DEFENDING NATIONAL PARK IDEALISM:
THE MYSTIQUE

MEMOIRS FROM A CAREER IN THE NATIONAL PARK SERVICE
1949–93

PARTS 1A and 1B. 1949–65

PART 2. 1965–93

by
B. Riley McClelland

2014
PART 1. YELLOWSTONE NATIONAL PARK
1949–65

Sapphire Pool eruption reaching 100 feet, with yellow monkeyflowers in the foreground.

"The park [Yellowstone] should so far as possible be spared the vandalism of improvement. Its great and only charms are in the display of wonderful forces of nature, the ever varying beauty of the rugged landscape, and the sublimity of the scenery. Art can not embellish them."

House Special Committee, 49th Congress, First Session, 1885, Report 1076 report filed 16 March 1886
(Cramton 1932:44)
Preface

On the morning of 14 August 1949, I was in the Biscuit Basin parking area, two miles west of Old Faithful. It was shortly after dawn as I watched the dense fog take on mysterious shapes in the Basin. From out of the vapors, a person in uniform gradually appeared. It was Ranger-Naturalist George Marler, on duty to observe and record hydrothermal activity. What a wonderful job! I was 14 yrs old and that episode established my career goal. I wanted to be a ranger in YNP.

This episode occurred on a trip with my father, mother, and sister. We had driven from our urban home in Denver, Colorado, to visit Yellowstone National Park (YNP) for our first time. We were staying in a Yellowstone Park Company cabin at Old Faithful for a few nights ($5.25 per night for the cabin). I had been fishing the Firehole River, watching geysers, and becoming increasingly excited about the wonders of YNP.

Part 1 of these memoirs covers my years in YNP 1955-65 and preceding years in which I made preparation for an NPS career. Part 2 describes my assignment to Glacier National Park (GNP) and my 19 years at the University of Montana (UM) as a PhD student and then a faculty member (1973–93). During 1980–93, I served on a split appointment at GNP and UM. In most years beginning in 1957, I kept detailed journals, although their completeness was not consistent. In preparing to write these memoirs, I spent many hours in the YNP and the GNP museum collections, archives, and libraries. I copied monthly reports from the stations at which I worked in YNP (1955–65) and GNP (1965–91). The YNP set is fairly complete; many years are missing from GNP’s archives.

In 1956 I married Patricia Truman and for subsequent years I have incorporated Pat’s involvement in events. It was “our” career, not just mine. Although Pat was not on the NPS payroll, she worked just as hard as I did in our NPS assignments. In YNP, when I was not home, she answered interminable phone calls associated with ranger work, and responded to knocks on the door from visitors seeking help or information at all hours. Some of the descriptions are based on letters Pat wrote to her parents. Her mother kept many of Pat’s letters, which contain a chronicle of the activities of our children as well as comments about NPS issues and park management.

Pat always was able to provide accurate information to inquisitive park visitors and she always did so courteously and patiently. She did all this while ultimately raising five children; her “mothering” always was accomplished with unwavering attention, patience, and kindness. During research projects in the later years of my career, Pat was directly involved in field work and writing. During our years in GNP, after the children were grown and had departed, she often served as an unpaid volunteer in the Park.

These memoirs are not written for formal publication, but as a nearly day-to-day record of one NPS career. They are lengthy and detailed. Few, if any, will want to read them in their entirety. However, I felt the need to include as much detail as possible, to make a historical record that is as complete and accurate as I can make it. There are many references to published writings of historical significance, as they relate to the national park mystique. However, I have made no attempt to document a complete history of NPS policy evolution. That has been done by those more qualified for such an effort, e.g., Ise (1961), Runte (1979), Sax (1980), Albright (1985), Frome (1992), Sellars (1997), Keiter (2013), and others. Our career was dedicated to the National Park “Idealism,” natural resource understanding and protection; the rewards were physical and spiritual. We continuously celebrated the privilege of living and working within YNP, GNP, and Carlsbad Caverns.
(CCNP) National Parks. As a family, we tried to follow the objectives of “getting to know a park, developing a sincere love for it, and wanting to share these feelings with others who also cared, or could learn to care” (paraphrased from Freeman Tilden’s [1957] national park interpretation philosophy).

These memoirs are the story of our attraction to the “Mystique” which makes Yellowstone and Glacier so special. Wendell Berry and other writers have described this type of mystique as a fascination with the wonder of the natural world. A special mystique is at the heart of many of Aldo Leopold’s essays, particularly “Thinking like a Mountain” (Flader 1974). Yellowstone inspires a sense of mystery and awe, a mystique evident in the writings of Lieutenant Gustavas Cheyney Doane, leader of the cavalry detachment with the 1870 Yellowstone Expedition (Bonney and Bonney 1970, Scott 2007). Doane’s descriptions of geysers and other natural features imply that he was spellbound by his observations, overwhelmed by the Yellowstone mystique (Doane 1870 in Cramton 1932, Black 2012). John Muir’s (1901) writings illustrate the mystical appeal he felt in YNP and other areas. The influence of the Yellowstone mystique is evident in several contemporary author’s, notably Schullery (1984, 2004).

