

THE CHANGING GEOGRAPHIES OF CAMPGROUND USE

IN

YELLOWSTONE NATIONAL PARK

by

JOHN CARTER REED

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THE CHANGING GEOGRAPHIES OF CAMPGROUND  
USE IN YELLOWSTONE NATIONAL PARK

CHAPTER I

INTRODUCTION

The region comprising Yellowstone National Park has held an attraction for man for almost 150 years. Before the creation of the park in 1872, trappers and explorers had been coming to the headwaters of the Yellowstone in increasingly greater numbers. No less than four explorations had been conducted into this region between 1860 and 1872.<sup>1</sup> Interest in the Yellowstone country phenomena increased considerably after the return of the Langford and Hayden explorations of 1870 and 1871.

During the first year of national park status in 1872, approximately 1,000 visitors entered Yellowstone National Park to view its natural phenomena. During the years following 1872, Yellowstone's visitation increased steadily and in 1900, 8,928 people passed through the park's entrances. The year 1915 marked the first year that private cars were allowed within the park boundaries. The advent of the auto was to make a considerable change in yearly visitation numbers as time passed. An example of this can be seen in the official park records of 1920, when 79,777 people entered Yellowstone Park with almost 41,000 of these coming in private autos.<sup>2</sup> During the years following 1920, the park's popularity continued to increase and other than slight drops in visitation following the 1929 depression and during World War II, yearly figures readily reflect this increase. (See Figure I, pg 2)

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<sup>1</sup>Marie M Augsburg, Yellowstone National Park (Middletown, Ohio: The Naegle-Auer Printing Co., 1948) p 44

<sup>2</sup>Horace E. Albright, Annual Superintendent Report of the Yellowstone National Park for the year 1919, to the Secretary of the Interior (Washington D.C., U.S. Government Printing Office, 1920) p 22

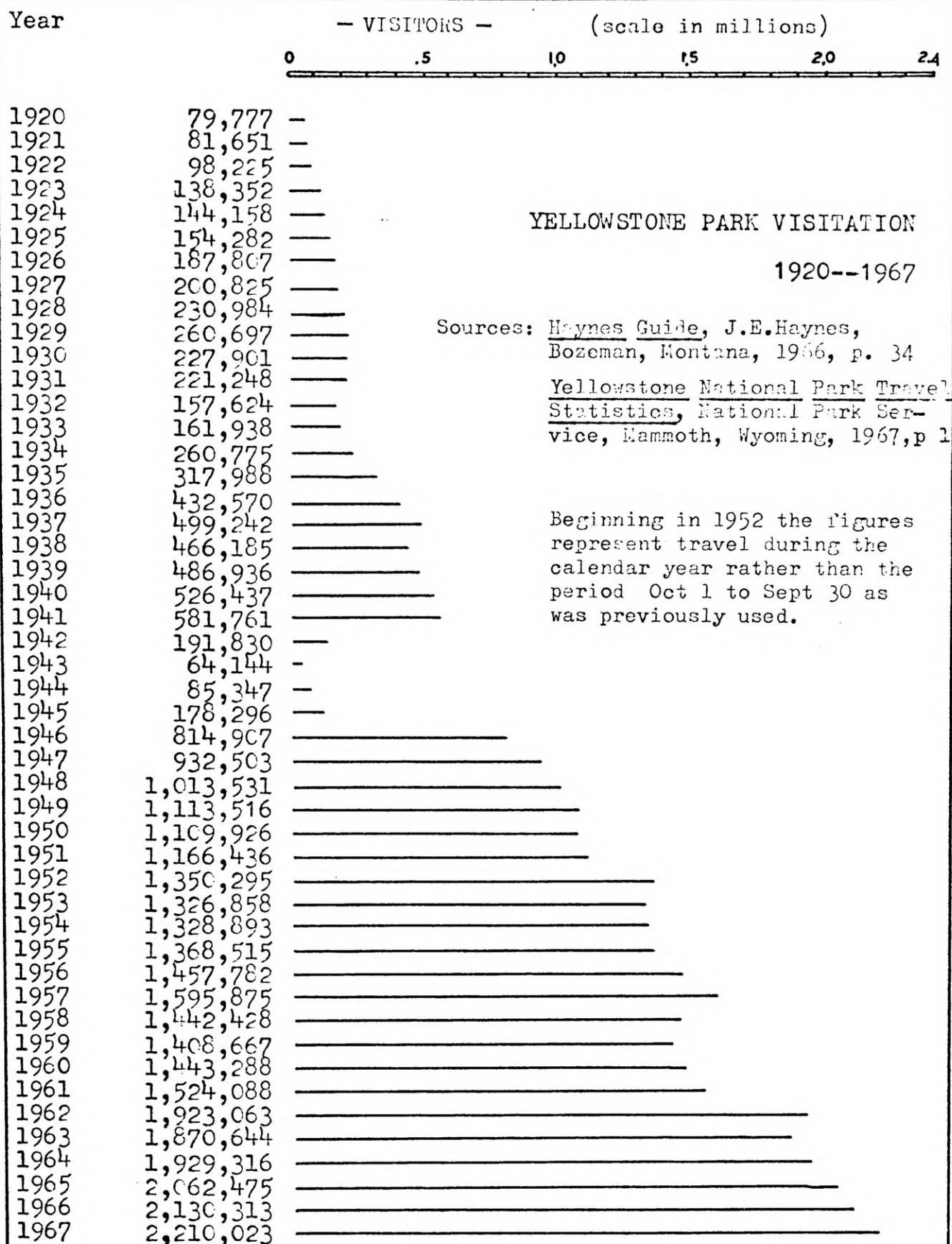


FIGURE 1

Numerous problems were associated with the park's rise in popularity. One of these problems was the constantly decreasing space available for camping. Prior to 1956, it became apparent not only to park service personnel, but to visitors as well, that camping space within Yellowstone National Park had become increasingly more difficult to obtain. With much of the country's population enjoying longer vacation periods, higher incomes and greater mobility, there was reason to believe that the problem of inadequate camping space would become even more acute in the years to follow.

As a result of the increasing visitor demand for camping facilities, the National Park Service was faced with the problem of formulating a recreational policy in Yellowstone National Park which would satisfy the visitor needs and still maintain the conservation ideals set forth in 1916. These ideals established by a Congressional Act states:

"to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

With this mandate in mind, an attempt was made by the National Park Service towards a partial solution by initiating the Mission 66 program. One of the purposes of the program was to modernize and increase visitor facilities in our national landmarks. Campgrounds received a great deal of attention, both with the construction of new areas, and the expansion

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<sup>3</sup>Hillory A. Tolson, Laws Relating to the National Park Service, the National Parks and Monuments, United States Code(39 stat. 535)(Washington D.C., U.S. Government Printing Office, 1933) pp 9- 10

of existing camps.<sup>4</sup> It became quite apparent, however, that even before the completion of the Mission 66 program that there was not going to be adequate camping facilities to meet the ever increasing demand of the visiting public.

'Notwithstanding these and subsequent accomplishments, the rise in number of visitors has accelerated so rapidly that construction and renovation of physical facilities has not yet caught up. Indeed, it may not even be 'keeping up' with the increase in visitation.'<sup>5</sup>

The Mission 66 program which had begun in 1956, was scheduled to terminated in 1966, on the 50th anniversary of the National Park Service. As it came to a close in Yellowstone Park, many facilities which were the result of the program, as well as those previously in existence were being used to their utmost. Several of the major campgrounds, for example, were reaching visitor capacity by one and two p.m. each day.<sup>6</sup>

### Review of Literature

The outdoor Recreation Review Commission has published a series of thirty-three reports dealing with mass recreation on a nationwide basis. Several of these reports examine the problem of overcrowded facilities in national parks. Report number thirteen states in part:

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<sup>4</sup>C. Frank Brockman, Recreational Use of Wild Lands (New York: McGraw-Hill Book Company, Inc., 1959) p 133

<sup>5</sup>The Frederic Burk Foundation for Education, Federal Agencies and Outdoor Recreation (Report to the Outdoor Recreation Resources Review Commission #13, Washington D.C.: Frederic Burk Foundation for Education, California State College, San Francisco, California, 1962) p. 31

<sup>6</sup>Daily Campground Report, A Report Prepared by the National Park Service Personnel, Chief Ranger Office, (Yellowstone National Park, Mammoth, Wyoming, 1965)

If the population continues to grow as it has and if an increasing porportion of this population desires outdoor recreation of the kind offered by the national parks, there may be no real solution to the problem except through the discouragement and frustration caused by overcrowded conditions and long waiting lines. If such conditions become common enough, the demand will fall off.<sup>7</sup>

The increased use of the automobile and its adaptability to use in a recreational environment has been one of the prime reasons why recreational facilities such as camping have become overcrowded. In the Outdoor Recreation Resources Review Commission Report Number 23, it is stated that;

The adaptability of auto's to recreational travel and camping has played an important role in the rapid rise in these activities. This adaptability has, for example, contributed to the fast growth of visits to and camping in national parks. The park service's estimates of "camper-days", a measure of outdoor camping, for example, rose by 8%, from 1959 to 1960. This was much faster than the growth in income or population. It is reported that campgrounds were the only vacation facilities in the nation filled close to capacity during the summer of 1961<sup>8</sup>

Recreation magazine, which is concerned mainly with organized camping and campground layouts, contained the following statement in March, 1964:

Today's mushrooming population has one acre of land which it calls its own per person. Scientists predict that by the year 2,000, there will be one square foot of land for each human throughout the world. Our population is growing at a fantastic rate; this makes recreation more

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<sup>7</sup>Federal Agencies and Outdoor Recreation, op. cit., pp 32

<sup>8</sup>The Frederic Burk Foundation for Education, Projections to the Years 1976 and 2000: Economic Growth, Population, Labor Force and Leisure and Transportation (Report to the Outdoor Recreation Resources Review Commission #23, Washington D.C.: Frederic Burk Foundation for Education California State College, San Francisco, California, 1962) p. 99



and more important. It makes camping space a direly needed commodity. At the same time, camping space will dwindle away, unless we do something about it and soon.<sup>9</sup>

A review of several annual reports for the park's earlier period reveal, for example, that overcrowded camping space in Yellowstone National Park isn't necessarily a new situation. In the superintendent's annual report of 1919, it was stated concerning the government operated auto camps;

At times during the summer these camps were overcrowded and before the opening of next season they must be expanded and new areas opened for their use.<sup>10</sup>

The problem of scenic preservation and maximum visitor usage has been one of the major importance in Yellowstone National Park. This is especially true in the last few years with the great increase in visitors and the corresponding decrease in recreational space. This problem has been examined by several noted authors, one of whom is C. Frank Brockman, a former park service employee and forestry instructor. Mr. Brockman discusses the dilemma faced by the park service today, that of maximum use versus maximum preservation. He states;

How, for instance, do National Park Service areas relate to the concept "for the benefit and enjoyment of the people?" Are there not many interests and activities which contribute to such laudable objectives which may not be appropriate in areas of the National Park System? Further, there is the concept of a dual principle, use of National Park Service areas by present generations coupled with unimpaired preservation of their values and interests for the future. Are not these two objectives at variance with one another? Can anything be used and at the same time preserved in a completely unimpaired state?"<sup>11</sup>

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<sup>9</sup>Dana E. Harlow, "Call to Action," Recreation, Vol, 57, No.3 March, 1964, p. 109

<sup>10</sup>Albright, Op cit., p 22

<sup>11</sup>Brockman, Op cit., p. 133

### Statement of the Problem

This study will attempt to examine alternatives toward the development of a campground policy for use in Yellowstone National Park, especially in light of the problem of maximum preservation versus maximum use.

