The Historical Development of Wasatch Trails in Salt Lake County

Clyde Brian Hardy

Brigham Young University - Provo

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Environmental Sciences Commons, and the Mormon Studies Commons

BYU ScholarsArchive Citation
Hardy, Clyde Brian, "The Historical Development of Wasatch Trails in Salt Lake County" (1975). Theses and Dissertations. 4759.
https://scholarsarchive.byu.edu/etd/4759

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.
THE HISTORICAL DEVELOPMENT OF WASATCH TRAILS
IN SALT LAKE COUNTY

A Thesis
Presented to the
Department of Recreation Education
Brigham Young University

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Clyde Brian Hardy

August 1975
This Thesis by Clyde Brian Hardy is accepted in its present form by the Department of Recreation Education of Brigham Young University as satisfying the Thesis requirement for the degree of Master of Arts.

Benjamin F. DeHoyos, Committee Chairman

Jay Naylor, Committee Member

William J. Hafen, Department Chairman

16 July 75
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>viii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>STATEMENT OF THE PROBLEM</td>
<td>3</td>
</tr>
<tr>
<td>DELIMITATIONS</td>
<td>4</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>4</td>
</tr>
<tr>
<td>JUSTIFICATION</td>
<td>6</td>
</tr>
<tr>
<td>DEFINITIONS</td>
<td>9</td>
</tr>
<tr>
<td>2. REVIEW OF LITERATURE</td>
<td>11</td>
</tr>
<tr>
<td>OLD SETTLEMENT TRAILS</td>
<td>11</td>
</tr>
<tr>
<td>OTHER TRAILS</td>
<td>14</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>18</td>
</tr>
<tr>
<td>3. PROCEDURE</td>
<td>19</td>
</tr>
<tr>
<td>ORGANIZING FOR HISTORICAL INVESTIGATION</td>
<td>19</td>
</tr>
<tr>
<td>CLASSIFICATION</td>
<td>20</td>
</tr>
<tr>
<td>LINKAGE</td>
<td>20</td>
</tr>
<tr>
<td>BALANCE</td>
<td>21</td>
</tr>
<tr>
<td>IDENTIFICATION OF SOURCES</td>
<td>21</td>
</tr>
<tr>
<td>PRIMARY SOURCES</td>
<td>21</td>
</tr>
<tr>
<td>SECONDARY SOURCES</td>
<td>22</td>
</tr>
<tr>
<td>TERTIARY SOURCES</td>
<td>22</td>
</tr>
<tr>
<td>4. HISTORICAL DEVELOPMENT OF WASATCH TRAILS</td>
<td>25</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>ANTECEDENTS OF WASATCH TRAILS</td>
<td>25</td>
</tr>
<tr>
<td>EARLY LUMBERING</td>
<td>28</td>
</tr>
<tr>
<td>LAMBS CANYON</td>
<td>29</td>
</tr>
<tr>
<td>MILL CREEK CANYON</td>
<td>30</td>
</tr>
<tr>
<td>BIG COTTONWOOD CANYON</td>
<td>35</td>
</tr>
<tr>
<td>LITTLE COTTONWOOD CANYON</td>
<td>51</td>
</tr>
<tr>
<td>BELLS CANYON</td>
<td>53</td>
</tr>
<tr>
<td>EARLY LUMBERING - CONCLUSIONS</td>
<td>55</td>
</tr>
<tr>
<td>LIVESTOCK OPERATIONS</td>
<td>55</td>
</tr>
<tr>
<td>PIONEER RECREATION</td>
<td>57</td>
</tr>
<tr>
<td>PHILOSOPHY</td>
<td>57</td>
</tr>
<tr>
<td>FIRST MENTIONED RECREATION</td>
<td>61</td>
</tr>
<tr>
<td>CANYON RESIDENTS AND EARLY RESORTS</td>
<td>62</td>
</tr>
<tr>
<td>CELEBRATIONS AT BRIGHTON</td>
<td>68</td>
</tr>
<tr>
<td>ARTISTS, AUTHORS, AND NATURE LOVERS</td>
<td>72</td>
</tr>
<tr>
<td>SCOUTING</td>
<td>82</td>
</tr>
<tr>
<td>FATHERS AND SONS' OUTINGS</td>
<td>85</td>
</tr>
<tr>
<td>MINING DEVELOPMENTS</td>
<td>87</td>
</tr>
<tr>
<td>EARLY MINING IN UTAH</td>
<td>87</td>
</tr>
<tr>
<td>MINING IN THE COTTONWOODS</td>
<td>91</td>
</tr>
<tr>
<td>WATER COLLECTION SYSTEMS</td>
<td>95</td>
</tr>
<tr>
<td>THE NEED FOR WATER</td>
<td>95</td>
</tr>
<tr>
<td>UPPER BELLS CANYON RESERVOIR</td>
<td>97</td>
</tr>
<tr>
<td>LOWER BELLS CANYON RESERVOIR</td>
<td>99</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>RED PINE LAKE RESERVOIR</td>
<td>100</td>
</tr>
<tr>
<td>WHITE PINE LAKE RESERVOIR</td>
<td>100</td>
</tr>
<tr>
<td>LAKE PHOEBE - MARY RESERVOIR, LAKE MARTHA</td>
<td>101</td>
</tr>
<tr>
<td>TWIN LAKES RESERVOIR</td>
<td>103</td>
</tr>
<tr>
<td>LAKE BLANCHE, LAKE FLORENCE, AND LAKE LILLIAN</td>
<td>104</td>
</tr>
<tr>
<td>RESERVOIRS</td>
<td></td>
</tr>
<tr>
<td>CCC DAYS</td>
<td>105</td>
</tr>
<tr>
<td>1943 - PRESENT</td>
<td>113</td>
</tr>
<tr>
<td>TRAIL MAINTENANCE</td>
<td>113</td>
</tr>
<tr>
<td>NEW TRAIL CONSTRUCTION</td>
<td>116</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>119</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>119</td>
</tr>
<tr>
<td>STATEMENT OF THE PROBLEM</td>
<td>119</td>
</tr>
<tr>
<td>SUB-PROBLEMS</td>
<td>119</td>
</tr>
<tr>
<td>FINDINGS</td>
<td>122</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>124</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>125</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>126</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>136</td>
</tr>
<tr>
<td>A. HIKERS TRAIL MAP -- WASATCH NATIONAL FOREST</td>
<td>137</td>
</tr>
<tr>
<td>SALT LAKE RANGER DISTRICT</td>
<td></td>
</tr>
<tr>
<td>B. U.S. GEOLOGICAL SURVEY QUADRANGLE MAPS SHOWING</td>
<td>139</td>
</tr>
<tr>
<td>THE AREA OF CONCERN IN THIS THESIS</td>
<td></td>
</tr>
<tr>
<td>C. MAPS INDICATING THE APPROXIMATE LOCATIONS OF CANYON MILLS</td>
<td>141</td>
</tr>
<tr>
<td>D. REGIONAL CIVILIAN CONSERVATION CORPS REPORTS</td>
<td>149</td>
</tr>
<tr>
<td>SHOWING TRAIL DEVELOPMENT IN UTAH</td>
<td></td>
</tr>
</tbody>
</table>
E. FEDERAL CIVILIAN CONSERVATION CORPS REPORTS
SHOWING ACCOMPLISHMENTS IN UTAH. 151

VITA 154
**LIST OF FIGURES**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pioneer Logging Operations</td>
<td>34</td>
</tr>
<tr>
<td>2.</td>
<td>Pioneer Logging Operations</td>
<td>34</td>
</tr>
<tr>
<td>3.</td>
<td>Snow Sheds in Little Cottonwood Canyon</td>
<td>41</td>
</tr>
<tr>
<td>4.</td>
<td>Remnants of Logging Days</td>
<td>50</td>
</tr>
<tr>
<td>5.</td>
<td>Rustic Mill</td>
<td>54</td>
</tr>
<tr>
<td>6.</td>
<td>Livestock Operations</td>
<td>56</td>
</tr>
<tr>
<td>7.</td>
<td>Plaque Commemorating the Settlement of Brighton</td>
<td>65</td>
</tr>
<tr>
<td>8.</td>
<td>Lake Mary</td>
<td>76</td>
</tr>
<tr>
<td>9.</td>
<td>Lake Minnie</td>
<td>79</td>
</tr>
<tr>
<td>10.</td>
<td>Mountain Lake</td>
<td>84</td>
</tr>
<tr>
<td>11.</td>
<td>Abandoned Mining Road</td>
<td>94</td>
</tr>
<tr>
<td>12.</td>
<td>Miner's Cabin and Trail Remnant</td>
<td>94</td>
</tr>
<tr>
<td>13.</td>
<td>Construction of the Lake Mary Dam</td>
<td>102</td>
</tr>
<tr>
<td>14.</td>
<td>CCC Project -- Entrance into Mill Creek Canyon</td>
<td>111</td>
</tr>
<tr>
<td>15.</td>
<td>CCC Project -- Bridge</td>
<td>111</td>
</tr>
<tr>
<td>16.</td>
<td>CCC Project -- Spruce's Lodge</td>
<td>111</td>
</tr>
<tr>
<td>17.</td>
<td>Youth Conservation Corps Project -- Trail Bridge</td>
<td>114</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

The volume and diversity of research required in the writing of this thesis obligates the author to acknowledge many agencies whose help was indispensable in arriving at the finished product.

The Wasatch Forest Service was particularly helpful and cooperative, especially the Salt Lake Ranger District. Thanks is extended for free access to files, photographs, and personnel for consultation. Other governmental agencies to whom the author is indebted include the Federal Archives and Records Center in Denver (particularly the help of Robert Svenningsen), and the State Department of Water Rights.

The staff of specialized libraries have been kind in extending every opportunity for researching documents and suggesting interview sources. Three deserve special mention: the Western Americana section of the University of Utah Library, the Utah Historical Society Library, and the L.D.S. Church Historical Department.

Appreciation is extended to the faculty of the College of Recreation Education for their council and encouragement.

The author is grateful for the photographic input of William Campbell and Bill Woodruff that made possible the inclusion of pictures in the body of the thesis.

A special thanks goes to the author's wife and family for interest and patience that were manifested during the course of the entire undertaking.

viii
Chapter 1

INTRODUCTION

There is a group of individuals for whom the call of a trail is akin to the cry of a child, and just as the latter elicits a tender response from the solicitous mother, the former evokes a near-consuming urge to follow -- to explore -- to discover.

Those who answer the beckoning call do so in terms at once personal: for one may find companionship as well as solitude, exhilarating activity as well as quiet contemplation, and self-discovery as well as nature-discovery. But whatever the reason for yielding to the lure of the trail, the acknowledged satisfactions are usually deep and lasting. Indeed, they are associated with poignant feelings and nostalgic remembrance.