The National Park Mystique does not diminish the importance or excitement of scientific analysis or scientific discovery. However, it is evident that many Park experiences are beyond scientific description: “There are things that cannot be put into words. They make themselves manifest. They are what is mystical” (philosopher Ludwig Wittgenstein, as quoted by Keen [2007]). Eminent wildlife professor Les Pengelly (1988) wrote:

“We wildlife professionals should . . . not deceive ourselves by denying emotion and kidding ourselves that we adhere to strictly scientific methods, completely devoid of subjectivity . . . .”

Former YNP Superintendent Lon Garrison (1983:300–301), in the epilogue of his autobiography, “The Spirit of the River,” put it this way:

“There is a mystique with each of the natural and scenic special jewels of America, and of the beautiful and inspirational places of the world. Can we find ways in our eager land management formulas to rediscover . . . intangible ideals, to structure organization that will care for them, to articulate the formal political language needed in statements of purpose, environment, objectives, standards, master plans, and legislation? Can we truly communicate from our own uplifted spirits and hearts? Can we express our concerns for the spirit of the Colorado River, or the Spirit of the Grizzly Giant Tree, or of Old Faithful Geyser? Or are we locked irretrievably into an economic measure, and can only ask, ‘What good are they?’”

Marston Bates (1960:4) had an appropriate response to the question “What good is it?”:

“I have never learned how to deal with this question. I am left appalled by the point of view that makes it possible. I don’t know where to start explaining the world of nature that the biologist sees, in which ‘What good is it?’ becomes meaningless. The question is left over from the Middle Ages; from a small, cozy universe in which everything had a purpose in relation to man. The question comes down from the days before Copernicus’ theories removed the earth from the center of the solar system, before Newton provided a mechanism for the movement of the stars, before Hutton
discovered the immensity of past time, before Darwin's ideas put man into proper perspective with the rest of the living world. Faced with astronomical space and geological time, faced with the immense diversity of living forms, how can we ask... "What good is it?" Often my reaction is to ask in turn, "What good are you?"

Yellowstone has a special aura, creating deep emotional involvement, not only because of its unique diversity and natural beauty, but also because of its landmark status in the evolution of altruism in United States federal land use. Although much of Yellowstone could have been appropriated for private land and commercial use in the early 1870s, farsighted men and legislators put the concerns of generations yet unborn above the opportunity for personal gain and greed. Some historians argue that YNP and other early parks were set aside by Congress as our counterpart of Europe's man-made monuments, which we lacked (Runte 1979). Further, the argument asserts that U.S. National Parks were primarily "worthless" lands when set aside. Perhaps those arguments have credibility (see discussions by several authors in the 1983 Journal of Forest History 27[3]).

Reading the early journals and records, and congressional debates over the fate of Yellowstone clearly show that most of those who fought so hard for the establishment of YNP did so because of the emotional (spiritual) mystique of these great lands. Even before the NPS was established (1916), "preservation" of natural resources was the primary goal. An early Congressional Committee (49th Congress, 1886) revealed this concern:

"The park [Yellowstone] should so far as possible be spared the vandalism of improvement. Its great and only charms are in the display of wonderful forces of nature, the ever varying beauty of the rugged landscape, and the sublimity of the scenery. Art cannot embellish them" (Cramton 1932:44).

However, the "pleasuring ground" focus of Mather and Albright quickly displaced the natural resource preservation focus that Muir and Olmstead (Sr. and Jr.) had espoused. It can be reasonably argued that Mather and Albright had no choice. They had to increase use of the national parks to keep congress favorably inclined in keeping the parks "relatively" unimpaired (as undefined as the term may be). George Wright and Adolph Murie provided much needed conscience in the 1930s. The progressive philosophy and goals that George Wright (Wright and Thompson 1935) had espoused faded quickly after his tragic death in 1936, at the age of 31 (see articles discussing Wright's legacy in the 2000 George Wright Forum 17[4]). Adolph Murie (1940) continued the battle for a more enlightened wildlife management program in the national parks. He was active in opposing some of the atrocities of Mission 66.

NPS Director Conrad Wirth had announced Mission 66 on 8 February 1956. It was a building and "development"plan, with a completion goal of 1966, to coincide with the agency's 50th anniversary. The program's focus was on the improvement of physical facilities in all national parks. Projects included 1,570 miles of rehabilitated roads, 1,197 miles of new roads, 936 miles of new or rehabilitated trails, 1,502 new parking areas, 575 new campgrounds, 271 new power systems, 1,239 new housing for employees, and 114 new visitor centers (Sellars 1997:184). National park concessioners also were expected to upgrade and expand their facilities. Mission 66 was severely criticized by most conservation groups and it was a great disappointment to employees who believed that the NPS mission should
more appropriately be focused on the preservation of natural resources.

The 4 March Leopold (1963) Committee Report on “Wildlife Management in the National Parks” resurrected an approach closely akin to the focus of Wright and Murie. They wrote:

“As a primary goal, we would recommend that biotic associations within each park be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by European man. A national park should represent a vignette of primitive America.” “Restoring the primitive scene is not done easily nor can it be done completely.” “... if the goal cannot be fully achieved it can be approached.”