### Methodology

Four primary sources of information were utilized in this study in formulating alternatives towards development of campground policy for use in Yellowstone National Park. The first was historical literature such as the Army records pertaining to their administration in the park between 1886 to 1916. Narratives of early park visitors and official records of the early Civil Administration in Yellowstone National Park were, also, utilized. This material is contained in the National Park Service archives and library located at Mammoth Hot Springs, Yellowstone National Park, Wyoming and the Montana State University Library, Bozeman, Montana. The second source of information was recent official records of Park Administration and Operations which are contained in the Administration and Resource Division, Mammoth Hot Springs, Wyoming and the library at Montana State University. The third source of information was derived from literature, both current and past, which deal with outdoor recreation. The fourth source was obtained through mapping and personal interviews with National Park Service personnel stationed at Mammoth Hot Springs, Yellowstone National Park, Wyoming.



Organization of Remainder of the Paper

The evolution of camping policies in Yellowstone National Park will be presented in Chapter II. Chapter III will present the geographical orientation and description of the major campgrounds within Yellowstone National Park. Chapter IV will examine possible campground policies, followed by conclusions in Chapter V.

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## CHAPTER II

### HISTORY AND EVOLUTION OF CAMPING POLICIES IN YELLOWSTONE NATIONAL PARK, WYOMING

During the years preceeding 1872, the vast region including the area which was later to become Yellowstone National Park, was visited by a wide variety of individuals, including fur trappers, hunters, gold seekers, missionaries and explorers.

In March of 1872, Yellowstone National Park was created and put under the administration of the U.S. Department of the Interior.<sup>1</sup> During the first fourteen years of its existence, this 2500 square mile area was administered by civil superintendents appointed by the Secretary of the Interior. The first of these superintendents was N.P. Langford, who had originally accompanied an expedition into this region in August of 1870.<sup>2</sup>

During Mr. Langford's term, there were no restrictions pertaining to camping within the park boundaries and visitors could camp anywhere along the trails and paths which connected the many points of interest. Langford was concerned about the related subject of campfires. In his annual report of 1872, to the Secretary of the Interior;

It is especially recommended that a law be passed, punishing by fine and imprisonment all persons who leave any fire they may have made for convenience, or otherwise, inextinguished. Nearly all extensive conflagrations of timber in the mountains may be directly traced to negligence in extinguishing campfires. Nothing less than a stringent law punishing negligence and carelessness can save the extensive pine timber fields of the Park from destruction.<sup>3</sup>

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<sup>1</sup>Tolson, op cit., pp 26-27

<sup>2</sup>Jack Ellis Haynes, Haynes Guide to Yellowstone National Park (Bozeman, Montana, Haynes Studio, 1962) pp33

<sup>3</sup>N.P. Langford, A Report of the Superintendent of the Yellowstone National Park for the Year 1872, to the Secretary of the Interior, (1873) op. cit., pp4

A notation in the diary of Samuel L. Holliday while camped at Old Faithful during his trip through Yellowstone National Park in 1883, is a graphic illustration of this practice:

I am now sitting where I can see campfires in every direction except to my back.<sup>4</sup>

Additional references to campfire problems are found in the superintendents' annual reports between 1872 and 1886. In 1879, Superintendent D.W. Morris stated in his annual report that:

Careless use of fire also destroyed vast groves of timber, seriously increasing the necessity and adding to the cost of constructing roads and bridle paths.<sup>5</sup>

In 1885, Superintendent D.W. Wear stated;

One of the most difficult things that I have had to contend with was the prevention of fires in the park, of which, I am happy to say up to this time none have occurred worth mentioning, though some sixty odd were put out by the assistants. A very stringent law should be enacted against the spread of fires or leaving campfires without extinguishing them completely.<sup>6</sup>

In August of 1886, the park witnessed a change from civilian to military administration. This had become necessary due to the increased depredations committed on the park's scenic attractions and the inability of the civil authorities to cope with the problem.<sup>7</sup>

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<sup>4</sup>Park County News, Holliday Diary of 1883 Trip to Yellowstone National Park (Livingston, Montana, June 17th, 1966) pg 6, cl. 1-4

<sup>5</sup>P.W. Morris, Annual Report of the Superintendent of the Yellowstone National Park to the Secretary of the Interior 1877 op.cit 1878 p 842

<sup>6</sup>D.W. Wear, Annual Report of the Superintendent of the Yellowstone National Park to the Secretary of the Interior 1885 op. cit., 1886, p 875

<sup>7</sup>Aubrey . Haines, "History of Yellowstone National Park", A Manual of General Information on Yellowstone National Park, (Yellowstone National Park, Wyoming, 1903) p 123

Captain Moses Harris, the first military superintendent, soon became aware of one of the problems which had confronted his civilian predecessors; that of uncontrolled camping. In his annual superintendent's report of 1887, he noted one of the results of unrestricted camping within the park:

There are now scattered throughout the park, many abandoned and unsightly cabins and shacks and the debris of a hundred camps. I had hoped to be able to clean up and remove much of this old material but the press of other duties had forbidden the employment of soldiers for this work.<sup>8</sup>

In 1889, Captain F.A. Boutelle, First Cavalry, became the superintendent. In his 1889 annual report to the Secretary of the Interior, it was noted, perhaps for the first time, the necessity for having regular campgrounds. Captain Boutelle stated that;

If the wonderland is considered worth preservation, a liberal appropriation should at once be made to be used in clearing away the down timber for 100 yards on each side of the roads and trails. Many parties pass through the park, camping and many of the fires which occur are traced to them. It may become necessary to establish regular camping grounds at intervals of a few miles.<sup>9</sup>

In the following year, Captain Boutelle again noted the need for campgrounds in his annual report of 1890, when he stated;

Your authority for the establishment of regular camping grounds where all campfires can be examined as soon as abandoned will, I think, do much to lessen the number of fires.<sup>10</sup>

Nothing came of Captain Boutelle's suggestions, however and the next five years saw no appreciable change in the practice of

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<sup>8</sup> Moses Harris, Annual Report of the Superintendent of the Yellowstone National Park for the Year 1887 to the Secretary of the Interior, op. cit., 1888, p. 1303

<sup>9</sup> Capt. F.A. Boutelle, Annual Superintendent Report of the Yellowstone National Park for the Year 1890 to the Secretary of the Interior, op. cit., 1891, p 147

<sup>10</sup> Ibid, 1890, p5

unrestricted camping in Yellowstone National Park. In 1896, the government issued a license to a private enterprise to establish what were probably the first regulated permanent camps within the park boundaries. Captain George S. Anderson, Sixth Cavalry noted in his 1896 superintendent's annual report that;

A license has been granted Mr. W.W. Wylie of Bozeman, Montana to conduct parties through the park and establish four permanent camps.<sup>11</sup>

These camps were located at Apollinares Springs, the Upper Geyser Basin, Yellowstone Lake and Grand Canyon.

The superintendent's annual report of 1897 repeated the previous years reports concerning fires and careless campers, however this was the first year that references were made concerning visitor demand in certain camping areas and definite restrictions on camping. Colonel S.B. M. Young, Third Cavalry noted that;

It was impossible with such great fields of camps, always to fix the responsibility of unclean camps and unextinguished fires on the proper parties. In order to prevent undue monopoly of the choicest camping places, parties were not permitted to camp longer than two days in anyone place and not permitted to camp at all between Gardiner and Mammoth.<sup>12</sup>

He noted under the title of Instruction to Persons traveling through Yellowstone National Park, a rule that had been enacted which stated;

No camp will be made at a less distance than one hundred feet from any traveled road. Campgrounds must be thoroughly cleaned before they are abandoned.<sup>13</sup>

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<sup>11</sup>Capt. George S. Anderson, Annual Superintendent Report of the Yellowstone National Park for the Year 1896 to the Secretary of the Interior, op. cit., 1897 p 5

<sup>12</sup>Col. S.B.M. Young, Annual Superintendent Report of the Yellowstone National Park for the Year 1897 to Secretary of the Interior, op. cit., p 17

<sup>13</sup>Young, Ibid

The next fourteen years in Yellowstone, from 1897 to 1915, saw no appreciable change in camping and campground policy. Individuals were still required to camp at least 100 feet from any traveled road and to clean their campsites upon leaving. In the 1908 superintendent's annual report, however, it was noted that although there were no mandatory camping areas, many camping parties were using the sites of previous parties during the season.<sup>14</sup> This use of camping areas had reached a sufficient level by 1912, to warrant the use of army sanitary crews to police and clean the camps and toilets on a regular basis. The problem of camp sanitation was now becoming quite apparent and was noted in the annual report of 1913.