In a way, the experience of the trail is much like that of the arts, i.e., the satisfactions derived are heightened as the knowledge of the elements that make up the experience increase.

One element central to the trail experience is nature herself. The more we know and understand, the more we are able to see relationships: patterns of interdependence, struggles for survival, methods of perpetuation, changes due to seasonal transition, etc. Nature is much like a library where time brings a constant accession of new books. For one who can read such writings there are "tongues in trees and sermons in stones" (99). Nor is this charged awareness limited to the man-land community, but overlaps luxuriantly into the man-man community.
Another constituent element is human relationships. It has long been acknowledged, at least by those who leave the trappings of civilization behind, that the mountain retreat or desert quietude foster meaningful personal relationships. Something there is about such places that break down defense mechanisms and reduce artificiality.

Still another element is the trail itself. Where did it come from? Who built it? When was it established? Trails have played a significant role in the development of America. Besides providing thoroughfares for the conquest and settlement of the west, they served as pathways which helped to develop in the pioneers a sense of "continental belonging to the land" (90:23). And, more than this, the famous frontier historian, Frederick Jackson Turner, argued that

American Democracy. . . was not carried in the "Sarah Constant" to Virginia, nor in the "Mayflower" to Plymouth. It came out of the American forest, and it gained new strength each time it touched a new frontier (109:293).

It is the contention of the writer that a knowledge of trail development can significantly contribute to the total experience of the trail user. In a day when it has become important to provide trail interpretation, it is a shame that this aspect has been so woefully neglected. But there is a movement afoot to rectify this deficiency. This movement found congressional expression in the National Trails System Act of 1968. This act provides for the creation of a national trail system, the beginning components of which are the Appalachian Trail and the Pacific Crest Trail. It encourages the addition of historic and scenic trail components as they comply to the standards required by the act. Since 1968 a few historical studies
have been completed on a limited variety of trails in order to secure congressional designation under the provisions of the act.

This study does not undertake such a large concern as suggesting the incorporation of Wasatch trails in Salt Lake County in the national system, but, borrowing from the emerging emphasis, attempts to provide the historical background on the above-mentioned trails.

STATEMENT OF THE PROBLEM

The hiking trails on Wasatch Forest lands in Salt Lake County have not been the subject of critical historical investigation. Admitting the probability of game trail and Indian footpath precursors, the origin of the majority of these trails belong to the preceding century is closely tied to the efforts of early pioneers who utilized canyon timber, ran stock up various forks, impounded mountain water, and sought recreational respite. In addition, miners, CCC enrollees, and the U.S. Forest Service played a role in the Wasatch Trail Story. The problem undertaken in this thesis was to tell that story.

Sub-Problems

In researching historical documents certain sub-problems became strikingly apparent and were clearly identifiable. They were conveniently classified into seven general areas:

1. early lumbering
2. livestock operations
3. pioneer recreation
4. mining developments
5. water collection systems
6. CCC days
7. 1943 - present

These areas, with the possible exception of the last, are not mutually exclusive chronological periods. On the contrary, they are categorical in nature, and each, except the last, suggests an area of human activity. It was found that these six activities provided the primary thrusts for trail development in the area delimited for study. The seventh sub-problem area traces trail development from 1943 to the present.

DELIMITATIONS

This study was focused on wildland hiking trails located on Wasatch Forest lands in Salt Lake County, Utah. Procedurally, the study was delimited to a critical analysis of written documents and personal interviews. Since the study was historical in nature, one more delimiting factor was necessary -- time. The period of concern was 1847 to the present.

LIMITATIONS

A study such as this was, of necessity, burdened with serious limitations, the primary one being the paucity of written documents -- especially for the earlier periods of trail florescence. There are reasons for this. First, in earlier periods no particular value was placed on the trail per se, except as a link allowing access to areas of interest (usually economic interest). So rather than being an end in itself, it was merely a means to an end, and as such was often deplored by users who wanted easier means of travel. Certainly the trail
was not to be considered of sufficient importance for historical recording.

Secondly, trail building, in some instances, occurred over a rather lengthy period of time and was the product of multiple agencies, groups, or individuals, none of which considered themselves originators of the trail. But the cumulative effect was trail development -- trail development without written history.

Associated with the above-mentioned reasons were the changing economic patterns and interests and the concommitant advances or retreats of civilization that came in their wake. For example: as economic opportunity expanded, some trails were widened and surfaced becoming roads, and, on the other hand, as electricity and modern conveyances exerted their influences on forest-based industries, some trails fell out of use and became obliterated. All of this suggests that some trails of former importance may be inadvertently overlooked by the author.

A modern factor which continues to exert a limiting influence over hiking trail histories is the focusing of interest on the area surrounding the trail -- plant taxonomy, geology, ecology, etc. -- to the exclusion of the trail itself. The author readily admits that these other interests are weighty and today may provide immediate rationale for the trail's existence, but he feels that these ought to have been done, and the other not to have been left undone (Matt. 23: 23).

A final limitation must be considered, namely, that due to the lack of written trail histories, some interviews were required in completing this study. Efforts were made, wherever possible, to compare
verbal responses to each other and to written documents in order to expose discrepancies and lend authority to areas of agreement.

JUSTIFICATION

In justifying a study of the development of Wasatch Trails in Salt Lake County, Utah, three important factors demanded consideration: first, the historical significance of early trails; second, the emerging prestige of trails; and third, the use-potential of trails in the area delimited for study.

"The story of the American trail is as old as the story of America itself. It was the American trail that transformed a frontier into a future" (85:1). With these words the Honorable C.B. Morton, Secretary of the Interior, began the proceedings of the National Symposium on Trails held June 2-6, 1971. Nor was he the first American by any means to recognize the tremendous impact of the trail on America. His words were an echo of numerous frontier historians who have declared for decades the primal significance of trails as the avant-garde of American civilization.

While it is true that many American trails have continental significance (Santa Fe Trail, Oregon Trail, Mormon Trail, etc.), and have been studded with historical markers and monuments, it is none the less true that trails of lesser length have local or regional significance even though they are often barren of any trace of historical recognition. Such is the case at the western terminus of the Mormon Trail, for the men and women who fled Nauvoo or emigrated from other places filled the valley and then spilled out at the ends in a procession that colonized a Mormon corridor connected by the quiet platitude
of rutted trails.

The United States National Park Service declared in a report resulting from its surveys:

The movement of the Mormons to the valley of the Great Salt Lake was one of the most dramatic events in the history of American westward expansion. With the Mormon migrations, not only the motivation of westward movement shifted, but the character of the emigrant also changed. No longer were the migrations composed solely of an agrarian people, but shopkeepers, artisans, mechanics, and skilled persons of all types made the trek. The economic motive, so dominant among the earlier emigrants, gave way to the desire to worship in peace and to live in isolation from those who would deny this right (121:12).

Trails, then, are more than pathways -- they are more than rutted transportation links connecting villages, lakes, points of interest, etc. -- they are "... America's colorful link with its historic past" (85:6), and as such are anthologies of human endeavor, inseparably connected to both land and people.

Many of the trails of the Wasatch in Salt Lake County are integrally connected to the colonization efforts of the Salt Lake Valley. Arising, as they do, from the struggles of early pioneers to wrest a living from semi-arid land, they are of historical significance. Their story should be told.

The second consideration for the justification of this study enumerated in the beginning paragraph was the emerging prestige of trails. Many indicators arising from diverse sectors of American life disclose the growing popularity of trails and trail-related activities.

Looking first to governmental sectors, one discovers that government has played a leading role in trail development, management, maintenance, and protection. During New Deal days, for example, the Civilian Conservation Corps in reporting foot trail development from
April 5, 1933, through March 31, 1941, showed 12,678 miles of new trail developed, and 38,058 miles of trail maintained (114:13). Current reports indicate that the National Park System contains almost 12,000 miles of scenic trails of which 6,591 are well marked and maintained (81:19). National Forests provide approximately 165,000 miles of trails, of which 112,000 miles are standardized (81:19). As early as 1945, attempts were made to establish a National Trails System (112:19). Successive attempts were also made.

Notwithstanding the rather lengthy period of governmental involvement, there was a marked upsurge in governmental activity beginning with the Nationwide Trail Study which found legislative fruition in the National System Trails Act of 1968. Since that time several trail components have been admitted into the system, and numerous studies are currently in progress. A National Trail Symposium has been held with others in the opening. Federal programs have solicited and encouraged state support. In Utah, the State Historical Society has completed a study on the route of the Mormon Battalion, seeking designation as a National Historic Trail. In the Utah State Comprehensive Outdoor Recreation Plan, the authors have logged the number of miles of Utah trails by county, and forecasted trail needs for the near future (some of which are considered urgent). The Plan also calls for a state-wide trail system study (47:9.01-9.05).

Moving to the media sector: since 1968, numerous books and articles attest to the growing popularity of trails. Card catalogues are becoming crowded with hiking and backpacking reference cards, and periodical indexes which were formerly devoid of trail articles are now keeping pace with the trends. Recently in Utah, the Wasatch
Mountain Club has published interpretive trail guides to Wasatch trails and Casche County trails.

In the economic sector the response to this growing popularity reflects the market's ability to quickly proliferate into areas where profits may be gleaned. Consider for a moment the number of businesses that stock trail supplies. Consider, also, the growing diversity of trail implements available.

All of these sectors, and others which could be cited, indicate an unprecedented prestige for trails of all types. Perhaps, now, the trail has come of age, and should be considered of sufficient worth for historical interpretation.

The final consideration dealt with in justifying the need for this study was the use-potential of the trails in the area delimited. On April 1, 1970, Utah's population numbered 1,059,273. Of these, 43% resided in Salt Lake County, and a full 78% were concentrated in the four-county area of Utah, Salt Lake, Davis, and Weber counties. This means that more than three-fourths of the inhabitants of Utah live within fifty miles of Salt Lake City (97:66). Based on this concentration, the use-potential of Wasatch Trails in Salt Lake County is high. It was therefore concluded that this would be a good place to begin writing trail histories.

DEFINITIONS

Trail. In this study this term will indicate a well established path limited to foot travel unless specified otherwise in a particular context.
Travelway. The United States Forest Service specifies that this term refers to the "clearing width which is necessary to permit unobstructed travel" (116:7730.6, Item 8).

Tread. This term will be used to specify that portion of the trail that is used for travel.

National Recreation Trails. "Trails established as provided in section 4 of the National Trails System Act" (116:7730.6, Item 2).