This goal was criticized by some who claimed that it advocated a museum piece approach, attempting to stall natural succession and change and freeze the landscape at a particular point in time. All of the rangers that I knew recognized that ecological change was an inherent part of the vignette. The National Academy of Sciences (NAS) Advisory Committee on Research (1 August 1963) appropriately clarified the goal:

“The Committee recognizes that national parks are not pictures on the wall; they are not museum exhibits in glass cases; they are dynamic biological complexes with self-generating changes. To attempt to maintain them in any fixed condition, past, present, or future, would not only be futile but contrary to nature. Each park should be regarded as a system of interrelated plants, animals and habitat (an ecosystem) in which evolutionary processes will occur under such human control and guidance as seems necessary to preserve its unique features. Naturalness, the avoidance of artificiality, should be the rule.”

The way in which the historic impacts and activities of American Indians was to fit into the management vision was not precisely clarified by either the Leopold or NAS Committees. On 10 July 1964, Secretary of Interior Stewart Udall wrote to NPS Director George Hartzog, Jr., instructing him to promptly develop policies for each of three categories of national park areas: Natural, Recreational, and Historical. Policy booklets for each category were published in 1967, 1968, and 1970. It seemed to be an important way to clarify the distinction and need for policy separation, especially between Natural and Recreational Areas.

However, policy impacts of the Leopold and NAS Committees recommendations regrettably were short-lived. Ecosystem management received increased awareness only until the early 1970s. The category separations of policies were dropped and any distinct management separation between recreation and preservation became increasingly fuzzy. What seemed always to rear its ugly head was an emphasis on the supposed “dual mandate,” which consistently led to an overemphasis on recreation and inappropriate facility development, characterized by Mission 66.

The chasm between the rhetoric of national park ideals, and the implementation by national park management continued to be immense (Chapman 1991, Sellars 1997) even though Park Historian Robert Utley (1974:7) had tried to resolve the “dual mandate” issue: “It is almost a cliche that our 1916 organic act assigns us two not entirely compatible missions—preservation and use. But examine the language of the law carefully:
which purpose is 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.
The first element is a simple mandate to preserve. The second is not, as usually
interpreted, a simple mandate to provide for public enjoyment, but rather to provide
for only such public enjoyment as is consistent with preservation. Preservation is a
condition of public use. If the first element were dropped altogether, the second
would still stand as an unequivocal charge to place preservation first. Indisputably
preservation comes first in law, indisputably it comes first in logic—without
preservation, the rest is utterly pointless. The time is overdue for the National Park
Service to recognize the force of law and logic, to rededicate itself to the
preservation ethic, to declare without equivocation that preservation comes first—in
short, to embrace philosophically and carry out in our daily stewardship the
fundamental mandate laid down in our organic act.”

By 1975, Leopold (2013) had rethought the wording in the 1963 Report and suggested
a revision: “As a primary goal we would recommend that the natural biological and geological
processes under which the area evolved, be permitted to function in a manner to perpetuate the
ecosystem as first observed by the white man.” On 19 March 1989, the Commission on
Research and Resource Policy in the National Park System (the “Gordon Report,” named for
its Chairman, Dr. John C. Gordon, Yale School of Forestry and Environmental Studies) issued
its report to the National Parks and Recreation Association:

“We have been described as a successor to the prestigious group chaired by
Dr. A. Starker Leopold that presented its findings in 1963. We believe that, even after
26 years, the Leopold Report remains a valuable document, and one not ready for
discard.” The Report concluded: “Because of our National Park System’s value, both
nationally and internationally, and its sensitivity to environmental threats, the
National Park Service has a profound responsibility for protecting these treasures. As
we begin to comprehend the interconnectedness of our environment, we realize that if
our parks are damaged, so are we. It is now time to act—not just for our parks, but for
us—all of us.”

Many NPS managers have remained politically directed, with confusion about the dual
mandate and with recreation and “development” overriding ecological management of park
resources and processes. Dr. Robin Winks (1996), Chairman of Environmental Studies, Yale
University, wrote:

Where access may be provided, where an enriched interpretation may be offered,
without damage to the resource, it may—indeed, perhaps should—be provided;
but never at the cost of risk to the resource for which the unit was created.”

In writing about a career in the NPS, it is important to emphasize the difference that
exists between (1) national park philosophy and objectives embodied in the evolution of
National Park Idealism and written policies, and (2) NPS management history and lack of
policy implementation. Most of the major frustrations that I encountered related to conflicts
within this dichotomy. These memoirs document a career spent embracing National Park
Idealism and the Mystique that represents the uniqueness of the national parks.
Part 1 is dedicated to Professor Jack Vernon Knox Wagar, my advisor at Colorado A & M College (1953–56) and mentor through years after graduation. He introduced students to the writings of Aldo Leopold and to the “National Park Idea.” He consistently emphasized the importance of quality and Leopold’s “Land Ethic” in wildland recreation standards. His sage insights and stimulating articles provided inspiration to his students in school and throughout their careers.
# TABLE OF CONTENTS, PART 1A and 1B