The question of sanitation and stream pollution is a very important one, which must be met by some general plan in the near future, as park travel increases.<sup>15</sup>

The following year, 1914, saw an increase in campground useage, with the corresponding increase in maintenance and upkeep. In the superintendent's annual report for 1914, Lt. Col. Brett, First Cavalry, mentioned perhaps for the first time, the existence of public campgrounds, as such, when he noted;

Two men with a team are kept at work through the tourist season, keeping the public camping grounds in good order and caring for the public earth closets maintained by the department.<sup>16</sup>

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<sup>14</sup>Young, op. cit., 1908 p 18

<sup>15</sup>Lt. Col Lloyd M. Brett, Annual Superintendent Report of the Yellowstone National Park for the Year 1913 to the Secretary of the Interior, op cit., p. 14

<sup>16</sup>Brett, Ibid, 1914, p 18



August 1, 1915, marked the beginning of a period of visitation growth and facility expansion in Yellowstone Park that is continuing at the present time. For the first time in the history of Yellowstone National Park, private auto's were allowed to travel into the inner areas, hitherto restricted to horse and wagon traffic. With the increase in visitor traffic, came an increasing demand for the expansion of camping facilities;

Since the admission of automobiles on August first, a demand has been created for special sanitary camps for parties traveling in private auto's and carrying their own camping equipment. The regular camps are selected with a view to provide grazing for horses, which also need to be kept at some distance from hotels and permanent camps. A separate set of camps, about three in number, located at Mammoth Hot Springs, the Upper Geyser Basin, and Grand Canyon, not far from the points of interest and provided with a few conveniences would be appreciated by those who travel in their own automobiles, and as the automobile, and as the automobile tickets of passage for which a charge is made by the department, are a source of considerable revenue, it seems that an expense for this purpose is warranted.<sup>17</sup>

In 1916, the campgrounds mentioned in the annual report of the previous year were constructed and put into immediate use. They were quite successful and were almost always filled. The 1916 report further stated;

Special sanitary camps for parties traveling in private automobiles and carrying their own camp equipment, located at Mammoth Hot Springs, Upper Geyser Basin, Grand Canyon and Lake outlet, were constructed in the early part of the summer. These facilities were appreciated and should be improved upon.<sup>18</sup>

In October of 1916, the administration of Yellowstone National Park was

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<sup>17</sup>Brett, Ibid, 1915, p 24

<sup>18</sup>Brett, Ibid, 1916, p 42

transferred from the United States Army to the National Park Service, a newly created agency of the Department of the Interior.<sup>19</sup> The change was accomplished with only minor difficulties and many military initiated projects, such as the construction of sanitary public auto campgrounds, continued at a steady pace. Earlier primitive facilities were continually being replaced as indicated by the following statement contained in the 1917 report to the Secretary of the Interior:

In each of these camps, there is a spacious structure for the shelter of cars, plenty of water for cooking and drinking, grates to be used for cooking and toilet facilities. The camps are policed by park employees and a small truck is used for carrying away garbage and keeping the camping grounds strictly sanitary. This system of free auto camps will be extended in the park as the demand for them increases.<sup>20</sup>

By the year 1919, the demand for free auto camps had increased and acting Superintendent Horace M. Albright noted in his annual report of that year:

Of the grand total of 62,261 visitors to the park, approximately two-thirds came here in their private auto's. Of these, probably sixty per-cent brought with them their own camp equipment and in most cases, used our special campgrounds. At times during the summer, these campgrounds were overcrowded and before the opening of the next season, they must be expanded and new areas's opened for their use. The popularity of these camps fully warrents their development on a large scale.<sup>21</sup>

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<sup>19</sup>Haines, Op cit.,

<sup>20</sup>Chester A. Lindsley, Annual Superintendent Report of the Yellowstone National Park for the Year 1917, to the Secretary of the Interior, Op cit., 1918, p 24

<sup>21</sup>Horace M. Albright, Annual Superintendent Report of the Yellowstone National Park for the Year 1919 to the Secretary of the Interior, Op cit., 1920, p 100

Superintendent Albright, also, noted in the same report under his recommendations that:

There is a crying need for the immediate construction of several large new auto campgrounds, for the use of motorists who bring their own camping outfits to the park. Next year, the camps at Upper Geyser Basin, West Thumb, Lake Outlet, Grand Canyon, Tower Falls and Norris Geyser Basin should be improved by the extension of the water system and much attention be given to the sanitation of the camps. This free auto camp system should be progressively expanded and improved year by year and as soon as possible, not less than thirty major camps should be made available. <sup>22</sup>

During the latter part of 1919, Superintendent Albright received the necessary funds and assistance to progress with the expansion of campgrounds and subsequently reported the progress in the 1920 annual report to the Secretary of the Interior:

The development of a system of much needed camps for the use of the thousands of tourists driving their own automobiles through the park, was begun during this past season and excellent progress was made. On June fourth, we began the work at Canyon and by the end of the month, it was nearly completed. This camp was filled with tourists as soon as it was opened. No work has been accomplished for years that is of more importance to the public than the improvements of these many camps. The number of tourists who make their own camps has become so great, that the main camps at Mammoth, Upper Geyser Basin, Lake Outlet and Grand Canyon are crowded throughout the season. <sup>23</sup>

Superintendent Albright, also, recommended in his 1920 annual report that:

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<sup>22</sup> Albright, Ibid, 1919, p 100

<sup>23</sup> Albright, Ibid, 1920 p 54

More attention should be given to the private motorists. Additional public campgrounds should be developed at once. Those should be equipped with water systems, comfort stations, fire plugs, and an adequate means of garbage disposal. Camps built for this year at Mammoth Hot Springs, Upper Geyser Basin and Grand Canyon should be further extended and improved and new camps built at the outlet of Lake Yellowstone, the West Thumb, Tower Falls, Norris Geyser Basin and the Eastern Entrance and at other points where campers congregate in large numbers. Than smaller camps should be built from time to time as needed.<sup>24</sup>

During the next three years, following the construction programs of 1920, Superintendent Albright followed through with his plans for campground construction and expansion. He reported in his 1923 annual report to the Secretary of the Interior that:

There are nine highly developed auto camps and forty auto camps of which development as started.<sup>25</sup>

During the next six years, the National Park Service continued to modernize the auto camps located at the major interest points within the park. (See Figure 2, p 18) Existing plumbing and sewage systems were expanded and new facilities were added. Showers were installed in some areas and tables were constructed for the additional campsites.

In the annual report of 1929, Superintendent Toll reported that:

We have concentrated this year in the extension of the Fishing Bridge, West Thumb and Old Faithful auto camps, which included building fireplaces, tables and bear proof garbage stands. No great increase in area was made to any auto camp, but additional campsites were provided in the present areas, and wider roads were necessary to care for the increased travel.<sup>26</sup>

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<sup>24</sup>Albright, Ibid, 1920, pg 144

<sup>25</sup>Albright, Ibid, 1923, pg 24

<sup>26</sup>Roger W. Toll, Annual Superintendent Report of the Yellowstone National Park for the Year 1929 to the Secretary of the Interior, Op cit., p 42



FIGURE 11

Major Park Auto Camps (1926-1930) △.

By 1930, all of the major interest or scenic areas had developed auto campgrounds. The effort now was to attempt to keep pace with the demands placed on them by the visitors. Superintendent Toll reported in 1931, that a total of 40,288 cars and 127,713 campers utilized the designated developed campgrounds in the park during the 1931 season. The campground at Fishing Bridge received the greatest use. There were, also, 7,900 visitors in 2,500 cars using undeveloped campsites throughout the park.<sup>27</sup> The auto camps received a slight breathing spell for several years following the 1929 depression, when visitation was down. (See Figure 1, p 2) This soon changed, however, in 1934, when a record number of visitors entered Yellowstone. That year, 260,775 came to the park and subsequently, the auto campgrounds were taxed to the limit.

In summary, it can be stated that throughout the 1920's and early 1930's, the general attitude toward campground policy exhibited by the National Park Service and Yellowstone Park administration toward campgrounds was one of continued expansion and development, in order to meet the public demand. During the next twenty years, however, there were no major campground developments in Yellowstone National Park. The existing facilities were maintained, modernized and in some cases, slightly expanded. This was a period of time in which the campgrounds obtained adequate water systems, additional fire pits, picnic tables

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<sup>27</sup>Toll, Ibid, 1931, p 4



and limited landscaping.

The year 1942 marked the beginning of a decline in visitation, which was to last until the cessation of World War II. During this period, the campgrounds received a brief rest and an opportunity to recuperate. This would have been a most opportune time in which the National Park Service could have conducted much needed expansion and repairs. The administration was hampered, however, by an acute shortage of money and manpower. Consequently, only short term spot repairs were accomplished. With the end of World War II, Yellowstone Park experienced a visitation influx unprecedented in its history. Over 800,000 people crowded into the park during the 1946 season and the campgrounds were filled to over twice their capacity.

Superintendent Rogers in his annual report of 1947 stated:

During the war years when travel through the park was extremely light, many of the campgrounds received a breathing spell and had some chance for vegetative recovery. Because of the extremely heavy travel during the 1946 season, campground usage was considerably in excess of any previous year and suffered from over use.<sup>28</sup>

The 1947 season saw the acute problem of over crowding becoming ever more serious. Under the impact of increasing visitation year after year, the Yellowstone Park administration policy toward campgrounds was beginning to evolve into a more conservative outlook. This is apparent in the annual report of 1948.

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<sup>28</sup> Edmund B. Rogers, Annual Superintendent Report of the Yellowstone National Park for the Year 1947 to the Secretary of the Interior, Cp cit., 1948, p 10



On July 5th, 1947, Superintendent Rogers appointed a campground committee to study planning, trend of use, preservation of vegetation and administration and control of campground populations. The committee met on July 28th to discuss the advisability of reducing the length of stay in campgrounds to ten days in any one camp so as to relieve the congestion in them. Also, a decided trend towards proposing the greater use of facilities outside the park rather than continue their expansion within the park was expressed. There was, also, the discussion of the proposal to work towards a program which would place all of the overnight facilities outside the park, including camping.<sup>29</sup>

Although many of the ideas and concepts expressed by the campground committee had considerable merit, no immediate action resulted from their study.

The 1948 season witnessed the same overcrowded conditions of 1947, which perhaps increased severity. Campground conditions were such that Superintendent Rogers noted in his annual report of 1949 that:

The total capacity of the campgrounds in the park is 766 cars or approximately 2,527 people. Camper use per night during the main part of the 1948 season was 1,061 cars or 3,502 people. This amounts to 40 per-cent overuse. In other words, where there was room for 10 people, 14 crowded in.<sup>30</sup>

The years immediately following 1948 saw the steady rise in visitation to Yellowstone National Park, with no appreciable change in campground policy. Finally in desperation, the National Park Service which had been experiencing overcrowded conditions every-

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<sup>29</sup>Rogers, Ibid

<sup>30</sup>Rogers, Ibid, 1949, p 18

where in the system, initiated the Mission 66 program. The main objectives of this program were to modernize and expand existing facilities, and build new facilities were necessary.<sup>31</sup>

This has been the latest major development program carried out in Yellowstone National Park. Out of this expansion came two new campgrounds located at Norris and Canyon replacing the old ones, an expansion of the campground at Madison Junction and two completely new campgrounds at Grant Village and Bridge Bay. It should be mentioned here, that almost as soon as these facilities were opened to the public, they were filled to capacity.