National Scenic Trails. "Trails designated by the Congress as national scenic trails as provided in section 5 of the National Trails System Act" (116:7730.6, Item 2).

Connecting Trails. "Designated components of national recreation or scenic trails that provide points of access to, or connections between, such trails" (116:7730.6, Item 2).

Side Trails. This definition, as those above, comes from the United States Forest Service:

Designated components of national recreation and scenic trails. Side trails are located entirely on lands administered by the Secretary of the Interior or Secretary of Agriculture and may provide users opportunities to view exceptional scenic, historic, natural, or cultural features. Side trails may also allow dispersion of travelers to such things as overnight camping, drinking water, or resting places (116:7730.6, Item 2).
Chapter 2

REVIEW OF LITERATURE

The problem considered in this study was the development of Wasatch Trails in Salt Lake County. Given the nature of the study and the attendant limiting factors associated with the compilation of trail histories (see Limitations, Chapter 1) it was difficult not only to write a chapter devoted to literature research, but to decide on an expedient means of dividing such a chapter into meaningful sections. The usual means of division -- historical overview, related studies, and specific related research -- was considered, as was chronology, and other arbitrary means of division. Without belaboring the inadequacies inherent in these, suffice it to say that they were discarded in favor of an approach that lumps the available literature into fairly isolated sections: old settlement trails, and other trails.

OLD SETTLEMENT TRAILS

It should be obvious to anyone with even a cursory knowledge of American History that the bulk of trail research has carefully followed the corridors of westward expansion, and these corridors have been dealt with copiously. Library shelves are replete with volumes that have as their primary concern the history of these trails and the people who used them. The significance of old settlement trails is such that historic monuments and markers dot their routes and interpret to the modern follower the panorama of westward expansion. Consider
the following taken from a marker along the Oregon Trail:

Wagon wheels cut solid rock, carving a memorial to Empire Builders. What manner of men and beasts impelled conveyances weighing on those grinding wheels? Look! A line of shadows crossing boundless wilderness.

Foremost, nimble mules drawing their carts, come poised Mountain Men carrying trade goods to a fur fair — the Rendezvous. So, in 1830, Bill Sublette turns the first wheels from St. Louis to the Rocky Mountains! Following his faint trail, a decade later and on through the 1860's, appear straining, twisting teams of oxen, mules and heavy draft horses drawing Conestoga wagons for Oregon pioneers. Trailing the Oregon-bound avant garde but otherwise mingling with those emigrants, inspired by religious fervor, loom footsore and trail worn companies — Mormons dragging or pushing handcarts as they follow Brigham Young to the Valley of the Salt Lake. And, after 1849, reacting to a different stimulus but sharing the same trail, urging draft animals to extremity, straining resources and often failing hurry gold rushers California bound.

A different breed, no emigrants but enterprisers and adventurers, capture the 1860’s scene. They appear, multi-teamed units in draft — heavy wagons in tandem, jerkline operators and bull-whackers de-livering freight to Indian War outposts and agencies. Now the apparition fades in a changing environment. Dimly seen, this last commerce serves a new, pastoral society: the era of the cattle baron and the advent of settlement blot the Oregon Trail (119).

Among the many writers who concern themselves with old settlement trails, some are inclined to be oriented toward the trail itself while others focus attention on the westward expansion treating the trail only incidentally. The author of this study chooses to consider briefly a sampling of the former.

Richard Dunlop maintains that at least four of our famous western trails antedate American settlers, trappers, or explorers. He argues that the Indians blazed three trail systems across the continent from the Missouri River to the Pacific. The first of these is designated as the Big Medicine Trail which climbed the Rockies to South Pass following the Platte, the North Platte, and the Sweetwater, thence to the Green River Valley, then looping the Wasatch Mountains, traced
the Bear and Snake Rivers to Hells Canyon, and from thence northwest to the Columbia. This trail, he suggests, entered history as the Oregon Trail. The second trail was a waterway trail. Following the Missouri and the Yellowstone Rivers, thence across mountain passes to the Columbia, the trail is the one followed in the main by Lewis and Clark. The third trail is designated as the Southern Trail, and Dunlop contends that much of this trail was incorporated into the Santa Fe and Butterfield trails (24:1-2).

Douglas Waitley, arguing that Western trails were important for only fifty years as a means of westward expansion (until the advent of the trans-continental railroad), suggests that:

During two hundred and fifty earlier years (from the days when the first puritans pushed out on the Old Connecticut Path to when migrants on the famed National Road broke out of the forest and into the awesome praries of Illinois) the eastern third of the United States was being criss-crossed by scores of roads, many of which played far more important roles in the survival and development of America as a nation than the short-lived Western Trails (127:vii).

Waitley's book traces the history of these eastern roads, and to some extent the trails that preceded them. Most of these trails came into existence as narrow Indian footpaths, however, Waitley does point out a few notable exceptions, such as the trail development efforts of Daniel Boone (127:1-319).

Closely allied in spirit, but somewhat different in scope, Edith Dorian and W.N. Wilson trace the history of famous settlement trails. Written for a younger audience, the book delightfully progresses from one trail to another with a gusto and excitement that would captivate almost any reader. The authors maintain that in America the

... "pathless wilderness"... was not a pathless wilderness at all; it was penetrated in every direction by thousands of trails
linking together all parts of what is now the United States. They were Indian trails, of course, but many of them had originally been made by the buffalo. Indeed, buffalo roads played a vital role in the story of America (23:17).

The authors proceed to give an account of eight early settlement trails including Indian backgrounds, early efforts of trappers, traders, or explorers, and highlights of western migration over these established routes. The book sacrifices detail in favor of fast-moving drama, but, at the same time, does not compromise fact (23:1-87).

It would be easy to multiply examples of old settlement trail literature: diaries, journals, guides, and historical commentaries abound. In fact, an American Trail Series comprised of ten volumes by ten contributing authors has been written, and current periodical guides pulse a continuing interest in these arteries of the past. Admitting, then, that efforts have been made to systematically research these famous trails, let us turn our attention to other trails.

OTHER TRAILS

Turning our attention from early settlement trails, two trails demand immediate recognition: the Appalachian Trail and the Pacific Crest Trail. Both north-south in course, but a continent apart, these trails, as one might expect, have been the subject of historical investigation. Their stories require research on at least two distinct levels. Chronologically speaking, these levels may be classified as recent and early. Recent refers to trail history since the germ idea to weld existing trails into one continuous band stretching through many states (for the Appalachian Trail, 1921 to the present; for the Pacific Crest Trail, 1926 to the present). Early refers to trail...
histories prior to the idea of welding separate trail components together.

Brief accounts of the recent history of the Appalachian Trail usually appear whenever it is the subject of a book or article. The nationwide study entitled *Trails for America*, which preceded the federal legislation of 1968, contains a concise statement on recent trail history (112:32), as does *The Appalachian Trail*, a National Geographic Society publication (28:10-11).

According to Fisher, the Appalachian Trail is not an old pioneer track, but "... was born only half a century ago, the brain child of a remarkable gentleman named Benton MacKaye" (28:10-11). So, strictly speaking, the early history of this trail is non-existent. This may or may not be so, but if one includes the myriad trails that connect thereto, then early history has a potential that is rich indeed. Some connecting trails have been quite vigorously investigated, such as trails in the White Mountains (88), the neighboring Catskills (59:8-10), and the more distant Adirondacks (89). It seems reasonable to assume that if western libraries were more complete, modest historical interpretation would be available for trails in the Green Mountains, the George Washington National Forest, the Pisgah National Forest, the Smoky's and other points south. Fisher's book furnishes some historical background on connecting trails and is reservedly rich on historical highlights that occurred on or near the course of the Appalachian Trail. His work detects the presence of trail studies.

The author of this study suspects, however, that these trail histories are far from complete, judging, at least, from what has been available for perusal. Kerr and Valkenburgh state that in the
Catskills "as in the Adirondacks, eventual (trail) development occurred along water-ways, with lumbering playing an important part as did other endeavors" (59:8), and yet in these areas little mention is made of economic ventures in historical trail interpretations.

The recent history of the Pacific Crest Trail is sometimes conflicting. Hazard sees the trail's birth occurring in 1926, and involving a Miss Catherine Montgomery, himself, and a Mr. Fred W. Cleator (51:57), while Edwards, supplying the date of 1932, maintains that Clinton C. Clark is the "father of the trail" (25:748). The later date, and Mr. Clark enjoy the greater acceptance. A work devoted to recent history is still not available.

The early story of the component trails that were welded into the Pacific Crest Trail have never been adequately told, nor have the stories of the miles of connecting trails. In reviewing the many guide books associated with parts of the trail, the brief and infrequent mention of trail origins and history show the apparent lack of research. It is recognized, of course, that the historic events leading to the settlement of much of this region were disjointed and lacked continuity in time -- the fur trade, the gold rush, early missionary labors, etc.: things that appeared and disappeared without a resident population who could chronicle and record -- all leave the modern historian the difficult task to interpret piecemeal from the meager vestiges surviving to present times.

Leaving these two trails of national prominence, one finds a virtual lack of trail histories, except for a few bright spots that momentarily penetrate the dearth. The Boy Scouts of America have identified, and developed files on one hundred fifty historic trails of
varying lengths (112:20). Recent interest in historical sites and ghost towns has helped to bring the history of some trails to light. For example: Gloria Allred describes the Texas Woodland Trail project, begun as an educational program, and she supplies a brief historic background on three of the trails -- one associated with the first oil well in Texas, and two others with ghost towns (1:24-27). Her article is by no means unique. But perhaps the most potent single factor contributing to the growing interest in trail histories is the action of the federal government in establishing the National Trails System. When senators begin to refer to trails as "strips of history" (86:26-27), and the Secretary of the Interior recommends trail studies (albeit a water trail), where sixteen of the twenty-two major themes of American history outlined by the National Park Service may be studied (111:17), when a large corporation "determines that those sites of timeless interest to all will not be torn down, paved or otherwise erased from the pages of living history" (78:18), and when, in Utah, three interpretive trail guides jump into existence since 1968, something has provoked action. In the words of G. Douglas Hofs, Jr., Director of the Bureau of Outdoor Recreation:

Today, the American trail has been rediscovered -- almost with a vengeance. Once again the trail molds and meanders in the destinies of America's outdoor traditions (53:41).

It is hoped by the author of this study that this review of literature has accomplished two ends. First, that it has aroused in the reader an appreciation for American trails and their dramatic contribution, and second, that it has awakened in some the desire to not only leave the confines of the metropolis to discover winding paths, but to answer the questions: Who made the trail? When was it estab-
lished? Why was it made? How was it made? What has happened through the years? What historic points does it connect to? What is the historical background of the area through which it passes? Who are the people who have used the trail? What are their philosophies? and What are the important documents related to trail history?

