mechanic Foreman
Thomas M. Thompson, Painter Foreman
Wyman P. Benson, Plumber Foreman
Thomas A. Bowman, Carpenter Foreman
William C. Mardis, Carpenter
Elmer W. Ames, Automotive Mechanic (Resigned May 2, 1947)
Almon E. Dewing, Automotive Mechanic
Howard S. Kocher, Automotive Mechanic
Earl F. Hochstrasser, Blacksmith
William A. Olson, Painter
Hugh B. Ebert, Park Ranger (Transferred to Rocky Mountain National Park April 13, 1947)
Paul V. Wykert, Park Ranger (Temporary Appointment June 5, 1947)
Joe J. Way, Park Ranger
Everette L. Arnold, Park Ranger
Lloyd J. Astle, Park Ranger (Transferred to Railway Mail Service, September 16, 1946)
Michael Sedar, Park Ranger (Temporary Appointment November 1, 1946 - Terminated December 19, 1946)
Boris T. Vladimiroff, Park Ranger (Temporary Appointment April 8, 1947)
Anthony E. Stark, Park Ranger (Transferred to Blue Ridge Parkway May 15, 1947)
DeLyle R. Stevens, Park Ranger
Thomas F. Ela, Park Ranger
Harry V. Reynolds, Jr., Park Ranger (Temporary Appointment April 7, 1947)
Harvey B. Reynolds, Park Ranger
Frank F. [illegible], Park Ranger
Merritt S. Johnston, Park Ranger
Dan S. Nelson, Park Ranger (Temporary Appointment April 16, 1947)
Frank T. Hirst, Park Ranger
Ruben O. Hart, Park Ranger
Rudolph F. Lueck, Park Ranger
John G. Lewis, Park Ranger (Transferred to Bryce Canyon National Park October 31, 1946)
Dennis E. Hess, Park Ranger (Transferred from Grazing Service January 15, 1947)
Edward J. Link, Automotive Mechanic (Resigned August 23, 1946)
Raymond T. O'Donnell, Automotive Mechanic (Temporary Appointment April 20, 1947)
Anthony B. Nelson, Automotive Mechanic (Disability Retirement September 30, 1946)

Lester C. Abbie, Automotive Mechanic (Converted from Warehouseman-Truck Driver April 20, 1947)
Eri A. Allan, Powerhouse Operator
James M. Bartee, Electrician
Charles M. Rector, Powerhouse Operator
Walter W. Stebbins, Operator, General
Elmer F. Armstrong, Operator, General
Fred J. Nissen, Automotive Mechanic
J. Stanley Fillmore, Warehouseman-Truck Driver
Leonard A. Selle, Janitor
Ralph Reed, Fireman (Low Pressure)
William L. England, Fireman (Low Pressure)
Ludwik Pilch, Janitor
Charles R. Manning, Truck Driver, H. D. (Reassigned from seasonal position as Truck Driver December 1, 1946)
David W. Pierson, Buffalo Keeper (Promoted from Buffalo Herder, December 15, 1946)
Ervin F. Coy, Guard (Promoted from Watchman-Janitor April 20, 1947)
Arnold G. Quist, Plumber (Promoted from Maintenanceman July 14, 1947)
James C. Kimberlin, Packer Foreman

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