As of the Spring of 1967, Grant Village hadn't yet been completed. The visitation trend as is illustrated in (Figure 1, pg 2) has continued to climb for the last seven years and there is every reason to believe that it will continue to do so. The National Park Service has realized that it is a physical impossibility to provide adequate camping space in proportion to the numbers of visitors and still provide maximum protection and preservation of the natural environment. One of the primary goals of the National Park Service in Yellowstone National Park at the present time is to provide what many service officials term, "a quality experience" for as many individuals as can participate. This does not mean turning Yellowstone National Park into a vast campground. It does mean that the National Park Service will try to supply to the

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<sup>31</sup>Brockman, Op Cit., pg 138

visiting public a number of facilities which are located and integrated into the natural landscape, so as not to detract from the scenic value of the area.

This is the essence of the Organic Act of 1916 which in establishing the National Park Service directed it to:

Conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.<sup>32</sup>

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<sup>32</sup>Tolson, Op cit.

### CHAPTER III

#### MAJOR CAMPGROUNDS OF YELLOWSTONE NATIONAL PARK

##### Physical Description of Yellowstone National Park

Yellowstone National Park is a federal reservation comprising approximately 3,471.51 square miles which is situated in the western continental United States. The park's dimensions are slightly over fifty miles on an east-west axis and slightly over sixty miles on a north-south axis. Yellowstone's 2,221,766 acres are situated between  $110^{\circ}$  and  $111^{\circ}5'$ , west longitude and between  $44^{\circ}08'$  and  $45^{\circ}6'$  north latitude. The park is bordered by three states, with Montana on the northern and part of the western side, Idaho on the remaining section of the western border and Wyoming along the eastern side.

From a topographical standpoint, Yellowstone Park is not mountainous country but rather heavily forested volcanic plateau. The park has an average altitude of around 8,000 feet. The volcanic plateau is bounded on the east by the Absaroka Mountains, on the northeast by the Snowy Range, on the northwest by the Gallatin Range, on the west by the Snake River high plains and on the south by the Teton Mountains and lesser mountains of northwestern Wyoming. Except for the Snake River plains on the west which are about 1,000 feet lower than the Yellowstone Plateau, the Volcanic Plateau is surrounded by mountainous country.<sup>1</sup>

##### Physical Description of the Major Campgrounds Within Yellowstone National Park

There are nine major campgrounds located in Yellowstone National Park

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<sup>1</sup>William D. Thornburn, Regional Geomorphology of the U.S., (New York City, N.Y., John Wiley and sons Inc., 1965) p 372

located in the following areas; Mammoth Hot Springs, Tower Falls, Canyon Village, Fishing Bridge, Bridge Bay, Grant Village, Old Faithful, Madison and Norris. (See Figure III) There are seventeen small camping areas, in addition to the major campgrounds, but for the purpose of this study, only the nine major campgrounds associated with commercial areas will be discussed in detail.

Mammoth Hot Springs: The Mammoth Hot Springs complex is located in the northwest corner of Yellowstone National Park. It is the northern most point of interest on the Grand loop Road and is approximately 5.3 miles from the north entrance. The area's major attraction is the complex of hydrothermal terraces located approximately .5 miles southwest of the Mammoth visitor center. Mammoth is the administrative headquarters of the National Park Service in Yellowstone National Park.<sup>2</sup>

Mammoth Village was the location of the first settlement within the park boundaries. Between the years 1872 and 1886, it served as the residency for the civilian superintendents. In 1886, Yellowstone Park was placed under the supervision of the U.S. Army. Camp Sheridan was constructed that same year and was the administration center until it was replaced by Fort Yellowstone in 1840. Fort Yellowstone operated as a U.S. Army cavalry post until 1916, when the buildings and administration of Yellowstone Park was turned over to the National Park Service.<sup>3</sup>

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<sup>2</sup>Jack Ellis Haynes, Handbook of Yellowstone National Park, (Bozeman, Montana, Haynes Studios Inc., 1966) p 45

<sup>3</sup>Tolson, Op. cit., p 10



FIGURE III

Major Campgrounds (Class A) in Yellowstone National Park  
(1967) △.



The campground serving Mammoth Hot Springs is located approximately one mile northeast from the Mammoth Springs Junction, on the Mammoth, Gardiner highway. It lies at a slightly lower level than the nearby commercial area, having an approximate elevation of 6,000 feet. The camping area is bounded on the northeast by the gorge of the Gardiner River and on the southwest by the outskirts of the Mammoth administration complex. Immediately to the southeast is the National Park Service residential area. The campsites are generally situated in a light stand of lodgepole pine forest with a small amount of juniper dispersed throughout the grounds. The overall campground construction is one of a single large loop connected to two additional smaller loops.

The loops which are roads constructed in an elongated oval, contain 91 developed campsites at specific locations along the road. Restrooms equipped with running water are located throughout the campground. The Mammoth campground does not contain shower or laundry facilities, however, these facilities can be found in the commercial development nearby and are operated by the concessionaire. The campground is normally open to the public from April 15th through October 31st.<sup>4</sup>

Tower Falls area: The Tower Falls area is situated in the northeast part of Yellowstone National Park. The commercial area, consisting of picture studio and store is situated on the Grand Loop road approximately 16.73 miles southeast of Mammoth Hot Springs. It is at an elevation of 6,598 feet. This particular site which was named by the Washburn, Langford,

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<sup>4</sup>Department of the Interior, National Park Service, Campground Listing of Yellowstone National Park, Wyoming, (Mammoth Hot Springs, Wyoming, Mimeograph Yell 361, July, 1966) p 1



Doane expedition in 1870 has been developed for its scenic characteristics. Tower Creek, situated nearby, flows over a falls with a drop in elevation of 132 feet before flowing into the nearby Yellowstone River.<sup>5</sup>

The Tower Falls campground is located approximately three miles southeast of Tower Junction and is reached over a spur road approximately .5 miles from the commercial area. Tower Creek defines the campground boundary on the southeast and the Yellowstone River Canyon is approximately .75 miles to the northeast. The campsites are situated in a light to moderate stand of lodge pole pine forest. This area, which is the smallest under consideration in this study is situated at an elevation of 6,600 feet and contains 53 developed campsites. It is serviced by piped running water, however flush toilets are not available. Due to the small development of Tower Falls commercial area, there are no concessionaire operated shower or laundry facilities. The campground has an operational season lasting from June 1st until September 15th, annually.<sup>6</sup>

Canyon Village: Canyon Village and the adjacent campground is located in the north central section of Yellowstone National Park. It is situated on the western edge of the Grand Canyon of the Yellowstone River. The approximate elevation of the commercial area is 7,920 feet above sea level. Development of the Canyon Junction, Village complex occurred because of its close proximity to the Grand Canyon of the Yellowstone. The developed area is actually less than a mile from the Canyon Rim.<sup>7</sup>

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<sup>5</sup>Haynes, Op Cit., p 145

<sup>6</sup>Campground Listing of Yellowstone National Park, Op cit.

<sup>7</sup>Haynes, Op cit., p 138

The lower Yellowstone Falls, which has a height of 308 feet, is slightly over a mile away.

The public campground which services the Canyon Village area is located less than .4 miles east of the canyon visitor center. The 340 campsites are spaced along a series of adjoining loop roads. Uncleared stands of lodgepole pine form a natural boundary around the campground. The Grand Canyon of the Yellowstone which is the major point of interest in the area is less than a mile to the southeast.

The campground in general, is situated in a moderate to heavy stand of lodgepole pine forest. Each loop has one or more individual restrooms which are equipped with flush toilets and running water. Neither the public campground or the nearby commercial area contain concessionaire operated shower or laundry facilities. The closest area which contain this facilities are at Fishing Bridge located approximately 16 miles to the south. The Canyon's campground operational period usually starts on the first of June and continues until the fifteenth of September.<sup>8</sup>

Fishing Bridge and Adjacent Campground: The Fishing Bridge complex is located in the east central part of Yellowstone National Park at an elevation of approximately 7,800 feet. The commercial area and adjoining campground is situated on the northern shore of Yellowstone Lake and lies approximately .5 miles east of the Yellowstone Lake Outlet. Development occurred here primarily due to its unique location at the

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<sup>8</sup> Campground Listing of Yellowstone National Park, Op. cit.

outlet of Lake Yellowstone. Boating, fishing and animal observation have played a major role in the popularity and continual high visitation to this area.<sup>9</sup>

The public campground serving the Fishing Bridge area is located on the southeastern edge of the commercial complex and approximately 450 feet north of the Yellowstone Lake shoreline. The general area is covered with a moderate growth of lodgepole pine. The campground is serviced by one primary access road which parallels the lake shoreline. A series of shorter loop roads which contain the individual campsites, are connected to this primary road along one side.

The campground contains a total of 317 individual campsites. The grounds are serviced with restrooms equipped with running water. There are no shower or laundry facilities located within the campground limits, however, these facilities can be found in the commercial area, a short distance away. The operational season for the Fishing Bridge campground is from the first of June until the fifteenth of September.<sup>10</sup>

Bridge Bay Campground: The Bridge Bay campground is located at the northern end of Yellowstone Lake on a small bay having the same name as the campground. The elevation is approximately 7,800 feet. Bridge Bay campground and associated facilities are situated approximately 3.72 miles southwest of Lake Junction, on the Grand Loop road. The area which includes a marina, was developed in order to accomodate the ever increasing visitor demand for water accessability as well as camping space.

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<sup>9</sup>Haynes, Op. cit., p 116

<sup>10</sup>Campground Listing of Yellowstone National Park, Op cit.