SUMMARY

In summary, much has been written regarding the history of early settlement trails. No one would question their place of prominence in American History. On the other hand, with the possible exception of the Appalachian Trail and the Pacific Crest Trail, very little trail history is extant, and that information which is available often ignores early developments -- those which preceded recreational interests. In Utah, there are no trail histories as such.
Chapter 3

PROCEDURE

This chapter is devoted to methods and procedures that were brought to bear in the investigation of trail development on Wasatch Forest lands in Salt Lake County.

ORGANIZING FOR HISTORICAL INVESTIGATION

It is the contention of Robert V. Daniels that the first imperative in historical research is the organization of the topic -- not elaborately nor rigidly, but simply and loosely -- into a basic outline (21:79-80). Implicit in this basic requirement is the need for a general acquaintance with the topic to be considered, for it would be difficult indeed to arrive at a meaningful pattern of organization without a fundamental understanding of what is likely to be encountered. Siegfried Kracauer, commenting on this need for flexible organization has this to say:

The historian cannot assemble the evidence needed unless he is guided by an idea, however vague, of what he wants to recover of the past and why he wants to recover it; and reversely, the evidence he gathers may in turn oblige him to modify his original hunches. So it goes on, spontaneity constantly altering with receptivity (60:47).

Daniels points out that in the organization process there are three basic characteristics. First, classification -- which he suggests may be chronological, geographical, or topical. Second, linkage (logical or factual connection between historical events) -- which may
be chronological or contemporaneous. And third, balance — which he stresses, is "not to neglect an area of significance" (21:43-45).

A thorough investigation of trail development has yielded the basic pattern of organization found below.

**Classification**

It was discovered after the period of research that the data fell rather naturally into the following areas:

1. early lumbering
2. livestock operations
3. pioneer recreation
4. mining developments
5. water collection systems
6. CCC days
7. 1943 - present

This classification system is generally topical, notwithstanding its chronological undercurrents. Items one through six are activities which provided the impetus for trail development in the area delimited for study. Undoubtedly, some of these activities occurred simultaneously. Item seven allowed for an investigation of trail development from 1943 to the present.

**Linkage**

Linkage was established both chronologically and contemporaneously to events in Utah History with occasional reference to events occurring in the United States at large. This was done so as to provide perspective and establish historical context.
Balance

Attempts were made to maintain enough flexibility in the study so as not to overlook any significant area.

IDENTIFICATION OF SOURCES

It was anticipated and subsequently found that in this study a particularly large variety of sources were required owing to the great diversity of motivations that combined to produce the trails endemic to the study. The sources identified below were carefully considered.

Primary Sources

The availability of primary sources were of crucial importance. Diaries, journals, memoirs, letters, and autobiographical accounts of early canyon residents, or those with vested interests in canyon areas, were sought and searched. State archives and Salt Lake County historical documents were carefully reviewed. It was found that files on impounding dams kept by the State Department of Water Rights were extremely valuable, as were United States Forest Service files on trail development. Journalistic reporting preserved in early newspapers was considered, and attempts were made to locate business records for early irrigation companies, lumber companies, and other canyon-related economic undertakings that may have played a role in trail development or history. Civilian Conservation Corps records housed in the federal archives and records center at Denver, Colorado, were searched so as to ascertain the contribution of this New Deal program to trail development.
Secondary Sources

Trails of the Wasatch have not been the subject of historical exegesis and so there are no secondary sources where trails are the primary concern of intensive research. However, there are some secondary sources where trail development and history occupy an incidental part of the exposition. Reference was made to these.

The early narrative history of the Church of Jesus Christ of Latter-day Saints was helpful as a secondary source, especially for descriptions of early canyon development and pioneer recreation. Lesson Manuals for the Daughters of the Utah Pioneers were helpful also. Unpublished theses and dissertations dealing with canyon interests, including the emergency relief and conservation programs that were conducted therein were important secondary sources. Another source that was sought was United States Government Professional Papers devoted to geology and mineral resources.

Tertiary Sources

It is doubtful if Wasatch Trails are the subject of tertiary sources. These did not play an important role in the study.

LIBRARY TECHNIQUES

In this study control was established by the use of two library techniques: (1) evaluation of the source, and (2) critical comparison between sources wherever possible. Actually, this is just another way of saying that sources were scrutinized through internal and external criticism.

In evaluating the source (internal validity), the book or
document was weighed against itself. The following criteria, borrowed from Daniels, was used to establish validity:

Is it (the book or document) consistent or self-contradictory? What opportunity did the author have to know what he says? What is clearly fact and what seems to be conjecture? What possible interest or bias might the author be defending, and has he stated facts contrary to his bias (21:92-93)?

The comparisons between sources, or external validity, weighed the book or document "in relation to other materials and to what was known about the subject in general" (21:93). The following questions were utilized in this process:

How does the document compare with earlier or later accounts? Is it contradicted by other facts that it does not mention or facts that became known only after it was written? Does it represent an honest attempt to interpret all the known data as you understand them? Do frequent errors cast doubt on the reliability of the source (21:93)?

Obviously, in research such as this, where there was a general lack of documents dealing directly with trails, it was difficult to establish control by any means — but insofar as sources would allow, efforts were made so as to lend authority to the study.

PERSONAL INTERVIEWS

The interviews required for completing this study were not as valuable as originally anticipated, with the possible exception of more recent trail development (the great preponderence of trail development in the locations of interest occurred prior to the turn of the century, the rest in the decade of the thirties), and this is good, because enough time has not lapsed to produce broad perspectives. In fact, it is a moot point whether there is such a thing as contemporary history. On the other hand, the general lack of documents for earlier
periods would have made oral sources important, but most of the trail development occurred so long ago that they were a very limited asset. Efforts made to interview descendents of early canyon residents were frustrating (trail development was not considered of sufficient importance to occupy space in journals, memoirs, or photographs) and were quickly and quietly abandoned.

It will be recalled that for purposes of investigation, this study was classified topically into seven categories. For all intents and purposes interviews were valuable only for the last two, i.e., CCC days, and 1943 to the present.

Interviewing Techniques

Interviewing techniques included: (1) the preparation of a basic outline, including questions, ahead of the actual interview; (2) contacting the persons to be interviewed at least one week in advance, and thoroughly briefing them on the purpose of the interview; (3) using a note pad during the interview period; and (4) sending a letter of appreciation to the interviewee. For some of the techniques enumerated above and for many helpful interviewing tips, the author is indebted to Willa K. Baum (7).
Chapter 4

HISTORICAL DEVELOPMENT OF WASATCH TRAILS

Before rushing headlong into the historical exposition required in this study it was felt that perhaps it would be appropriate to present some brief perspectives on trail development prior to 1847.

ANTECEDENTS OF WASATCH TRAILS

In all probability, the antecedents of the Wasatch trail developments described in this study have their roots in the Indian cultures endemic to the area. Depending on the authority consulted, these cultures are divided either into two broad linguistic groups (notwithstanding the fact that endemic cultures spoke dialects of the Shoshonean language) -- the Utes or Utahs to the south, and the Shoshones to the north (95:161) -- or three culturally defined groups -- the Utes, the Paiutes, and the Gosiutes (26:66, 54:16). In addition to these, Shoshoni from Idaho and Wyoming made seasonal incursions penetrating as far south as the Salt Lake Valley (126:344-346, 54:16-17).

Journal descriptions of the Salt Lake Valley preceding the Mormon migration either overtly state or covertly suggest a paucity of Indian settlements. Early visitors to the great basin area make no mention of them, and the journal of Heinrich Lienhard, 1846, describes the Salt Lake Valley as "uninhabited" (26:126). That the same conditions obtained a year later is suggested by the journal of Orson Pratt who describes the valley yet makes no mention of Indian settlements.
(26:147). Notwithstanding this emptiness of the valley, it is evi-
dent from the many accounts that Indians were near by when the Mormons
arrived. As a matter of fact, Ellsworth suggests that:

The Mormons did not know it, but the Salt Lake Valley was con-
sidered by the Ute, Shoshoni, and Gosiute to be neutral ground
between them. Here Indians came for salt which they all needed. All western tribes knew that in this valley they did not fight
(26:162).

While few historians would argue that the Salt Lake Valley was
a kind of neutral buffer zone, there are some who would take issue with
the idea of understood peace on valley soil — particularly among the
mobile Ute and Idaho-Wyoming Shoshoni. It seems apparent that there
was among these tribes an understood north-south territorial boundary
— understood at least by the Shoshoni who viewed Ute overtures of
trade with the Mormons in July of 1847, as an infringement on their
rights (127:334-336). Hunter suggests that at one time the Utes set-
tled as far north as the Great Salt Lake, and the Shoshone settlements
ran west and north of Utah Lake (54:16). The archaeological diggings
reported by Julian H. Steward support this conclusion by showing a
definite overlap of Indian artifacts in the Salt Lake Valley area (104:
1-34).

Given the survival requirements of the Great Basin area, the
close proximity of the tribes, their proclivity to steal, and their
occasional hostility one with another, there is little wonder that
both groups endeavored to establish trade with the Mormons — especial-
ly for guns and ammunition — even if it sometimes meant stooping to
torture and murder of captured Indian children in order to peremptorily
force the Mormons into trade (95:171). Although the coming of the
Mormons initially aggravated relations between the Shoshoni and Utes,
it was, in all likelihood, not the beginning of inter-tribal troubles. The Wasatch Front area east of Great Salt Lake formed a kind of buffer zone long before the arrival of the Mormon pioneers. This does not mean, however, that this was a no-mans-land, off-limits to both tribes. On the contrary, the rabbits, grasshoppers, crickets, and other desert delectables, including salt, were sought by neighboring groups -- not to mention the deer, elk, and bear the canyons east of the valley could provide. Hunter points out that these larger animals were important to the tribes for both clothing and food, even though insects and smaller mammals were the staples in their diets (54:17-20). It would probably be easy to over-emphasize the value of the canyons in the Wasatch east of Salt Lake as Indian hunting grounds, but in all probability they were not totally neglected.