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE ............................................................................................................. ii</td>
</tr>
<tr>
<td>DEDICATION ........................................................................................................ vii</td>
</tr>
<tr>
<td>LIST OF DOCUMENTS ............................................................................................. xi</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS ................................................................................... xii</td>
</tr>
<tr>
<td>LIST OF TABLES ................................................................................................... xix</td>
</tr>
</tbody>
</table>

# PART 1A. 1949-1961

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overcome with Yellowstone Fever; Preparation for a Career (1949-53)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Employed by the National Park Service (1954)</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>First Job in Wonderland (1955)</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Completing College (1955-56)</td>
<td>35</td>
</tr>
<tr>
<td>5</td>
<td>Marriage and the Beginning of our National Park Service Career (1956)</td>
<td>42</td>
</tr>
<tr>
<td>6</td>
<td>Carlsbad Caverns National Park, a Stepping Stone (1956-57)</td>
<td>66</td>
</tr>
<tr>
<td>7</td>
<td>To Yellowstone as a Permanent Park Ranger (1957)</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>Restoring the Dream (1957-58)</td>
<td>87</td>
</tr>
<tr>
<td>9</td>
<td>Preparations for Autumn and Winter (1957-58)</td>
<td>105</td>
</tr>
<tr>
<td>10</td>
<td>To the Yosemite Ranger School (1957)</td>
<td>107</td>
</tr>
<tr>
<td>11</td>
<td>Home in Wonderland (1957-58)</td>
<td>115</td>
</tr>
<tr>
<td>12</td>
<td>First Full Summer at Old Faithful (1958)</td>
<td>146</td>
</tr>
<tr>
<td>14</td>
<td>A New Assignment, Snake River (South Entrance) (Summer 1959)</td>
<td>176</td>
</tr>
</tbody>
</table>
CHAPTER 15. Third Winter at Old Faithful! (1959-60) .................................................. 188
CHAPTER 16. A Surprise — We Don't Have to Move! (Summer 1960) ..................................... 203
CHAPTER 17. Our Fourth and Final Snowed-in Winter at Old Faithful (1960-61) ......................... 222

PART 1B, 1961-1965 (next volume)
CHAPTER 18. Moving from Old Faithful to Yellowstone Lake (Summer 1961) ............................ 243
CHAPTER 20. Return to Yellowstone Lake and a Glorious Spring (1962) .................................... 270
CHAPTER 22. Transfer to the Naturalist Division (1963) ............................................................. 314
CHAPTER 23. The Mystique Under Attack (1963) ................................................................. 324
CHAPTER 24. First Winter as North District Naturalist, at Mammoth Hot Springs (1963-64) ............. 327
CHAPTER 25. Final Summer at Mammoth Hot Springs (1964) ................................................... 333
CHAPTER 27. Stephan T. Mather Training Center, Harpers Ferry, West Virginia (1965) ................ 366
CHAPTER 28. "Final" Days In Yellowstone (1965) .......................................................................... 372

ACKNOWLEDGMENTS .................................................................................................................. 374
LITERATURE CITED (covers Parts 1A and 1B) ........................................................................... 375
INDEX (covers Parts 1A and 1B) ............................................................................................... 380

# LIST OF DOCUMENTS

(Except for D-5, which was retyped, original documents were scanned in their entirety)

## PART 1A

<table>
<thead>
<tr>
<th>Document Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Letter from Yellowstone Superintendent Edmund B. Rogers (17 March 1952)</td>
<td>3</td>
</tr>
<tr>
<td>2. Rocky Mountain National Park, Colorado, Trail Crew Employment Form (14 June 1954)</td>
<td>9</td>
</tr>
<tr>
<td>3. Letter to the Editor, Denver Post (1955)</td>
<td>13</td>
</tr>
<tr>
<td>4. Yellowstone Personnel Action Form, Fire Control Aid (20 June 1955)</td>
<td>16</td>
</tr>
<tr>
<td>5. Narrative report of the Sunset Lake Fire (26 July 1955)</td>
<td>24-28</td>
</tr>
<tr>
<td>7. Letter from Yellowstone Chief Park Naturalist David de L. Condon (20 February 1956)</td>
<td>37</td>
</tr>
<tr>
<td>8. Letter from Yellowstone Superintendent Rogers (2 March 1956)</td>
<td>38</td>
</tr>
<tr>
<td>9. Letter from Yellowstone Superintendent Rogers (13 March 1956)</td>
<td>39</td>
</tr>
<tr>
<td>10. Letter from Carlsbad Caverns National Park Chief Ranger Thomas Ela (7 September 1956)</td>
<td>64</td>
</tr>
<tr>
<td>11. Letter from Carlsbad Caverns Superintendent R. Taylor Hoskins (17 September 1956)</td>
<td>65</td>
</tr>
<tr>
<td>12. Letter from Yellowstone Administrative Officer Ernie Anderson (26 October 1956)</td>
<td>67</td>
</tr>
<tr>
<td>13. Cryptic note from Yellowstone (February 1957)</td>
<td>74</td>
</tr>
<tr>
<td>14. Memorandum from Carlsbad Caverns Superintendent Hoskins (8 March 1957)</td>
<td>76</td>
</tr>
<tr>
<td>15. Telegram from Carlsbad Caverns Acting Superintendent Cal Miller (31 March 1957)</td>
<td>77</td>
</tr>
<tr>
<td>16. Yellowstone National Park Personnel Action form (7 April 1957)</td>
<td>81</td>
</tr>
<tr>
<td>17. First time slip as a permanent Park Ranger in Yellowstone National Park (7 April 1957)</td>
<td>82</td>
</tr>
<tr>
<td>18. Memorandum regarding research in thermal areas</td>
<td>220-221</td>
</tr>
<tr>
<td>19. Firehole River temperature memo (10 November 1960)</td>
<td>226-227</td>
</tr>
</tbody>
</table>