The campground is situated in a moderate to heavy stand of lodge pole pine forest. It is approximately 800 feet northeast of the marina and is reached by an access road which is .4 miles in length. The access road connects to four loop roads, which in turn provide access to the individual and group campsites.<sup>11</sup>

The campground contains 230 campsites and restrooms with piped running water are available throughout the area. Concessionaire operated laundry and shower facilities are located nearby. The normal operating season for the Bridge Bay campground is from June first until October fifteenth.<sup>12</sup>

Grant Village: Grant Village is located in the south central section of Yellowstone National Park. The elevation at this point is approximately 7,800 feet. The village and campground are situated on the western shore of a part of Yellowstone lake named West Thumb. The construction of Grant Village was initiated in order to alleviate the congestion at the West Thumb commercial area which lies approximately 1.7 miles to the north, along the lake shore.<sup>13</sup>

When the construction of Grant Village is completed, it will replace the commercial development at West Thumb. The campground, which is already in operation, is situated at the edge of the lake with the distance from the shore line varying from between 200 to 500 feet. The landscape is covered with a moderate stand of lodgepole pine forest. the campground

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<sup>11</sup>Haynes, Op. cit., p 113

<sup>12</sup>Campground Listing of Yellowstone National Park, Op.cit..

<sup>13</sup>Haynes, Op.cit., p 93

is reached by a primary access road which enters from the northern end of the grounds. Branching from the access road, are a series of loop roads which provide access to the individual campsites.

There are a total of 399 campsites available for use in the campground. The area is serviced with restrooms equipped with piped water and flush toilets. At the present time, the Grant Village area including the campground, is not serviced by a laundry mat or shower facilities. The operational season of the campground is from June first until September 30th. <sup>14</sup>

Old Faithful and associated Campground: The Old Faithful complex is located in the west central part of Yellowstone National Park. It is situated on the Firehole River, at an approximate elevation of 7,300 feet above sea level. The developed area is approximately 17 miles from the West Thumb, on the Grand Loop road.

Development of the Old Faithful area occurred due to the thermal activity of the Upper Geyser Basin. The primary attraction is Old Faithful Geyser, which is probably one of the main scenic phenomena of Yellowstone National Park.<sup>15</sup> The campground, which is situated on the southeast edge of the commercial area is less than .5 miles away. The campground is divided into two parts; an older section and a more modern section. Both camping areas can be reached either from the Grand Loop road or from the commercial complex itself.

The new part is composed of three elongated loop roads, all of

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<sup>14</sup>Campground Listing of Yellowstone National Park, Op. cit.,

<sup>15</sup>Haynes, Op.cit., p 93

which are connected to one entrance. The loops provide access to the individual campsites situated along both sides of the road. The entire campground area is covered by light to moderate stand of lodgepole pine forest. There is no regular pattern to the location of campsites in the old section. They are distributed in a relatively irregular pattern within the campground limits.

In addition to being bounded on the northwest side by the commercial development, the campground limits are defined on the eastern side by the Firehole River, on the northern side by the Grand Loop road, and on the southern edge by a very small stream. Old Faithful campground contains 323 campsites and both, old and new sections are serviced by restrooms equipped with piped running water and flush toilets. A concessionaire operated laundrymat and shower facilities are located nearby in the commercial area. The normal operating season of the Old Faithful campground, is from May first to October fifteenth.<sup>16</sup>

Madison Campground: Madison campground is located in the western section of Yellowstone National Park. It is situated on the confluence of the Gibbon and Firehole Rivers which form the head waters of the Madison River. This area lies at approximately 6,876 feet above sea level. The Madison campground is 16.5 miles north of Old Faithful, on the Grand Loop road.

The present campground is relatively new, having been opened in the Spring of 1961. Its location is on an important park highway junction.

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<sup>16</sup> Campground Listing of Yellowstone National Park, Op.cit.



visitors arriving at this point, can go either south to Old Faithful, north to Norris Junction and Mammoth Hot Springs, or west to the park's west entrance. <sup>17</sup>

The campground limits are defined along the southern side by the Madison River, along the remaining parameter by the converging park roads. National Park Mountain which was named to commemorate the discussion leading to the founding of Yellowstone National Park, (7,560 feet) is situated approximately 1.5 miles to the southwest. Purple Mountain (8,433 feet) lies directly to the north. The individual campsites are spaced along a series of oval loop roads which are connected at one end to a primary access road. The campground contains 300 sites which are serviced by comfort stations situated throughout the loops.

The comfort stations are equipped with flush toilets and piped running water. The entire area is covered with a medium dense growth of lodgepole pine forest. There are no laundry or shower facilities located at Madison. The campground operates from the first of June until the fifteenth of September. <sup>18</sup>

Norris Campground: The Norris campground is situated in the northwest section of Yellowstone National Park. It lies at an elevation of 7,484 feet above sea level. The area contains a major geyser basin and is one of the important thermal attractions within the park. <sup>19</sup> The campground is located on the Grand Loop road, and is approximately .7 miles northeast

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<sup>17</sup>Haynes Op cit.

<sup>18</sup>Campground Listing of Yellowstone National Park, Op cit.

<sup>19</sup>Haynes, Op cit., p 65



of the geyser basin.

The campground proper is situated less than 400 feet north of the Gibbon River which meanders through low lying meadows. The campground is located on high ground overlooking several meadows which are favorite feeding grounds for elk in the fall. The Norris campground contains 116 developed individual campsites. These sites are regularly spaced on both sides of the four loop roads comprising the campground. One of the loops overlooks the Gibbon River.

The campground is equipped with flush toilets and running water, however, there are no laundry or shower facilities. The entire area is covered with a medium stand of mature lodgepole pine, with the exception of the meadows. The campground is in operation between June fifteenth and September tenth each year.<sup>20</sup>

The author stated that only nine major campgrounds would be discussed. These camps which are classed as "A" type areas receive the brunt of visitor use and are described as:

An area with an organized layout having well-defined roads, parking spaces, and campsites. Drinking water and sanitary facilities including toilets and refuse cans, are furnished on a community basis. Each campground has a designed capacity based on the number of campsites therein.<sup>21</sup>

The smaller campgrounds, although, a necessary part of the park's campground structure are classed as "B" type areas. This designation is applied to :

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<sup>20</sup>Campground Listing of Yellowstone National Park, On cit.

<sup>21</sup>U.S. Department of the Interior, National Park Service, Camping in the National Park System, (Superintendent of Documents, U.S. Government Printing Office, Washington D.C., 1966) p 4

A camping area which may be accessible by either road or trail. The facilities provided are minimum, generally being limited to access roads, basic sanitary facilities, and a limited number of fireplaces and tables.<sup>22</sup>

Due to the somewhat limited facilities, most "B" type units receive less visitor use than do the major campgrounds. In most instances, they are found in outlying areas and are not located close to the major points of interest.

The Fishing Bridge Trailer Village is operated by a concessionaire which utilizes a reservation system, rather than a "first come, first serve" basis as is used in the public campgrounds. This area, in addition, is designed for trailers and does not meet the needs of other campers.

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<sup>22</sup>Ibid

## CHAPTER IV

### EXAMINATION OF CAMPGROUND PROPOSALS

It is the purpose of this chapter, to examine several alternate proposals, anyone of which might aid in the development of a policy leading to a more adequate campground program in Yellowstone National Park. The following proposals will deal specifically with major campground operations as opposed to smaller and less complex units.

#### Expansion

The first of these proposals deal with the concept of a park wide campground expansion program so as to make available a camping experience to as many visitors as possible. An expansion program might be accomplished in one of several ways;

A. The National Park Service could increase the number of campsites in proportion to the increase in camping visitors during a specific period. The park wide campground survey of July 15th and August 2, 1967, for example, indicates that during those periods, a number of the major campgrounds within Yellowstone National Park, were being utilized considerably beyond their capacity.<sup>1</sup> The Old Faithful camping area was overused approximately 58.8%. The campground at Madison Junction was overused by approximately 20%, the Grant Village camping area was over utilized by 27%, the Norris campground by 22%, Canyon was over utilized by 11%, Tower was over utilized by 44%, Bridge Bay and Fishing Bridge by 130%. These percentages were obtained by subtracting the

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<sup>1</sup>Department of the Interior, National Park Service, Population Census and Distribution July 15, to August 2, 1967, (Yellowstone National Park, Mammoth, Wyoming, 1967), p 1

number of sites needed to accomodate the number of camping visitors counted in the two days indicated with the number of actual sites available, and dividing the difference by the number of actual sites. The average American family size of four was utilized as one camping unit.<sup>2</sup>

It should be pointed out, that this problem of overcrowding has been realized by the National Park Service for a number of years. During 1948, for example, Superintendent Rogers in the annual report to the Secretary of the Interior, states;

The total capacity of the campgrounds in the park is 766 cars or approximately 2,527 people. Camper use per night during the main part of the 1948 season was 1,061 cars of 3,502 people. This amounts to 40% overuse. In other words, where there was room for 10 people, 14 crowded in.<sup>3</sup>

Utilizing the calculations shown previously, the service might increase the number of available camping sites by using the average percentage of overuse as the increase figure. In the case of the 1967 survey, this would amount to an increase in camping sites of approximately 35% or 900 new sites. At the average cost of \$1,200.00 per site, this would be an expenditure of approximately \$1,080,000.<sup>4</sup>

Examining this increase from the viewpoint of space utilized, the average campsite occupies approximately 1,400 square feet.<sup>5</sup> At the present time, Yellowstone National Park has devoted approximately 68 acres of land to A and B class campsites. This is admittedly, a small

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<sup>2</sup>Gerald R. Leslie, The Family in Social Context, (Oxford University Press, New York, 1967), p 513

<sup>3</sup>Rogers, Op cit, 1949, p 18

<sup>4</sup>Department of the Interior, National Park Service, Campground Development Program, (Grand Teton National Park, Moose, Wyoming, 1967) plate 24

<sup>5</sup>Ibid

amount, when considering the park's total acreage of 2,221,766. However, a great deal of this acreage is situated in topography totally unsuited to the type of terrain necessary for organized camping areas. The description of the two types of campsite classes situated in Yellowstone National Park, indicate the type terrain necessary for their construction.

An area with an organized layout having well defined roads, parking spaces, and campsites. Drinking water and sanitary facilities including toilets and refuse cans must be furnished.<sup>6</sup>

In view of these requirements, much of the park's topography would be unsuitable, due to extreme elevations, lack of adequate water, or isolation from the major commercial facilities. These limitations reduce the land available for camping sites by a considerable amount.

The scenic quality is another factor which must be examined when locating a major camping area. Locations which seriously mar or destroy the scenic or ecological values of the park, obviously must be considered unacceptable. This again, reduces available camping acreage.