In the long run the Mormon settlement of the Salt Lake Valley fostered the neutral wedge between the Shoshones and Utes. The northern tribe, who felt they had better claim to the region, were eager to sell the land (127:345), and the tide of emigration steadily filled the valley. The pioneers lost no time, nor had they any time to loose, in planting crops and building homes. By the first of August several acres had been plowed and planted, thirteen plows and three harrows had been worked and various repairs made. The valley had been explored, the several canyons visited, a road constructed to the timber, and a saw pit had been built (127:345-346). In visiting the canyons, it is probable that Mormon pioneers followed game trails and Indian foot or horse paths. These, then were the antecedents of Wasatch trails in Salt Lake County.
EARLY LUMBERING

For a people who had known the vagaries of life under canvas domes or tents, or in primitive lean tos or the confines of caves, there was an irrepressable urge to establish homes that would afford security, warmth, and comfort -- especially during the encroaching winter. And so the first pioneers to enter a valley designated by Brigham Young as the right place, did not delay the construction of homes beyond the plowing and planting requirements for food subsistence. It was all too clear to these early settlers that the valley itself was sparsely wooded and the meager timber it could provide was surely not sufficient for homes and a fort, so roads were pushed to canyon timber, a pit saw was hastily constructed, and building commenced.

As valley population swelled, the demands for lumber, shingles, and lath rose correspondingly -- not only for homes, but for barns and sheds, shops, schools and churches, industrial structures and places of recreation, and a tabernacle and temple. In order to satisfy the increased demands enterprising men were commissioned by church officials to construct lumber and shingle mills. Later charters were granted by the governor and legislative assembly of the Territory of Utah to develop canyon-based lumber industries.

In this section, an attempt will be made to illustrate a positive correlation between selected Wasatch trails and the early lumbering activities so crucial to valley survival and florescence. In this, the reader need not suppose that the relationship suggested is necessarily causal and corresponds exactly to the existing trails. On the contrary, it is the firm conviction of the writer that the
presence of many of the trails is a result of the cumulative effects of differing endeavors that were sustained over a period of years. Nor were these endeavors always mutually exclusive of each other, but often overlapped either complementing or discouraging trail development in a given area.

**Lambs Canyon**

Lambs Canyon was named after Abel Lamb and his sons, coopers by trade, who were emigrants to the valley in 1850 (with the exception of his eldest son Lisbon who entered the Salt Lake Valley in July, 1847, with the sick detachment from the Mormon Battalion). During the first year in Salt Lake City, they used native timber to construct beef barrels, however, during the ensuing years Abel Lamb and his sons made the first roads into the canyon that now bears their name. The canyon provided timber for the barrels, tubs, washboards, churns, and waterbuckets that were essential to the early pioneers. The files of the Daughters of Utah Pioneers show that Mr. Lamb built a home in the canyon for his family. At the request of Brigham Young, the home was abandoned during the approach of Johnston's army in 1857, but as soon as the conflicts were resolved there was a glorious homecoming (17:372-373).

A toll gate was located at the mouth of this canyon and twenty-five cents was exacted from each team that passed through it in order to pay for the cost of maintaining the road. A mill was built at what was then considered the head of the canyon, and reports indicate that "at times, large herds of wild cattle and other animals were found in the vicinity of the lake near the mill" (17:373).
The Lamb's Canyon Trail #8002, is mostly located within the confines of Lambs Canyon, except where it traverses across the ridge to the south, entering the Elbow Fork basin in Mill Creek Canyon.

Mill Creek Canyon

Owing to its easy accessibility and available timber, Mill Creek Canyon was among the first locations where logging operations were established.

Early in 1848 Archibald Gardner, an experienced mill builder, erected the first mill located on Mill Creek stream at Highland Drive and Murphy's Lane. This was a lumber mill utilizing some of the best timber that grew in Mill Creek Canyon (17:400).

Later in 1848, John Neff, Sr. erected a grist mill in the canyon. The next three decades saw the construction of no less than eighteen mills located at various locations in the canyon from a point that would presently be considered far below the mouth of the canyon to the extreme easterly reaches of its head.

In plotting the locations of these mills, it appears more than coincidental that many of the existing trails in Mill Creek Canyon are closely adjacent to mill sites and what would have been, in all probability, natural logging areas. In examining the possible reasons as to why this may be so the following are suggested: first, that existing trails are at least in part related to lumbering activities — either as remnants of logging roads that were integral to logging efforts, or as remnants of paths that grew up along side or in front of logging ventures and served as communication links or precursors to logging developments; and second, that trails came into existence independent of logging activities — the close proximity of the two being explained either by chance, or by choice as directed by other
endeavors, or by the proclivity of trails (probably game trails) to follow water courses and favor grades of moderate steepness. Should the second of these reasons be true, the first would be wholly negated. If, however, the first is true -- and there is strong correlational and historical evidence to support such a conclusion -- then, at least in spirit, the second may also have explanatory merit. For what pioneer logger, with timber accessibility and profits in mind, would not take advantage of game paths and more gentle-sloping terrain? Having provided this brief exposition, let us return to the mills in Mill Creek Canyon.

The third mill built in the canyon was constructed by Chauncey Porter. It was a lumber mill which had a flutter wheel and a circular saw (17:401). Located four and a half miles from the mouth of the canyon at the mouth of Porter Canyon, this mill was situated at a juncture where logs could be taken from either the primary canyon or its tributary. In both cases the grade would be far more manageable than logging the steep side slopes. Fire claimed the mill, and Mr. Porter moved to Morgan County where he started anew in the lumber business. However, a Mr. South later constructed another mill -- the twelfth one to be built in Mill Creek Canyon -- in the vicinity of Porter Canyon (17:401).

Currently the Wasatch National Forest, Salt Lake Ranger District, have two complete trails catalogued for this area: Porter Fork Trail #8013, and Left Fork - Porter Fork Trail #8047. In addition to these two trails, significant segments of two additional trails are contained within the drainage area of Porter Fork, viz. Desolation Trail #8148, and the Bowman Fork Trail #8007.
Almost directly opposite from where Porter Fork makes its confluence with Mill Creek Stream, a somewhat smaller tributary enters from the north. The hollow through which the stream plunges is known as Birch Hallow. Its close proximity would suggest another possible timber harvesting area. Today the Birch Hollow Trail #8070 winds its way up this ravine.

The western terminus of the Terraces Trail #8006 is well within a quarter mile of the mouth of Porter Canyon and therefore another possible area for logging activities -- this time within the ridge confines of the main canyon.

Shortly after the third mill was built, Archibald Gardner built a fourth mill at Elbow, located six miles up from the mouth of the canyon. It was equipped with a sash saw, and Salina O. Stillman maintains that it was from this mill that lumber was provided to one Mr. Foster, a cabinet-maker, who subsequently used the same for making some of the first tables in Utah (17:401). The location of this mill was such that timber accessibility in the immediate vacinity would most probably have been in the bowl formed by the ridge to the north. This area currently provides space for one complete catalogued trail -- the Elbow Fork Trail #8065 -- and significant segments of two additional trails, i.e., the Mount Aire Trail #8001A, and the Lambs Canyon Trail #8002. Both of these last mentioned trails terminate in other canyons where there were logging as well as other activities. Almost immediately across the canyon from where Elbow Fork enters the Mill Creek stream, and therefore in close proximity to where the mill once stood, is the eastern terminus of the Terraces Trail #8006. The terrain on the south side of the canyon, however, is declivitous at this point, but, perhaps, the
timber on the lower slopes was harvested.

The ninth mill to be built in the canyon was constructed by Edmund Ellsworth. It was located at the junction of Church and Thayne's Canyon. Later, the fourteenth mill to be constructed, was also located near this site (17:401-402). Once again, the catalogued trails are currently located within the surrounding ridge sectors -- in this case Church Fork Trail #8004, and the Grandeur Peak Trail #8001 to the north, and a lower segment of the Desolation Trail #8148 to the south.

According to Selina O. Stillman, the tenth mill was constructed by Alva Alexander and his sons. This particular lumber mill was located at the mouth of Alexander Basin some seven miles up the canyon. A short time later a mill built by Peter Ranck was established near this same site. Within the period of time that marked the construction of these two mills, the Upper Gardner Mill was built only a half mile further up the canyon (17:401-402). Undoubtedly Alexander Basin was among the areas -- probably principal among the areas where logging activities were carried out. Today the Salt Lake Ranger District of the Wasatch National Forest catalogues the Alexander Basin Trail #8010, most of which is located within the ridge confines of Alexander Basin.

Two additional mills were eventually built thirteen miles up from what is now considered the mouth of Mill Creek Canyon. And while the present road does not extend to that distance today, there is one catalogued trail that may have roots extending far enough in the past to have been associated with these two mills -- the Murdock Peak Trail #8003. Much of this trail is located within the ridge confines of the Mill Creek Canyon Bowl.
Figure 1. Pioneer logging operations conducted in Big Cottonwood Canyon. Courtesy of the L.D.S. Church Historian Department.

Figure 2. Pioneer logging operations conducted in Big Cottonwood Canyon. Courtesy of the L.D.S. Church Historian Department.
Big Cottonwood Canyon

Being a little farther removed than Mill Creek Canyon, and significantly less easily accessible, the timber in Big Cottonwood Canyon was not harvested until at least two, and possibly six, years after the first mill efforts were expended in Mill Creek Canyon. According to Mr. George Green, Forest Ranger in Big Cottonwood Canyon for many years, the first mill was constructed in 1850, by the Latter-day Saint Seventies Quorum at the command of Brigham Young. It was supposedly located about two miles up the canyon, about a quarter mile below the upper power house, which still stands. Reports have it that the mill was never a success, and that the tools used to operate the mill mysteriously disappeared whenever they were laid down. Apparently the mill operators confronted Brigham Young with their dilemma, and he responded by suggesting that perhaps the spot whereon the mill was built was sacred to former inhabitants who once lived there, whereupon the mill was moved and no more trouble was encountered. Mr. Asa Bowthorpe, a local historian who has compiled a brief history of pioneer sawmills, included this account in his history, but questions its reliability on the basis that no road existed in the canyon until 1850 (9:20). There are, however, two interesting factors, one of which may challenge Mr. Bowthorpe's conclusions. First, accounts which describe the exploration of the canyon reveal no apparent difficulty in penetrating the canyon to a point beyond where the mill would have been located, and second, there is an interesting parallel to the mysterious disappearance of the mill tools that has been passed down from mill days in Mill Creek Canyon (9:14).

According to a report written by George D. Watt and published
in the Deseret News in July of 1856:

In the year of 1852, the legislature of the Territory of Utah granted to Joseph Young and others a charter to this (Big Cottonwood) kanyon, and the company built a mill a short distance above its mouth, which has since been taken down (124).

This statement would suggest that in 1852, or within two years thereafter (prior to the subsequent sale of the improvements to other parties) the first mill in Big Cottonwood Canyon was constructed.