## PART 1B

<table>
<thead>
<tr>
<th>Document Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. NPS Newsletter article featuring Wayne Replogle (24 February 1975)</td>
<td>351</td>
</tr>
<tr>
<td>23. Memo from E. E. Deao regarding our reassignment (5 April 1965)</td>
<td>370</td>
</tr>
</tbody>
</table>
## LIST OF ILLUSTRATIONS

(photos are by the author unless otherwise credited)

### PART 1A

<table>
<thead>
<tr>
<th>Page</th>
<th>Image Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bunk House for Blister Rust Crew and Trail Crew, Rocky Mountain National Park, Colorado.</td>
</tr>
<tr>
<td>2.</td>
<td>1955 Colorado A &amp; M Range Plant Team</td>
</tr>
<tr>
<td>3.</td>
<td>Fort Yellowstone Double Barracks</td>
</tr>
<tr>
<td>4.</td>
<td>Old Faithful Ranger Dormitory</td>
</tr>
<tr>
<td>5.</td>
<td>Old Faithful Fire Cache</td>
</tr>
<tr>
<td>6.</td>
<td>Old Faithful Horse Barn</td>
</tr>
<tr>
<td>7.</td>
<td>Old Faithful Area Buildings locations Map, 1956-58</td>
</tr>
<tr>
<td>8.</td>
<td>Riley McClelland and Old Faithful mule Ethel</td>
</tr>
<tr>
<td>9.</td>
<td>Shoshone Lake Rangers Nat Lacy and Bert McLaren</td>
</tr>
<tr>
<td>10.</td>
<td>Riley, Old Faithful Fire Control Aid, and his parents, George and Katherine McClelland</td>
</tr>
<tr>
<td>11.</td>
<td>Ranger-Naturalist Harry Truman and daughter Pat, at Lower Falls of the Yellowstone, summer 1941</td>
</tr>
<tr>
<td>12.</td>
<td>NPS cabin in which the Truman family lived at Canyon, summer 1941</td>
</tr>
<tr>
<td>13.</td>
<td>Bear feeding platform and bleachers, Otter Creek, 1941</td>
</tr>
<tr>
<td>14.</td>
<td>Wildlife and Forest Recreation senior students at the Owl Canyon Pinon Grove Natural Area, April 1956</td>
</tr>
<tr>
<td>15.</td>
<td>Old Faithful Cabin #165, the “Dog House,” July 1956</td>
</tr>
<tr>
<td>16.</td>
<td>Old Faithful Naturalist Apartments, Quadraplex, constructed in 1930</td>
</tr>
<tr>
<td>17.</td>
<td>Ranger-Naturalist Bud Lystrup brushing out vandal’s initials in Emerald Pool</td>
</tr>
<tr>
<td>18.</td>
<td>Ranger-Naturalist George Marler measuring water temperature of Fountain Geyser</td>
</tr>
<tr>
<td>19.</td>
<td>Old Faithful Museum in 1929</td>
</tr>
<tr>
<td>20.</td>
<td>Eruption of Old Faithful Geyser viewed through the open door of the 1929 museum, September 1956</td>
</tr>
<tr>
<td>21.</td>
<td>Old Faithful Museum Courtyard in 1933</td>
</tr>
<tr>
<td>22.</td>
<td>Old Faithful Amphitheater in 1932 and 1946</td>
</tr>
<tr>
<td>23.</td>
<td>Morning Geyser in eruption, August 1956</td>
</tr>
<tr>
<td>24.</td>
<td>Bear trail from Upper Rabbit Creek to Rabbit Creek Dump, September 1956</td>
</tr>
<tr>
<td>25.</td>
<td>The water dome (“bubble”) initiating a major eruption of Great Fountain Geyser, 9 September 1956</td>
</tr>
<tr>
<td>26.</td>
<td>An usually high eruption of Great Fountain, following a water dome onset of the magnificent burst</td>
</tr>
<tr>
<td>27.</td>
<td>Buffalo Pool and Diamond Spring, along White Creek, near Great Fountain Geyser, August 1956</td>
</tr>
<tr>
<td>28.</td>
<td>Five Sisters Hot Springs, along White Creek, August 1956</td>
</tr>
</tbody>
</table>
29. Carlsbad Caverns National Park, former Superintendent
Col. Thomas Boles, 3 November 1956 .................................. 70
30. Carlsbad Caverns National Park, Tour Leader
Riley McClelland, 1 February 1957 .................................. 70
31. Our Quarters at Carlsbad Caverns National Park,
28 December 1956 ................................................................ 73
32. NPS Naturalist cabin adjacent to the Boiling River,
Mammoth Hot Springs, Fall 1942 ........................................... 80
33. Annual Spring Ranger Conference in Yellowstone,
17 May 1957 (photo by Jack Ellis Haynes) ......................... 85-86
34. Mary Teresa’s baptism day, 30 June 1957 ......................... 89
35. Old Faithful Quarters 161B, the north side of
Quarters 161, in 1946 and 1957 ................................................. 90
36. The 1921 Old Faithful Museum and Ranger Station
(Building 161), in 1929 ................................................................. 91
37. The 1921 Old Faithful Museum and Ranger Station
(Building 161), in 1936 ................................................................. 91
38. The Fireplace Alcove in Old Faithful Quarters 161B,
in 1923 and 1957 ................................................................. 92
39. An eruption of Old Faithful Geyser viewed through
our living room window (Quarters 161B), August 1960 .......... 93
40. “Our” home in Quarters 161 at Old Faithful, as seen
from Observation Point in August 1955 .............................. 98
41. Pat with baby Mary Teresa, Riley McClelland, and
Father Otho Sullivan in the Old Faithful Fireplace
Alcove (Quarters 161B), 11 August 1957 ................................. 99
42. Crashed aircraft near Old Faithful, 25 August 1957 .......... 100
43. Pat with Mary Teresa, at Glacier Point, Yosemite
National Park, October 1957 ...................................................... 112
44. The Steven Mather class, first ranger training session
at the Yosemite National Park School, Fall 1957 ....... 113-114
45. Pocket Basin thermal area, 13 January 1958 .............. 117
46. Commercial snowcoach (Bombardier) from West
Yellowstone, at Old Faithful, January 1958 ......................... 120
47. Sub-District Ranger Les Gunzel and Riley McClelland
ready to start a ski patrol to Shoshone Geyser Basin,
22 January 1958 ................................................................. 123
48. Les Gunzel crossing a snow bridge across
Shoshone Creek, 22 January 1958 ........................................... 124
49. Snow in front of our front door (Quarters 161B),
as a result of shoveling the roof ........................................... 125
50a,b. View south from kitchen window, Quarters 161B .... 126