With the various limitations in mind, this concept of increasing sites in proportion to percent of overuse could be examined in still another way. If the National Park Service were to increase the number of campsites, by 900 for example, to handle next year's camping traffic, it must realize that this would provide the needed camp space for only a short time. The CRRRC survey of "outdoor recreation trends", published in 1965, indicate that since 1960, the occasions of camping has risen by

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<sup>6</sup>Camping in the National Park System, Cp. cit., 1966, p 4

62%. The survey further estimates that between 1965 and 1980, this trend will increase by an additional 16% and by the year 2,000, camping occurrences within the United States will have risen to 238%.<sup>7</sup>

From the stand point of land usage, it would require an additional 930 acres or 28,800 campsites within Yellowstone National Park, during the next 32 years, to provide the additional campsites necessary, based on the percent of over use which occurred during the peak of the 1966-1967 season. When considering the ORRRC predicted increase in camping in the next 30 years; a 35% increase is a conservative estimate.

Another approach to the decision for determining expansion of campgrounds, might be to utilize the percentage increase each year in total visitation. This method would not take into consideration those individuals who were visiting the park, but did not utilize any over night accommodations. This percent increase, also, lumps into one category, all overnight visitors, whether they used a public campground or concessionaire facilities.

Using, for example, the 1966-67 increase, of approximately 2%, the National Park Service would have to increase the number of sites by approximately 25,000.<sup>8</sup> These additional sites would be needed each year, if Yellowstone's annual increase continues as it has in the past. The 25,000 sites would utilize approximately 803 acres. This figure, projected for the next 32 years, would mean a total of 24,090 acres, devoted primarily to camping sites. The cost of 25,000 additional sites

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<sup>7</sup>Department of the Interior, Bureau of Outdoor Recreation, Outdoor Trends, (U.S. Government Printing Office, Washington D. C., 1967) p 19

<sup>8</sup>Department of Interior, National Park Service, Seasonal Travel by Entrance Stations, ( Yellowstone National Park, Mammoth, Wyoming, 1967) Mimeograph, p 1



each year would be approximately \$500,000,000.

Another possibility would be to set an arbitrary number to use in order to increase the quantity of camp sites each year. It should be evident, that to at least keep pace with the annual increase in camping use, no less than 750 sites per year would be adequate. This figure, in all probability, would not be enough to alleviate the over crowded conditions in the main campgrounds at the season's height, or to eliminate overflow camping throughout the park.

It is obvious that the concept of a continual expansion of camping facilities, in proportion to the increase in use, whether its accomplished by basing an increase on overuse percent, increase in annual visitation, or by using an arbitrarily fixed number, is not realistic. It is not possible to make a camping experience available to everyone who wishes to camp, at the height of the season. The physical and financial limitations are much to great. Even if financial considerations were not a problem, it is obvious, that Yellowstone National Park, in the space of 30 to 50 years would be essentially nothing but a vast campground, if campsites were continually constructed in proportion to visitor demand.

#### Reduction of Overnight Camping

The second alternative to be discussed involves the concept of reducing overnight camping in Yellowstone National Park and emphasizing where feasible, day use only activities. This idea has been given serious consideration and was outlined in the Yellowstone National Park Master Plan for 1967. Specific locations within the park were considered for this



type of use, one of these being Old Faithful.<sup>9</sup> This concept could be extended to the entire park, hence, Yellowstone National Park could be utilized for day use only.

Individuals wishing to camp within Yellowstone National Park, today, have the choice of entering the park from five different locations. Major campgrounds are not more than twenty-nine miles from any of these entrance points. Major and smaller campgrounds are situated at the important points of interest and are tied together by the Grand Loop road. An individual wishing to visit the park, has but to move along this road system and depending on the availability of camping space and his time table, stay at one of the campgrounds near his location each night. (See Figure IV, p 43)

With the entire park operating under a "day use only" concept, this method of visitation would be changed considerably. A camping visitor wishing to see the park would have only a specific length of time each day, before having to be back outside park boundaries. All camping would be done in areas surrounding the park. A visitor wishing to camp would have to either return to the location of his original campsite outside the park, or travel through the park during the day to another location outside the park boundary. The elimination of

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<sup>9</sup>Department of the Interior, National Park Service, General Development Master Plan for Yellowstone National Park, (Yellowstone National Park, Mammoth, Wyoming, 1967) p 8-12

(Note: The Yellowstone National Park Master Plan Development analysis for 1967 stated that; over the years the facilities for both visitor use and staff operating needs were expanded until now, many of the developments such as Old Faithful have become an intrusion of the scenic features of the area. Accordingly campground development will be limited to existing and proposed campgrounds. An informal program should be developed to acquaint the visitor to the availability of campgrounds outside the park on national forests and private lands. In addition, the Old Faithful campground should be removed. After conversion to a day use area, those sites removed will be accommodated elsewhere.)



FIGURE IV

Major Park Campgrounds (Class A) △.

Minor Park Campgrounds (Class B/C) ○.

camping within Yellowstone National Park, would undoubtedly shift the use emphasis to the land immediately surrounding the park.

For the purposes of this study, only the area within fifty driving miles from the park boundary will be discussed. This figure was chosen arbitrarily as it represents approximately 1 1/2 to 2 hours of driving time under the traffic conditions which generally prevail during the heavy use season. The 1968-1969 Campground Atlas of the United States and Canada, indicate that within this area, there are approximately 45 campgrounds containing 943 camp sites, which fall into the class A or B type site.<sup>10</sup>

The largest campground is in Montana, located approximately 26 miles from Yellowstone National Park's west entrance, and contains 86 sites. The smallest campground is, also, located in Montana, approximately 14 miles from the park's west entrance and it contains three sites. With the exception of three, all campgrounds are operated by the U.S. Forest Service. Of the remaining three, two campgrounds are located in state parks and one is a Bureau of Land Management campground. In addition, there are several private installations within this fifty mile limit, however, the author chose to exclude them as they do not necessarily operate on a first come, first serve basis.

A comparison of the number of camp sites in Yellowstone National Park with the number of available sites within the fifty mile range outside the park, indicate a difference of 682 campsites less than the number

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<sup>10</sup>James A. Bier and Henry A. Raup, Campground Atlas of the United States and Canada, (Alpine Geographical Press, Station A, Champaign, Illinois, 1967-1968) p 112-119, p 151-155, 231-233

available within the park at present. He could then assume, that the over crowded conditions which exist presently within Yellowstone National Park campgrounds, would exist, also, in the camping areas outside the park, should a change be made to "day use only."

Forest Service tabulations of campground use during the 1965 season May through August, indicate, that camper use of six main campgrounds, all less than 40 driving miles from Yellowstone National Park's west entrance, was 1.8 visitor day's per campsite. A visitor day is calculated as one person per site for twelve hours duration.<sup>11</sup>

The forest service campground at Baker's Hole, three miles north of West Yellowstone, had an average use figure of 2.8 visitor use days per site. This figure reflects the relatively heavy use this particular site receives during the height of the season. Another forest service campground at South Fork, also, only four miles from the park's west entrance, reflects the small amount of use it received during this same period, with an average visitor use day of .12 for the season. On the north eastern side of Yellowstone National Park, the Soda Butte campground had a visitor use average for the season of .21, again reflecting the relatively small amount of use.<sup>12</sup>

Personal observations made by the author, on numerous occasions, between June 20th and August 30th, 1967, of forest service campgrounds within thirty miles of Yellowstone National Park, noted most campgrounds were only about half filled.

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<sup>11</sup> Department of Agriculture, U.S. Forest Service, Recreation and Information Management System, An annual report for 1965-1966 (Gallatin National Forest, Bozeman, Montana, 1966), p 1

<sup>12</sup> Ibid

It should be pointed out that the visitor day use figures used do not allow for the fact that all of the individuals counted at a specific location during a twelve hour period, did not camp during the Night. The author assumes that the actual number of campers per site, per day, is lower than indicated. Due to the method of survey, actual camping figures are not available.

Three factors would have to be considered if Yellowstone National Park changed to a "day use only" concept. First, a greater number of camp sites would be needed outside the park boundaries within a relatively short range, then more effective utilization of existing campgrounds would be necessary and finally, there would be a need for a faster and more effective transportation system within the park.

The first factor involving a greater number of "outside" campgrounds could be accomplished in one of several ways. The Forest Service could take the brunt of the camping traffic by enlarging existing facilities, as well as constructing new and larger camping complexes. This could be correlated with private concerns, wishing to become involved in the business of camping, on a pay and reservation basis. The number of new sites needed could be calculated as has been suggested by the author for increasing the campsites within the park. It is assumed that camping pressure would be just as great outside the park, as it presently is within, if not greater. Not only would visitors to Yellowstone National Park be utilizing the area, but others would be attracted to various points of interest near the park, as well.

The National Park Service, itself, could operate campgrounds on



or just inside the park boundaries. This could be accomplished in conjunction with the Forest Service. Complexes could be built similar to the development at Colter Bay in Grand Teton National Park and could offer to the camping public 1,000 to 1,500 sites, fully equipped and serviced by a concessionaire operation.<sup>13</sup> These complexes could be situated at or near various entrances and placed so as to intrude as little as possible, on the natural environment. In the construction of these complexes, consideration would be given to future expansion, as camping pressure increased. (See figure V, p 48)

With the advent of a "day use only" concept for Yellowstone National Park, a more effective transportation system would be needed. At present, in order for visitors to see most of the points of interest within Yellowstone National Park, it requires at least two days if not more, during the height of the season. The Grand Loop road, itself is 142 miles in length and between June and September, traffic flow is virtually a crawl.