Brigham Young and others bought the claims and improvements, and in 1854 Daniel H. Wells, Feramorz Little, Bishop Kessler, and John Sharp, under the instruction of President Brigham Young, "penetrated the fastnesses of Big Cottonwood Canyon" (19:175). The party initially attempted to ascend the canyon from the west, but encountered great difficulty at a steeply inclined section that early became designated as The Devil's Stairway (early name for the Stairs) -- so called because they had such a hell of a time trying to get through (108:20). After repeated effort they retreated to the valley, returned north to Mill Creek Canyon and pursued a course which took them toward the head of that canyon, south across a ridge, and then down into Big Cottonwood Canyon at a point near where Mill E was afterwards established. They proceeded to descend the canyon to the head of the Stairs and thence discovered it to be so rough and dangerous that it took all day to make the descent of scarcely a mile (19:175).

From the reporting of George D. Watt, taken from the same source that was quoted above, we learn that shortly after the first explorations were made

... a trail was brushed out, and pack animals used for transporting provisions, mill irons and other requisite articles (124).

Edwin B. Harper maintains that it was at this point that
Brigham Young constructed the first saw mill in Big Cottonwood Canyon. It was located about four miles up the canyon and was a pit mill (9:20). It is easy to see that this conflicts with the before-mentioned accounts. Whether or not this last account is true, it is easy to substantiate that during the next four decades there was a proliferation of mills in the canyon. Returning to the article by Mr. Watt, we read:

From that small beginning... in a locality where experienced mountain and lumber men had pronounced a road impracticable, have arisen, as if by magic, three well finished saw mills, one of them having a large circular saw in addition to the upright, and each provided with comfortable dwellings for the laborers; and some 17 miles of road has been located and worked with a judgment and perseverance we have never seen surpassed (124).

Evidence indicates that this first road was a toll road built by the Mormon Church at a cost of $16,000. A Mr. Little, directing a work force of thirty-two men, completed at least the lower portion of the road in 1854. Settlers, after obtaining permission from the Church to bring timber out for fuel and building purposes, were allowed into the canyon and charged a dollar a load (17:377). The three mills spoken of above were constructed by the Big Cottonwood Lumber Company, and according to Watt:

... the company designed to build five more mills at different points, from which the timber in the main and numerous side kanyons will be easily accessible (124).

From the perspective of 1892, H.L.A. Culmer remembered that eight or ten saw mills were erected in Big Cottonwood Canyon, however, their operation was rather short lived. He explains that:

They were named from the letters of the alphabet, not in the order of their location in the canyon, but in the order of the date of their being put in operation (19:175).

During the active logging period, from the decade of the 1850's
extending to the designation of the canyon as part of the National Forest System in 1904, there were at least twenty-two mills located at various points in the canyon. The sources are not always in agreement as to the exact whereabouts of the various mills, nor do the construction dates always correspond. While it is not the purpose of this thesis to examine the conflicts arising from a comparison of the accounts, a judicious effort will be made to present the facts as honestly as possible, and, where it is deemed necessary, allusion will be made to areas of conflict. Since there seems to be a clearer agreement, and generally less confusion geographically than chronologically, geography will be used as a basic frame of reference beginning at the upper reaches of the canyon and then proceeding downward toward its mouth.

There is disagreement as to the location of Mill E. Tew suggests that it was located a quarter mile below Brighton on the east side of the stream (108:33). Bowthorpe maintains that it was located at the fork in the canyon just above Mill F which was a mile and a half down the canyon on a large flat, known as Giles Flat (9:21). At any rate, the builder of both Mill E and Mill F was Daniel H. Wells of the Big Cottonwood Lumber Company. The dates of construction were: Mill F, 1856, and Mill E, 1857. Soon thereafter, probably the following year, a steam engine sawmill was set up on the east side of Brighton Flat by the same company. A large blacksmith shop was maintained at Mill E, and numerous dwellings were built at the lower mills to house the families and men employed in the industry. For several years these three mills produced in excess of one million board feet of lumber per year. And, according to the account of Asa Bowthorpe, much of the lumber was
sold in Salt Lake City and went into such famous structures as the Gardo House, Amelia Palace, and the Salt Lake Theater (9:21).

In order to produce the quantity of lumber indicated above, timber had to be harvested from all the surrounding hill sides that comprise the Brighton Bowl and the descending canyon in the near vicinity. For the purposes of this study, however, the southern confines of the Bowl are of particular interest as they provide the area that contains two complete trails and significant segments of two additional trails, all of which are catalogued by the Wasatch Forest Service.

The Brighton - Clayton Peak Trail #8025, and the Brighton Lakes Trail #8028, lie within the Brighton Bowl, and there is a distinct possibility that lumbering activities provide a possible explanation for the etiology or standardization of at least the lower reaches of these trails. The Catherine Pass Trail #8026, lies above Lake Mary and crosses the southwest ridge of the Brighton Bowl then descends into Little Cottonwood Canyon. While it is possible that logging had something to do with the development of this trail (particularly the segment that skirts Lakes Mary and Martha), it is probable that mining, early recreation, and inter-canyon communications had a greater effect. The Alta - Brighton Trail #8027, skirts Silver Lake, crosses a small ridge and by-passes Twin Lakes on the west, whereupon it rises across the southern terminus of the Brighton Bowl, then descends into Alta. Stella Brighton Nielson reports that Daniel H. Wells built a road from Silver Lake to Twin Lakes to get logs out for his Mill E (87). She further states that:

People who were going to Brighton often took the narrow gauge
railroad to Alta; thence by horseback to their destination. The railroad track was covered at several points by snow sheds where there was danger of slides and drifts. By 1880 many traveled by buckboard. Daniel H. Brighton carried the first mail from Alta on horseback . . . On August 29, 1877 when word went out that President Brigham Young had died, Daniel Brighton, then thirteen years of age, immediately took the message to Brighton on horseback . . . In 1890 Daniel (Daniel H. Wells) continued the road from Twin Lakes to the pump house of the Prince of Wales mine on the Alta side. This was the route traveled by passengers who wouldn't or couldn't go by horseback. He surely gave them a thrilling ride in the buckboard (87).

In November of 1890, May Wells, on a pleasure excursion to Twin Lakes reports that:

So many of the trees having been cut down has marred the beauty of the lakes. They are not what they used to be, but we found enough to compensate us for our walk (126:31).

In all probability the existing trail follows the road roughed out many years ago. Vestigal remains auger for this conclusion.

In the area of the canyon that extends from the confluence of Silver Fork with the main stream downward to the Reed and Benson Ridge there were at least four mills. It is also in this area that the town of Silver Fork (sometimes called Silver Springs) sprang into existence. Stephen L. Carr, who has compiled a historical guide to many ghost towns in Utah states that Silver Fork was a logging town comprised of several dozen log and rough-cut lumber houses, a store, and a post office (16:47). The Armstrong-Bagley Mill, a steam mill, was located in or near the town and operated for two years. In 1890, Richard Maxfield moved a steam saw mill up a short distance into Silver Fork. This venture being unsuccessful, he soon sold out, and the mill was disassembled and moved entirely out of the canyon by its new owners. The other two mills were built downstream from Silver Fork. Matt Fleson built on the south side of the canyon, and Alvin Green built on
Figure 3. Snow Sheds in Little Cottonwood Canyon as sketched by Alfred Lambourne. Taken from Senic Utah, authored by the artist.
the north side of the stream a little further down the canyon. Timber for these two mills was harvested from small basins which still retain the names: Green's Basin, and Mat's Basin, located on the steep south slope of the main canyon (9:23-24). Logs were cut, brought to the edge of the basins and rolled down the mountain side to the bottom of the canyon. These basins may be located on U.S. Geological Survey maps.

The Wasatch Forest Service does not catalogue any trails in this section of the canyon, but the United States Department of the Interior Geological Survey topographical maps for 1950, show trails leading up Willow Creek and Bear Trap Fork. Earlier government maps show the presence of a road leading to the head of Willow Creek. Asa Bowthorpe gives the following account of Willowpatch Fork (same as Willow Creek):

He (Julius Cook, who had purchased Alvin Green's mill from Alvin's son) had filed on a piece of land in the head of Willowpatch Fork which ran to the north opposite Silver Fork. Large aspen trees covered his ground and he cut many of them into saw logs. He hired Warren Bowthorpe, and George A. Green and also his wife Loraine to haul his logs down to his mill where they sawed them into all sizes of lumber. Then Mr. Cook made the lumber into furniture and sold it mostly to people living in the canyon (9:24).

Perhaps the activity accounted for above explains the presence of the trail up Willow Creek depicted on the U.S.G.S. maps. Available sources do not directly link the existence of the Bear Trap Fork Trail to lumbering pursuits, notwithstanding the close proximity of the fork to several mills. Apparently this fork received its name from a family named Littleford who trapped bears in that fork for several years and had a cabin situated near its mouth (9:23).

The sources are not in agreement regarding the location of
Mill D. Stella Brighton Nielson states that "Armstrong and Bagley operated Mill D, which is now Silver Fork" (37). Bowthorpe maintains that Mill D was built by Ferramorz Little (later purchased by Frank Armstrong who subsequently entered into a partnership with Charles Bagley), and was situated very near to where Mill D North Fork empties into the main stream from the north and Days Fork from the south. He further states that:

The large fork leading to the north (Mill D North Fork) . . . had several branches, all well covered with timber. In addition, a fork leading to the south, named Day's Fork, furnished saw logs for the "Mill D" mill (9:24).

If Bowthorpe is correct, and the author believes he is, the timber harvesting areas once again coincide with two catalogued trails -- the Days Fork Trail #8023, and the Lake Desolation Trail #8009. In addition, a two mile segment of the Desolation Trail #8148, is located within the ridge confines of Mill D North Fork. In addition to lumbering, this North Fork area was also used as a range for beef cattle run by Charles Bagley. His cattle furnished beef for the mill employees and their families. Undoubtedly the cattle had some bearing on trail development -- but, in retrospect, it is difficult to assert whether the effect was functional or dysfunctional.

In 1898, after most of the mills in the canyon had been dismantled, Charles A. Harper and James A. Taylor, in company with four sons, set up a horse power machine (part of a threshing outfit) quite a distance up in Mill D North Fork. It is reported that they set up a saw mill and cut bridge ties for Salt Lake County (9:26). Notwithstanding the mill was only located here for one year, with lumbering so well established in this for fork and two lakes in close proximity,
it would be unusual if trails were not extant to this day.

U.S.G.S. maps and the *Hikers Trail Map* distributed by the Wasatch National Forest, Salt Lake Ranger District agree that Mill D South Fork drains the ridge area immediately west of Reed and Benson Ridge. Asa Bowthorpe states that the fork was originally "called 'Mill G' South Fork, but later was called Cardiff Fork" (9:26). If Mr. Bowthorpe is correct, this could very well help to explain some of the conflicting accounts concerning the location of Mill D and the towns of Silver Fork (or Silver Springs) and Argenta.