51a,b. Old Faithful Geyser, photo taken from (a) roof
of Quarters 161 (1958), (b) web cam (2010) ................. 127
52. Removing snow from roof of Old Faithful Museum,
February 1958 ................................................................. 128
53. OF Geyser erupting in minus 16° F temperature ...............129
54. Grand Geyser in eruption, 21 February 1958 ...............132
55. Snowplane from Jackson, Wyoming, at Old Faithful,
    26 February 1958 ........................................133
56. Mule deer doe ("Baby") and buck passing an eruption
    of Old Faithful Geyser, February 1958 ..................134
57. Mary Teresa in her playpen, in our kitchen at
    Old Faithful (Quarters 161B), February 1958 ...........135
58. Pine marten in our kitchen (Quarters 161B),
    at Old Faithful, February 1958 ........................136
59. Giantess Geyser in eruption, 23 March 1958 ...............141
60. Beehive Geyser erupting on Pat’s birthday,
    24 March 1958 ...........................................142
61. The two ranger families (McClellands and Burns) at
    Old Faithful, winter 1957-58, photo in Quarters 161B ...143
62. Cow elk witnessing a March 1958 eruption of
    Old Faithful Geyser ......................................144
63. Icicle snag near Grotto Fountain Geyser ..................145
64. Pat and Mary Teresa in a bed of yellow monkeyflowers,
    northeast of Hot Lake, 4 May 1958 .....................148
65. Black bear in garbage can, Old Faithful Campground ...149
66. Ranger Bob Perkins marking a black bear,
    summer 1958 ............................................150
67. Fort Yellowstone Hospital, Mammoth Hot Springs .........153
68. Pat and Kevin back home at Old Faithful .................154
69. Kevin’s baptism day, 28 June 1958, in Old Faithful
    Quarters 161B ...........................................155
70. Unnamed hot spring in the Gibbon Hill Group,
    northeast of Artist Paintpots, 12 August 1958 ........156
71. Ranger Bob Perkins at the Shoshone Lake Patrol Cabin,
    28 September 1958 .......................................159
72. Mule deer fawns in our yard at Old Faithful
    Residence 161, January 1959 ..........................162
73. Mary Teresa on the NPS Weasel at the Morning Glory
    Pool parking area, 12 January 1959 ....................163
74. Fairy Falls, 16 January 1959 ................................164
75. Ranger Bob Perkins at Weasel with a thrown track,
    17 February 1959 .........................................167
76. Shoshone Geyser Basin Patrol Cabin, 26 February 1959 ..168
77. Rabbit Creek Hot Spring, March 1959 ........................169
78. The Old Faithful Ranger families, McClellands
    and Perkins, winter 1958-59 ................................170
79. Annual Spring Ranger Conference in Yellowstone,
    4 May 1959 (photo by Jack Ellis Haynes) ...............173-174
80. Old Faithful and Grand Geysers in simultaneous
    eruption (4 January 1959) slide award, May 1959 .......175
81. Snake River (South Entrance), permanent rangers' quarters and ranger station ........................................ 180
82. Fault scarp with vertical displacement of 20 feet, near Hebgen Lake, August 1960 ................................ 181
83. Earthquake Geyser in eruption, August 1959 .............. 182
84a,b. Sapphire Pool pre-quake, in quiescent period between eruptions and typical eruption prior to the 1959 Earthquake ........................................ 183
84c. Major eruptions of Sapphire Pool (Geyser) after the 1959 Earthquake ........................................ 184
84d. Major eruptions of Sapphire were powerful .............. 185
85. Location of weir used to send signals to an automatic recording device, when Old Faithful Geyser erupted .... 190
86. Old bison and human footprints in geyserite, exposed by eruptions from Sapphire Geyser in late 1959 ......... 191
87. Old Faithful Geyser eruption at minus 32° F, 19 January 1960 .................................................. 194
88. Geyserite block from the rim of Sapphire Geyser, and the Sapphire's crater, 1960 ............................... 195
89. A winter eruption of Sapphire Pool .............................. 197
90. Dr. Vincent Schaefer studying electrification fields near Old Faithful Geyser, February 1960 .................. 198
91. District Ranger Elt Davis on ski patrol at Shoshone Geyser Basin, 4 March 1960 ....................... 199
92. Coyote on bird feeder, outside kitchen window, Quarters 161B, February 1960 ................ 200
93. Annual Spring Ranger Conference in Yellowstone, 28 April 1960 ........................................ 204-205
94. Divide Hill Lookout, 7 July 1960 ........................................ 208
95. Mother grizzly captured in the Old Faithful Campground by the Craighead team, summer 1960 ......... 211
96. Sylvan Springs area, August 1957 ............................ 212
97. Evening Primrose Hot Spring in August 1957, and in August 1960, one year after the Earthquake ............ 213
98. Dante’s Inferno Spring, a result of the 1959 Earthquake, August 1960 ........................................ 214
99. Mudflow in Secret Valley, triggered by the 1959 Earthquake .................................................. 215
100. Ranger-Naturalist Bill Lewis observing the height of the Secret Valley mudflow, August 1960 ............ 216
101. Old Faithful Geyser – each eruption is unique .............. 218
102. "Baby," the mule deer doe that was our visitor each of our four winters at Old Faithful, December 1960 .... 228
103. The Three-antlered Elk, with Beehive Geyser erupting in the background, 14 December 1960 ............. 229
104. The Three-antlered Elk at a runoff channel from Old Faithful Geyser, with a coyote close by, December 1960 ................................................................. 230