The Yellowstone National Park monthly travel report indicates, for example, that between June first and August 30th, 1967, a period of 92 days, 5,774 cars a day entered the park.<sup>14</sup> This means an average traffic flow of approximately 481 cars per hour, over a twelve hour daylight period. This, on road widths of 18 to 22 feet, and in most instances, at speeds of 45 miles per hour posted.<sup>15</sup>

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<sup>13</sup>Melville B. Grosvenor, "Today and Tomorrow in our National Parks", (National Geographic Society, Washington D.C., July, 1966), p 27

<sup>14</sup>Yellowstone National Park, Monthly Travel Report, On cit., 1967

<sup>15</sup>Title 36, Code of Federal Regulations, 4.17 (A) (3), Office of the Federal Register of Records Service, (General Services Administration, Washington, D.C., 1967) p 21

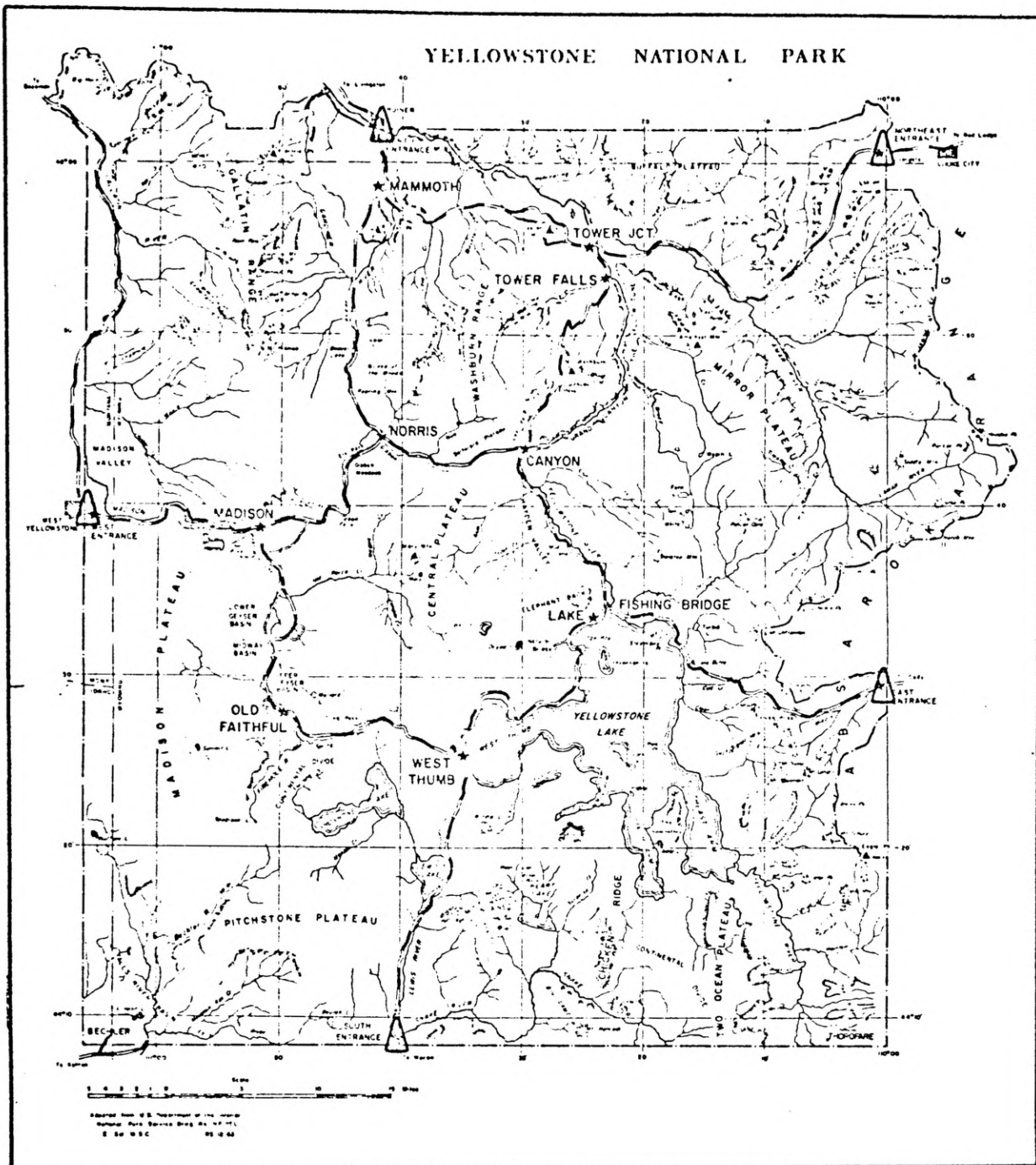


FIGURE V

Proposed Campground Locations for a "Day Use Only" Visitor Operation in Yellowstone National Park (1967) Δ.



On numerous occasions, the author found that it required 2 1/2 hours, minimum time to travel between Old Faithful and Mammoth Hot Springs, a distance of 51 miles. There have been a number of ideas advanced, especially in the last few years, dealing with Yellowstone National Park's traffic problem.

Dr. O'Brien in his study proposed a double track one way system throughout the park.<sup>16</sup> This is not the first time, however, that this type of approach to Yellowstone's traffic has been discussed. George E. Hartzog, the present Director of the National Park Service, noted in the July, 1966 issue of the National Geographics that;

We've learned that you don't double a road's capacity by making it one way; you triple or quadruple it. Further more, the driver can watch more of the scenery. He doesn't have to worry about head-on collisions. We may extend the one way concept to Yellowstone's Grand Loop Road. Oddly enough, this would be a reversion to the past; the loop was one-way when first built. Of course, that was before the time of the automobiles.<sup>17</sup>

In considering the traffic problem in Yellowstone National Park, it should be considered that the automobile and more modern highway system is just one of many possibilities.

Once you are in the park, perhaps you will reach the main points of interest by aerial tramways, used successfully for years in Europe. There may be a cog railway or funicular in steep slopes; we are thinking, also, of narrow-gauge railways running on silent rubber wheels, and of monorail trains.<sup>18</sup>

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<sup>16</sup>Bob Randolph O'Brien, "The Yellowstone National Park Road System, Past, Present and Future", (Unpublished Doctor's dissertation, The University of Washington, Seattle, Washington, 1964), p 220

<sup>17</sup>Grosvenor, Cit., p 80

<sup>18</sup>Ibid

The operation of Yellowstone National Park, therefore, with the absence of over night camping, involves not only the increased availability of camping adjacent to the park, but, also, the need for a more efficient means of transportation within the park itself.

The third factor to consider involves the correlation of Yellowstone National Park's existing camping facilities with the adjacent U.S. Forest Service areas. The National Park Service and the United States Forest Service have initiated this to some extent, with the formation of the Wilderness Survey Master Planning Team.<sup>19</sup> This group of representatives from both the Forest Service and National Park Service, has as one of its objectives, the formulation of a master plan for the integrated recreational development and operations of Yellowstone National Park, Grand Teton National Park and adjacent U.S. Forest Service areas. Until this plan is completed and put into effect, something could be initiated in the interim period.

#### Present Campground Utilization

Several problems associated with high density, early filling campgrounds should now be examined, as well as a possible solution. During the 1965 season, the campground daily status report indicated that several major campgrounds were reaching capacity early in the day. Figures indicated, for example, that Bridge Bay was filling by one p.m. This occurred approximately 45% of the reporting period which was between June 15 and September 1, 1965. Over this same period, it was found that

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<sup>19</sup> Department of the Interior, National Park Service, Administrative Policies for the National Parks, and National Monuments of Scientific Significance, (U.S. Government Printing Office, Washington D.C., 1967) p 30

for 85% of the time, this campground was completely filled at 1 p.m., 43% of the reporting period and for 91%, of this same period, it was filled by 4 p.m. Fishing Bridge, during the 1965 summer season was filled at 1 p.m., for 85% of the reporting period and 88% of this same duration found the campground filled by 4 p.m.<sup>20</sup>

Of the eight major campgrounds reporting, which were Old Faithful, Madison Junction, Norris, Mammoth, Canyon, Fishing Bridge, Bridge Bay and Grand Village, it was found that on the average, all had reached capacity by 1 p.m., at the frequency rate of 27% of the period reported and that a frequency of 56% of the reporting period, capacity was reached by 4 p.m. In other words, visitors wishing to stay at one of the above campgrounds had to be at the campground before 1 p.m., during 27% of the period June 15 through August 1, 1965 or for 56% of the time, be present in the campground before 4 p.m. or space would not be available.

Upon discovering that camping space is not available, a visitor has one of three choices. First, he may stay in a concessionaire facility if accommodations are available. In many instances, accommodations are not available near major campgrounds. The 1967 statistics for all over night use in Yellowstone National Park indicate that between June 1 and August 30, 1967, 1,551,200 visitors utilized over night facilities in Yellowstone National Park.<sup>21</sup> This is an average of over 17,000 per night. The Yellowstone Park Company, pillow count, or total capacity is 9,000

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20. Daily Campground Report, On cit.

21. Department of the Interior, National Park Service, Public Use of the National Parks; A Statistical Report by the Branch of Statistical Analysis, (National Park Service, Washington, D.C., 1967) p 1-2

people.<sup>22</sup> This leaves approximately 8,000 people staying in National Park Service facilities, such as campgrounds.

Using again, the average number of occupants in any one campsite, as four, and calculating the total number of sites available, the park could theoretically contain 10,600 campers. This figure, however, is unrealistic when compared to the figures derived from the 1966 and 1967 campground survey, noted earlier. The daily campground log, also indicates, major campgrounds were filling by 1 to 5 p.m., through most of the heavy use season. In the month of July alone, statistics indicate that concessionaire facilities as well as service facilities, could not handle the over night demand. Over 40% of the visitors were sleeping in something other than concessionaire or National Park Service facilities.<sup>23</sup>

If then, the camper cannot find space in a major campground or a concessionaire operation, he has the choice of leaving the park or going to one of the smaller B class campground. These smaller campgrounds are not equipped with concessionaire operated eating facilities, grocery stores, laundry or shower facilities. (See figure VI, page 53) If he chooses an outside campground or commercial facility, it may mean a drive of several hours, dependent on his location and traffic conditions.

To obtain information about outside camping facilities or commercial facilities, the visitor has to personally phone long distance to the area or drive to it and take his chances. He can seldom receive current forest service campground information while in the park, with the exception of the entrance stations, which may have current knowledge

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<sup>22</sup> Pillow Count, A Statistical Report of the Reservations and Management Division, (Yellowstone Park Company, Mammoth, Wyoming, 1967)

<sup>23</sup> Public Use in the National Parks, Op cit., 1967



FIGURE VI

Minor Campgrounds (Class B/C) in Yellowstone National Park  
(1967) △.



of forest service facilities. The present telephone network utilized by the National Park Service in Yellowstone National Park, connects all points receiving visitation. This system is confined to the park proper and any calls from this network, to an area outside the park, would become a long distance call. National Park Service personnel at any interior location, desiring current forest service information, would have to place a long distance call. It is obvious that in the course of one day, cost to the park would be prohibitive.