There is an interesting story associated with this particular part of the canyon. In or near the year of 1860, a Mr. Taggart built a family cabin in Mill G South Fork nestled on the east side of the fork at a point where Reed and Benson Ridge descends sharply to G Flat. Loy Andrus remembers that:

One day Robert Maxfield went to their home and told Mr. Taggart to move his family out as there was a danger of snowslides in this area. Mr. Taggart did not heed the warning and within a few days an avalanche of snow buried the cabin and its surroundings. All members of the family were killed and when rescuers uncovered the bodies, the baby was still in its mother's arms. After Mr. Taggart's death, a trial was held, and Mr. Taggart was accused and convicted of murder by jury for not having moved his family to a safer location after Mr. Maxfield's warning (17:390).

The summer following the slide father, mother, and the five children were buried in the South Cottonwood cemetery (9:26).

Mill activity in this area consisted of a shingle mill constructed on the lower perimeter of Mill G Flat. The mill race was commenced in 1865, and the mill put in operation in 1867. There are today two trails existing in the fork: one extending its entire length then descending to a southern terminus in Alta -- the Cardiff - Little
Cottonwood Trail #8021 -- and the other, a short scenic side path leading to Donut Falls -- the Donut Falls Trail #8022.

Entering the main canyon from the north, Butler Fork actually joins Big Cottonwood Stream before Cardiff Fork adds its waters to the growing accumulation in the drainage system. Two mills were established in this fork. First on the scene was a steam sawmill built some distance up in the fork by Neri Butler. Later, Archibald Gardner, a prodigious mill right, constructed a water-powered sawmill at the mouth of the fork. Once again, lumbering efforts and trail development seem to coincide. The Dog Lake Trail #8008, closely follows Butler Fork to Dog Lake. In addition, sections of the Desolation Trail #8148, and the Butler Fork Trail #8012, lie within the confines of Butler Fork.

Josie Reenders maintains that the little settlement that in 1872 became known as Argenta (Latin for lead), was a thriving community dating back to the 1850's, and sites for evidence old newspapers bearing dates from 1858 to 1861, that were used to paper a cabin (94). If the mining timetable suggested by mining historians is accurate, it is probable that the settlement of the Argenta of latter years was first an unnamed community (or differently named community) that grew alongside logging interests. Although there are some discrepancies as to the actual location of Argenta, critical evaluation of the sources indicate that it was located somewhere between a mile and a half west of Butler Fork and a quarter mile east of the Maxfield Mine.

Just below Argenta at the mouth of what is listed on U.S.G.S. maps as Mill A Gulch, John Maxfield, a mill wright from Prince Edward Island, off Canada, and great-grandfather of Josie Maxfield Reenders,
built a mill in or around 1870 — at any rate, this is the date arrived at by Asa Bowthorpe (9:27). It is interesting to note that the Journal History of the Church shows a snow depth report for December 15, 1856, that registers seven feet at Mill D (designated then as the upper mill), five feet at Mill A, three feet at Mill B, and two feet at Mill C. The Journal History also reports that on Sunday, December 14, 1856, there was an avalanche that carried a large double log house (20' x 60' — one and a half stories) one hundred fifty yards and pitched it into the mill pond, the occupants having moved out only a few days previous (18). The same type of chronological discrepancies exist for Mill B, and the Culmer statement that mills were identified by alphabetical letters based on their date of being put into operation (19:175) punctuates the chronological discrepancies that are found when comparing the available historical accounts. This, however, is not an attempt to discredit the work of others — on the contrary, were it not for their efforts this present study would be immensely more difficult, if not impossible. What all this illustrates, is that the history of mill activity in the canyons — especially Big Cottonwood Canyon — is confusing and somewhat more complicated and detailed than supposed.

If the author may be allowed the luxury of departing momentarily from the principal objectives of the exposition, an attempt will be made to suggest a possible rationale that may underlie some of the apparent problems encountered in understanding what actually occurred.

In the first place, it is not hard to marshall convincing evidence to support the fact that travel by a conveyance capable of
hauling logs would be, and was, extremely difficult in the numerous side canyons. Loy Andrus remembers:

The roads from the various canyons where lumber was procured were exceedingly rough and it took twelve or more hours of laborious travel over rocks and streams to bring the logs down the canyons (17:390).

A hike today up these side canyons will foster a warm respect for the industry of these early pioneers. Admitting, then, the frustration and difficulty of logging maneuvers, it is probable that when timber accessability became such that logs were more and more difficult to obtain, a point of diminishing returns was reached and it became easier to dismantle then reconstruct the mill in more fruitful areas than to continue probing deeper into rugged, steep terrain.

Secondly, as timber began to disappear at ever-increasing rates mills and appurtenant structures became more dangerously exposed to avalanche danger. Snow slides account for the destruction of several mills in Big Cottonwood Canyon, some resulting in injury and death. Although it may seem strange, mill structures rose at or near the razed remains that mutely testified of earlier tragedy. For example, Mill A was a scene of destruction in 1856 (18), and in 1875, nineteen years later, it was the scene of death (9:28).

Thirdly, a cursory reading of Mr. Bowthorpe's history reveals that fire or boiler explosion account for the destruction of a significant number of canyon mills. Once again, there are accounts which show that later mills rose on or near the charred remains of earlier ones.

Another factor that may have played a more minor role in adding confusion to attempts at getting at the history of logging
ventures was increased technology and equipment availability. The first mills constructed by the pioneers were pit mills. Later mills used water power or steam as energy sources. It may be that in these advances some of the more primitive mills slipped out of existence unreported.

Finally, as the number of mills increased and easily accessible timber grew scarce, it became necessary to penetrate deeper into the many side canyons. It is probable that there was a return to earlier abandoned sites, or at least a renewed excitement in areas of former interest. Perhaps this helps to explain why mills were built at sites of known avalanche danger as in the case of Mill A.

In returning to Mill A Fork we discover that although there is no established trail running up the fork there are two trail segments in the upper ridge confines: The Desolation Trail #8148, and the Butler Fork Trail #8012. It just so happens that the terrain traversed by these trails has been designated the Mill A Basin and the Maxfield Basin. Judging from the naming of Green's Basin and Mat's Basin discussed earlier, it would seem logical to assume that the former received their names in like manner as the latter—namely, Mill A Basin and Maxfield Basin were the sites of timber harvesting activities. All of this, of course, augers for concluding that once again logging was closely associated with trail development.

At the place in Big Cottonwood Canyon where the road makes an S curve, a large fork enters from the south known as Mill B South Fork. A short distance below Mill B North Fork enters the main canyon. Bowthorpe reports that the south fork was the location of David Brin- ton and others' Mill B, built in 1872 (9:28). He also suggests that
the flat at the mouth of the north fork is where it is claimed the
first mill in the canyon was built (not the Seventies Mill alluded to
earlier, but the pit mill described by Edwin B. Harper, also discus-
sed earlier) (9:20). Bowthorpe, assuming the accuracy of this ac-
count, reports that the mill was bought by Alva Butler in 1876. One
of Butler's sons, born at a cabin located near the mills, claims to
have

... hauled with a team of oxen, the biggest red pine log
out of Mill B South Fork ever brought into any sawmill in Big
Cottonwood Canyon. It was supposed to have measured a little
better than four feet across the butt (9:29).

Perhaps the loggers who journeyed up Mill B South Fork were the first
white men to view the three lakes that are nestled at the base of
Sundial Peak. The Lake Blanche Trail #8020 winds its way to these
lakes today. The Mill B North Fork Trail #8005, proceeds a short dis-
tance up the fork, then traverses the east ridge into Elbow Fork where
it climbs north and east to where it terminates on the ridge over-
looking Maxfield Basin by joining the Desolation Trail #8148.

The Broads Fork Trail #8024 begins in Mill B South Fork, but
crosses the ridge into Broads Fork. If this particular trail grew out
of logging ventures, it is likely that the timber was either hauled to
the Brinton Mill or the mill built by Nelson Wheeler Whipple and sons
at the mouth of Whipple Fork a quarter of a mile below the confluence
of Broads Fork with the main canyon stream.

The last logging area of interest in Big Cottonwood Canyon, at
least so far as this thesis is concerned is the Storm Mountain area
where a man by the name of Standish built a water powered sawmill (9:
30). Two trails are catalogued in this area: the Mule Hollow Trail
Figure 4. Remnants of logging days. Courtesy of the Salt Lake Ranger District of the Wasatch National Forest.
As with Mill Creek Canyon, there was prolific trail development almost to the point of saturation, in areas of defined logging interest in Big Cottonwood Canyon -- so much so, that it seems safe to assume that the relationship of logging to trail development was in many cases causal.

**Little Cottonwood Canyon**

Sometime during the decade of the 1850's, logging activities commenced in Little Cottonwood Canyon. Carr points out that during this period a small lumber and logging town named Tannersville was located on what is still known as Tanner's Flat. The town consisted of dwellings, boarding houses, saloons, and a livery stable. Later, in the early 1870's it became a smelting and ore shipping center. Destroyed by fire in 1872, it was never rebuilt (16:49).

Actually, Little Cottonwood Canyon was never as important as a timber source as the two major canyons to the north. There are several reasons why this is so. First, the canyon under consideration is described by the typical U shape characteristic of canyons the formation of which includes glaciation. As a result, ridges are truncated producing a rather wide, smooth canyon floor intermittently interrupted by moraines which tell of glacial recession. These forces exercise a great influence on drainage patterns and it is therefore not strange that Little Cottonwood Canyon contains only two or three significant forks -- Hogum Fork, Red Pine Fork, and White Pine Fork -- and as with the canyons previously considered, these forks were the major timber producing areas. Secondly, Little Cottonwood Canyon is
one canyon further removed from the major marketing area. Thirdly, owing partially to the glaciation and partly to the steepness of the terrain -- especially to the north -- the canyon is vulnerable to snowslides and avalanches which wrack havoc to a stand of timber. Another factor which served to lessen the value of Little Cottonwood Canyon as a lumber source was the encroachment of mining. The rapid expansion of mining in the canyon increased indigenous demands markedly. And as logs were literally gobbled up by the growing shafts and tunnels and boarding and commercial needs that rose alongside the promise of wealth, the slopes became barer and barer thus increasing avalanche danger many fold. This canyon has a long history of winter devastations in ecology, property, and lives.