105. The Three-antlered Elk in the walkway at Quarters 161B, Old Faithful, Christmas 1960 .......... 231

106. Orange-pink eggs of Ephydra flies (Ephydra bruesi) on a microbial mat, February 1961 ...................... 232

107. Mary Teresa, Kevin, and Jane McClelland watching an eruption of Beehive Geyser, February 1961 ........ 235

108. The Three-antlered Elk, dead, near Castle Geyser, 10 March 1961 ...................................................... 238


PART 1B

110. Grizzly cub “Ignatz” begging near Mary Bay, July 1961 ................................................................. 247

111. Rangers Bob Murphy and Dale Nuss in the Lewis Channel, between Lewis and Shoshone Lakes, 25 September 1961 ................................................................. 255

112. The Snag,” on the bank above Yellowstone Lake, across the road from the Lake Ranger Station, after a September snowstorm ........................................ 256

113. “The Snag,” as seen from our front door, Lake Ranger Station Residence, October and November 1961 ... 257

114. Unusual ice formations on the shore of Mary Bay, Yellowstone Lake, November 1961 ...................... 258

115. “The Snag” with first December ice on Lake, and Mary T., Kevin, and Jane, 15 December 1961 ........ 259

116. Elk being “driven” to Crystal Creek Elk Trap by helicopters, December 1961 ........................................ 262

117. Sawing antlers off of a bull elk, February 1962 ...... 265

118. Ranger Darrell Coe near Imperial Geyser, 26 February 1962 ......................................................... 268

119. Old Faithful Geyser eruption at minus 44° F, 27 February 1962 ......................................................... 269

120. Patrol Car in Hayden Valley and snowplow approaching Lake Ranger Station/Residence, 26 March 1962 ...... 272

121. Ranger McClelland removing the winter’s snow accumulation from the roof of the Lake Ranger Station/Residence, 26 March 1962 ........................................ 273

122. McClelland family on Fishing Bridge, 31 March 1962 ... 274

123. Mary Teresa and Kevin wading in Yellowstone Lake, April 1962 ..................................................... 275