This problem of obtaining current information might be alleviated, by the use of a common communications network, whereas both Yellowstone National Park and surrounding Forest Service areas, pertinent to this problem, be hooked into a radio or telephone net. This would allow any given location in this net to either inquire as to the status of the other campgrounds or to report its current facility load. Entrance stations could advise incoming visitors wishing to camp, as to available camping space, either within or outside the park. This system could help in achieving maximum utilization and coordination of existing facilities.

#### Concessionaire Involvement in Campground Operations

The possibility of concessionaire operated public campgrounds is another aspect which is seriously being considered throughout the National Park Service. This type of operation would mean turning the present service campgrounds over to a private organization and allowing them to operate the camping facilities. This would involve the charging of campground fees, separate from park entrance fees. Reservations could be used, such as concessionaires now utilized with hotel rooms and cabins. Concessionaire operated campgrounds are presently being



tried for the first time at Crater Lake National Park and Everglades National Park and the success of these operations may very well result in the initiation of this idea in other National Park Service areas.<sup>24</sup> The National Park Service has already indicated approval of concessionaire campgrounds, in its administrative policy statement for natural areas of the National Park Service, of September, 1967.

Insofar as practicable, campgrounds should be developed and operated by private enterprise under contractual arrangements with the service.<sup>25</sup>

A concessionaire campground would probably have far reaching effects on the visiting public. Most individuals utilizing Federal recreational facilities are accustomed to paying either an entrance fee which allows access into a national park and its campgrounds, or a campground fee which is valid only for that purpose and used in many forest service areas. The system now being used throughout the United States is the Federal Recreation Area Entrance Permit, otherwise known as the "Golden Eagle Passport." This \$7.00 permit allows an individual access into almost all Federal recreation areas in the United States and is valid from April 1st to March 31st. This permit or other types similar to it, would not be valid in a concessionaire operated campground. Visitors would be required to pay an additional fee to camp within the park. Visitors accustomed to camping in the public National Park Service campgrounds, would no doubt find this extra camping fee an unwelcome addition.

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<sup>24</sup> Analysis of Concession Operated Campgrounds, A Report Prepared by the Office of the Superintendent, Crater Lake National Park, (National Park Service, Crater Lake Oregon, 1968)

<sup>25</sup> Administration Policies for the National Parks and National Monuments of Scientific Significance, Op cit., 1967, pg 54

From the service's standpoint, however, a concessionaire operated campground would have several beneficial aspects; (1). It would take the National Park Service out of the campground business, therefore, allowing needed finances, facilities and manpower to be utilized and concentrated in other areas involving visitor services and resource protection. (2). It might possibly control and even reduce the camping impact on many of the campgrounds. Once the visiting public realized that there was going to be an additional cost for camping in the park and that they would not be able to camp without reservations, they might decide to visit the park at a later date or possibly not at all.

In many instances, individuals have been known to enter the park, looking for a place to camp, even though he had been informed that camping was not available. Yellowstone National Park, in past years, has allowed these "extra campers" to utilize overflow areas, picnic grounds, roadside turnouts and parking lots on a one night basis. This policy has been changed, however, and overflow areas will no longer be available.

Each campground shall be operated within its design capacity. No overflow or excess use of a campground or an individual campsite will be permitted. So called "over-flow campgrounds" shall be phased out as rapidly as possible.<sup>26</sup>

Although camping space can not be made available for all who wish to camp, there is no reason why those already camping cannot enjoy

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<sup>26</sup>Ibid

a "quality camping experience." One way this can be accomplished is to provide and maintain high quality campgrounds; campgrounds which are designed so as to allow easy access to and from campsites, sites which are well spaced and properly screened. These campgrounds should be properly located as to terrain and should utilize the kinds of vegetation which are either highly resistant to heavy visitor use, or will recover in a short period of time. Campgrounds which, because of their locations and design, will allow for closure for specific periods of time, to support vegetative recovery and repair.

If an entirely new facility is to be built, one consideration will be size. Campgrounds of 250 - 300 sites are now as large as the National Park Service feels is compatible with a natural environment.<sup>27</sup> Campgrounds which are larger than this begin to generate a new set of problems. An example of one such problem, is the pall of smoke over Yosemite Valley during the camping season. This is a direct result of the number of campers and campfires allowed on the valley floor.<sup>28</sup> This problem will eventually be eliminated by the use of other types of fuels, but until this occurs, the smaller campground size facilitates less problems.

#### Law Enforcement

Another factor to consider in campground policy is law enforcement. In many cases, a single campground ranger is responsible for maintaining

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<sup>27</sup>Ibid p 53

<sup>28</sup>Grosvenor, Op cit., p 11

order and enforcing service regulations. With a campground in the category of the Colter Bay Campground in Grand Teton National Park, this may mean dealing with more than 2,000 people at various times during a twenty-four hour period.

#### Campground Maintenance

Maintenance of a large campground is an aspect to consider in determining campground policies. A maintenance operation which involves servicing rest rooms, trash deposits and general campground clean up; in addition to cost and over all maintenance and repair, becomes more involved as the campground grows in size. The daily expense for the maintenance operation of the Colter Bay campground in Grand Teton National Park, for example, is approximately \$213.00.<sup>29</sup> It is obvious, therefore, that a campground maintenance program can be expensive. The Service then, feels that if new campgrounds are to be installed, they will not be the large expansive installations which have characterized several of the areas in the National Park System. The present National Park Service policy states that;

Except as may be approved by the director in specific locations, campgrounds should be limited to 250 sites and designed so as to permit areas of separation between campsites which can be managed to retain as much as possible of the natural environment.<sup>30</sup>

The National Park Service in general and Yellowstone National Park in particular, has an obligation to meet two basic objectives;

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<sup>29</sup>Personnel Cost Sheet Analysis, A Report Prepared by the Maintenance Division, Grand Teton National Park (National Park Service, Moose, Wyoming, 1967)

<sup>30</sup>Administration Policies for the National Parks, and National Monuments of Scientific Significance, Op cit., 1967 p 53

first, to try and provide a quality experience to the visiting public and second, to carry out the mandate of 1916 which directs the service to protect and conserve the natural and historic objects and wildlife therein.

It will be increasingly difficult for Yellowstone National Park and other national parks, as they become more heavily used, to meet these objectives. If however, the use of smaller campgrounds, closer co-operation with other federal agencies and a shift to greater concessionaire involvement within park operations; might help accomplish those prime directives, the national park system has no alternative but to try them.

## SUMMARY OF CONCLUSIONS

The author has stated that with the continual increase in visitation, Yellowstone National Park, as well as other national park areas, would find it increasingly more difficult to protect and conserve the natural resources, provide for maximum visitor use as well as provide a quality recreational experience. The National Park Service has no alternative but to try a method, whereby, it might be able to accomplish those ends.

Conclusions

When considering the possibility of additional facilities, in the form of campgrounds, it must be noted, that it is neither economically feasible or topographically practical to attempt, to provide camping for everyone who wishes to camp within Yellowstone National Park. Unless new camping facilities included an addition of several thousands of sites, these facilities would have no appreciable effect on the availability of camping space, especially during the height of the season. It is, therefore important to maintain and effectively use to their maximum potential, what facilities presently exist.

A. The author, therefore, concludes that there should not be an increase in the number of campgrounds within Yellowstone National Park. It is impractical, from an economical as well as physical standpoint, to attempt to supply campsites in proportion to the camping demand.

The present operational campground policy of a "first come, first service," is actually facilitating over crowded camping conditions.



The fact that fees are not charged for camping, only adds to the problem. Unless the campground is physically barricaded after the capacity is filled, many individuals will still attempt to crowd into sites already occupied, or drive off the constructed roadways into the trees surrounding the campground. This problem can rapidly become out of hand, especially when twenty-four hour campground supervision is not available.

B. The author concludes that immediate improvement of the camping problem within Yellowstone National Park could be facilitated by better co-ordination between Yellowstone National Park and U.S. Forest Service campgrounds. This could be done by the use of an interagency communication system.

#### Recommendations

A. The author recommends the establishment of an interagency communication system which would be utilized by the U.S. Forest Service and the National Park Service. This communication system could be either a radio or telephone net. Coverage could extend to either district, sub-district ranger offices and or individual campgrounds. A hook up to individual campgrounds may necessitate the presence of a 24 hour campground ranger. In past years, this supervision has not been possible due to manpower and financial limitations.

With an effective communication net between Yellowstone National Park and adjacent U.S. Forest Service areas, hopefully many of the individuals who have camped in an overflow area or were crowded into

an already filled campground, could be directed to areas having camping space. In the event, that all campgrounds were either filled or approaching that point, visitors could be so informed early enough in the day to allow them time to make other overnight arrangements. This should allow the park campgrounds to operate more within their designed capacity, than was previously possible.

B. The author recommends that the operation of Yellowstone National Park campgrounds should be contracted to a private concessionaire. This could be accomplished either on a limited trial basis, involving only a few campgrounds or by turning over all of the campgrounds within the park, at one time.

A prospective concessionaire may want the National Park Service to initiate the fee system in park campgrounds in order to survey public reactions, before assuming the operation. A concessionaire campground, if operated similar to other lodging facilities, would provide necessary supervision and control of camping. The reservation system could be employed, just as with hotels; when the campground reached capacity, it could be closed. With twenty-four hour supervision, the campsite registration system could more effectively utilize the entire Yellowstone National Park camping facility.

C. The present Yellowstone National Park campground policy and increasing visitor load, have not allowed the formulation of a program, whereby, each of the park's major campgrounds or a portion, thereof, could be closed for an entire season, for rehabilitation purposes.

The author would recommend that Yellowstone National Park institute a program, whereby, certain campgrounds; or portions of these campgrounds be closed for an entire season, to allow vegetative recovery, reseeding, transplanting and necessary maintenance.

This could be accomplished on a rotating basis and should be done, whether a concessionaire assumes the campground operation or it continues under the jurisdiction of the National Park Service. This would remove several hundred campsites from use each season, however, the long term benefits of an attractive, well cared for campground outweigh the negative aspects of a reduction in camping space.

The recommendations and conclusions, presented, were not done with the intention that they were the only feasible solutions to an extremely difficult problem. On the contrary, they were presented as several of many possible alternatives that the National Park Service can consider. What is important is that the "status quo," or existing policies and operational procedures are not adequate, have not been for several years and some type of action is necessary.

When considering the forecast of National Park System visitation in the next 30 years, coupled by the fact that Yellowstone National Park is one of the more popular, largest and oldest park, it is only hoped that those directives and suggestions presented here are enough and that they did not come too late.

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