124a. Yellowstone Lake, April 1962已经有了 276

124b. Pat’s pastel sketch of Yellowstone Lake ................................................................. 277
125. Annual Spring Ranger Conference in Yellowstone, 27 April 1962 (photo by Jack Ellis Haynes) ........281-282
126. Coyote in Hayden Valley and moose alongside our house, at Yellowstone Lake, Spring 1962 ..........283
127. Yellowstone Lake ice pushed by wind onto the shore at Mary Bay, 10 May 1962 .........................284
128. Yellowstone Lake ice pushed by wind into the NPS boat dock, 11 May 1962 ..........................284
129. Flightless Canada Geese at Turbid Lake, 30 June 1962 .......................................................287
130. Ranger-Naturalists Alan Eliason, Bill Lewis, and Bill Baker near Jones Pass, July 1962 ........290
132. Ranger McClelland releasing a black bear in Hayden Valley, summer 1962 ........................292
133. Brimstone Basin, one mile from the shore of Yellowstone Lake, 20 August 1962 .......................295
134. Our children, with siamese kittens, at Lake, September 1962 ...........................................296
135. Lamar Ranger Station and Residence, October 1962 ....300
136. Lamar Ranger Station and Residence, January 1963 ....300
137. Mary Teresa on gentle horse "Sox," January 1963 ..........301
138. Kevin at our Lamar Ranger Station Residence, 12 January 1963, temperature minus 53.5° F ..........304
139. Elk in the Slough Creek Trap, January 1963 .........307
140. Rangers McClelland and Hughes at our camp near Wrong Creek, 12 March 1963 ..................311
141. Annual Spring Ranger Conference in Yellowstone, 26 April 1963 ........................................312-313
142. Ranger-Naturalist Wayne Replogle (Rip), at a wickiup, 27 June 1963 ........................................316
143. Ranger-Naturalists Bill Baker and Bill Lewis on Sepulcher Mountain, 16 July 1963 ...............319
144. Pat on the way down the trail, from the Snake River Fire Lookout, 31 July 1963 ..................320
146. The 1881 Bathhouse, viewed across Queen's Laundry Hot Spring, Sentinel Meadows, photographed in 1955 ....322
147. The McClelland family at Norris, January 1964 ........329
148. Kevin McClelland in icicle formations created by Steamboat Geyser, January 1964 ...............329
149. Early morning view of Mt. Sheridan and Heart Lake Patrol Cabin, 25 February 1964 ...............330
150. Ranger Tom Milligan crossing Witch Creek, at the inlet to Heart Lake, 24 February 1964.................331
151. Temporarily back in Old Faithful Quarters 161B, April 1964..................................................335
152. The McClelland children viewing an eruption of Old Faithful Geyser, April 1964.........................336
153. Park Naturalist McClelland, and Fox, a good horse.....337
154a,b. Silk screen posters prepared by artist Bill Chapman, for (a) hikes in the North District and (b) evening program topics at amphitheaters throughout YNP, summer 1964.........................338-339
155. Rustic signs for the Hot Spring Terrace features.....342
156. Trumpeter swan cygnets on Swan Lake Flat, 5 July 1964..................................................343
157. Ranger-Naturalist Bill Lewis on the summit of Electric Peak, 8 July 1964..................................344
158. Minerva Hot Spring Terrace, on the Mammoth Lower Terraces..............................................347
159. Bryan Harry and R. McClelland, near Republic Pass, 18 July 1964...........................................348
160. Ranger-Naturalist Replogle in The Hoodoos, 9 August 1964..................................................349
161. Ranger-Naturalist Bill Baker on Specimen Ridge, 21 August 1964.............................................352
162. Lightning photographed from the Norris Geyser Basin parking area, August 1964.........................353
163. Ranger-Naturalist Wayne Replogle at his easel, at home in Kansas.............................................354
164a. Steamboat Geyser vicinity with the landscape covered with glare ice, 14 January 1965 .............358
164b. Ice laden tree after the 14 January 1965 eruption of Steamboat Geyser........................................359
165. Mary Teresa, marveling at the “icicles” near Steamboat Geyser, 14 January 1965 .........................360
166. Fragments of siliceous sinter on ice pedestals, after an eruption of Steamboat Geyser, 14 January 1965.................361
167. Icicle decorated trees near Steamboat Geyser, After the 14 January 1965 eruption.........................362
168. Assistant Chief Ranger Ken Ashley, at the Shoshone Geyser Basin Patrol Cabin, 23 February 1965.....365
169. The class of spring 1965 at the Steven T. Mather Training Interpretive Center, Harpers Ferry, West Virginia..............................................................368-369

Closing Quote illustrated..........................................................373a-373b
# LIST OF TABLES

**PART 1A**

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Data from automatic recorder, Old Faithful Geyser eruptions, 1959-60</td>
<td>206</td>
</tr>
<tr>
<td>2.</td>
<td>Data from automatic recorder, Old Faithful Geyser eruptions, 1960-61</td>
<td>237</td>
</tr>
<tr>
<td>3.</td>
<td>Commercial snow coach and private snowplane trips to Old Faithful from West Yellowstone, winters 1957-58 through 1960-61</td>
<td>239</td>
</tr>
<tr>
<td>4.</td>
<td>Weather variables recorded during our four winters at Old Faithful, 1957-58 through 1960-61</td>
<td>240</td>
</tr>
</tbody>
</table>

**PART 1B**