While Bowthorpe does not report on the lumbering activities carried on at Tanners Flat, he does record the presence of four other mills that were located in the canyon. Sometime between 1861 and 1865, Solomon Despain constructed a water-powered saw mill at Hogum Flat, located about four miles up the canyon. About the same time, Archibald Gardner built a steam powered mill in White Pine Fork. Some fifteen to twenty years later a steam saw mill was built by the Mormon Church at Coal Pit Flat with John Taylor in charge. In 1883, the ownership of this mill reverted to the Taylor brothers who recruited three other men and organized a lumber company. At a later date this mill was moved to the foot of Big Mountain in East Canyon. Two years prior to the turn of the century Alva J. Butler built a water-powered saw mill near Miner Springs -- situated about half-way up the canyon -- which was operated in that location for two years then moved about one half mile below the mouth of Little Cottonwood Canyon (9:36-37).
The Wasatch Forest Service have not catalogued any trails in close proximity to the lower mills which were located at Coal Pit Flat and Hogum Flat. If any ever existed they have been obliterated. It should be pointed out, however, that the mill at Coal Pit Flat was operated only two years (summers, probably) and Solomon Despain's mill at Hogum Flat was only a part-time operation as records show him to be a farmer and rancher in addition to his mill activities (9:36).

The upper mills located at Tanners Flat, White Pine Fork, and Mineral Springs were in close proximity to currently catalogued trails. The Red Pine Trail #8050, and the White Pine Trail #8029, are at least in part remnants of logging roads and trails cut into the land more than a century ago. U.S.G.S. maps show that in addition to these two trails, another one junctures off from the Red Pine Trail near the 8800 foot elevation contour. The author has hiked this trail and although it has not been maintained vestiges remain. It is possible that logs were once cut in the upper basins of Maybird Gulch.

**Bells Canyon**

Immediately across the south ridge near the mouth of Little Cottonwood is a canyon called Bells after a man who mined part way up its fork. Bowthorpe records:

About 1880, Hyrum Despain, along with David Archibald Sr., made a wagon road part way up Bell's Canyon. There they built a sawmill. They sawed both lumber and stove wood for people down in the valley. They also maintained a toll gate at the mouth of the canyon at which everybody that went into the canyon had to pay (9:42).

Within the confines of this canyon is located the Bell Canyon Trail #8030. It is probable that the other interests which later developed up this canyon -- including recreational interests -- followed
Figure 5. Rustic Hill sketched by Alfred Lambourne in 1890. Taken from Senic Utah, a book written by the artist.
the route established by Bell and these early pioneers.

**Early Lumbering -- Conclusions**

While the major logging activity in the area delimited for study lasted for four short decades its influence on trail development was pervasive. In concluding this section it should be made explicit that of the thirty-eight trails catalogued by the Wasatch National Forest Service, Salt Lake Ranger District, thirty-two have been linked to timber or timber-related activities. In addition to this, three trails not catalogued, but present on U.S.G.S. maps, have been associated with logging ventures. Of course, in some instances, these associations may not be warranted, but, it is safe to conclude that in many cases the relationship was real.

**LIVESTOCK OPERATIONS**

Notwithstanding the uniqueness of the Mormon migration -- the fact that there were artisans, shopkeepers, mechanics, etc. -- the base was still agrarian. The initial trek westward had to be self-sustaining, and survival in the valley, especially at first, was dependent upon sufficient crops and herds. Reports that are extant, in providing numerical totals, not only for people and wagons, but for oxen, horses, cows, sheep, dogs, etc. as well, give insight concerning the value of domesticated animals to the pioneers.

It did not take long to discover that forage was available in the canyons of the Wasatch. It will be recalled from the former section that Charles Bagley ran cattle up Mill D North Fork (9:26). Cattle were also run up Neffs Canyon, and Ray Lindquist is certain that the
Figure 6. Livestock Operations -- sheep grazing on watershed above Brighton. Courtesy of the Salt Lake Ranger District.
portion of the Neffs - Thayne Trail #8011 that is located within
Neffs Canyon is a result of livestock operations conducted there
76). Bells Canyon was also used as a range for cattle, and there is
little doubt that livestock activities were associated in some way
with trail development there. The upper part of Mill Creek Canyon
has long been used as grazing land for sheep. These too, while they
have sometimes been blamed for destroying segments of trail, have
played a role in trail development and maintenance (76).

In researching this particular section, it has been difficult
to ascertain the direct effects of livestock on trail development, but
certainly this was a viable pioneer activity conducted in the area,
and, although grazing allotments have been somewhat curtailed, this
activity continues to exercise influence on the environment today.

POINtEReCRESqCATION

Before proceeding into a direct exposition that explores the
effect of pioneer recreation on trail development in the Wasatch Front
canyons east of the Salt Lake Valley, perhaps it would be valuable to
consider in some detail the early growth of the Mormon recreational
system, and the forces that led to its development.

Philosophy

A perspective that views early Mormonism as a part of the lar-
ger religious milieu discovers that in the area of recreation there
was a certain divergency of attitude and practice that was character-
ized by the new religion. Whereas the majority of the religious groups
were not only suspicious of play and recreation, but openly, and often
resolutely, condemnative, the Mormon people advocated and actively pursued a wide variety of recreational activities. There were reasons for this uniqueness.

First of all, Mormonism represented a dynamic break from religious traditionalism in both theology and practice. And although there are some who authoritatively conclude and adamantly announce that there are few if any doctrines or practices in early Mormonism that were not openly avowed or covertly present in contemporary American religions or religious thought, it is none the less true that in Mormonism they were combined in such a way and infused with sufficient power to produce a religious movement of amazing potency, the virility of which has been sustained now for nearly 146 years. Doctrines suggesting joy as the reason for man's existence (1 Nep. 2:25) and good causes as the thing mankind should be anxiously engaged in (D&C 58:27), and practices which recognized self-expression and activities that were praiseworthy or of good report (Art. of Faith) all helped to produce a kind of doctrinal base for the Mormon recreational development. In addition, Mormon theology teaches that God has corporeal identity, and this attaches a special significance to the body of man not only as the tabernacle of the Spirit of God, but as a requisite for eventual exaltation. It follows that the body should be protected through proper diet and physical exercise. From its inception, Mormonism has not only encouraged the development of God-given talents, but has suggested a kind of accountability in that development. Furthermore, Mormon doctrine regarding education, song, dance, and sociality, encompassed as they are in the theology, find natural expression in Mormon recreation. Skidmore points out that the Mormons have spiritualized
recreation, and that they see play as an integral part of man's existence (101:5).

Powerful social forces also help to explain the early inculcation of recreation into Mormonism. Skidmore points out the following: (1) Mormon leaders, particularly Joseph Smith and Brigham Young, introduced ideas which stressed that temporal and physical welfare were essential to spiritual welfare; (2) the Mormons were socially isolated; (3) persecution and hardships created a desire for respite; and (4) Mormon converts represented numerous cultures and diversified nationalistic backgrounds which led to new behavior patterns, and required forces to aid in the socialization process (the force of play is a common language) (101:9).

Early journal or diary accounts indicate that the prophet Joseph Smith participated in and advocated numerous activities -- drama, dancing, debating, boating, hiking, music, and picnics. And while sermons were silent concerning these activities, the life styles of influential church leaders, along with their countenance of wholesome activities encouraged wide participation.

Brigham Young, the successor to Joseph Smith, while quick to warn church membership to not engage in the "vain amusements and sins of the world" (129:668), was decidedly pro-recreation. In the westward exodus of the saints from Nauvoo, music and dance were consciously encouraged, and upon the arrival of the saints in the valley provision was made for recreational pursuits. Social Hall was erected, and later the Salt Lake Theatre. Early societies and organizations fostered recreation -- the Deseret Dramatic Association, the Deseret Philharmonic Society, the Deseret Musical Association, various dancing
societies and academies, a public library, lyceum and lecture programs, the Universal Scientific Society, and the Polysophical Society (101: 44-46).

Inventive and pragmatic as he was, Brigham Young made constant additions to the growing social system. He advocated family excursions and began to create the accoutrements of a recreational program within the structure of the church organization and facilities. He encouraged Bishops to take steps to help provide local facilities for play and recreation -- he encouraged Sunday School parties, and finally organized for youth -- the Retrenchment Society for the young ladies (later called the Young Ladies Mutual Improvement Association) and sometime later the Young Men's Mutual Improvement Association (101:54-55).

Most early recreation in the valley, as well as the canyons could be categorized as spontaneous and random, but with the passing of time and the growing acquiescence and legitimazation of recreation per se, activities began to enjoy even wider church approval and sponsorship. It seems clear, that in most instances pioneer recreation, whether spontaneous and random or organized and church-sponsored, played a secondary roll in trail development and was not of primary importance in trail origins. This is not to suggest, however, that its effects were unimportant. On the contrary, there is little doubt that without the recreational trail-users the paths forged by economic interests, or trodden by wild game would have returned to the land, for Nature has a way of obliterating through her constant encroachments that which is left unattended and unused.
First Mentioned Recreation

There is abundant evidence, both documented and intuitive, that mountain peaks possess a kind of drawing power that lures an adventuresome and exploring spirit to their lofty heights; and so it is by no means strange that before the first month of pioneer occupation in the valley had elapsed, five men set out for the summit of Twin Peaks, the highest point in that portion of the Wasatch Front that lies directly east of the Salt Lake Valley. The account of the climb is preserved in the journal of John Brown, who together with Albert Carrington, William H. Rust, and two others climbed to the top. The account follows:

On the Friday, August 20, 1847, in company with Bro. Albert Carrington and others, I went to the foot of what we supposed to be the highest peak in the eastern range of the Lake mountains called the Twin Peaks. We camped at the mouth of Big Cottonwood Canyon. Next morning at eight o'clock four of us commenced to ascend the mountain, leaving a guard with our horses. This was Saturday the 21st day of August. After toiling about eight hours and being very much fatigued, three of us reached the summit of the west peak. One man gave out and laid down by a snow bank. We had with us a barometer, a thermometer, and a compass. We took some observations by which we learned that the peak was 11,219 feet above the sea. The temperature was 55° above zero at 5 p.m. The same day at noon it was 101° in the city. At 5:30 p.m. we began the descent going down the west side through a beautiful grove of timber and by a small creek. We had not gone far before it was dark. We were without bedding or coats, or any kind of arms, as we had expected to return to camp by the middle of the afternoon, and, being a very warm day we went as light as possible but when night came on, it was quite cool on the mountain, and also very dark. We got separated in climbing over the rocks and had to feel our way, lest we fall over a precipice. At 10 o'clock p.m. Bro. Carrington and myself laid down under a scrubby tree, being so tired that we could not proceed, and not knowing where either of the other men were. We found a place between the rocks large enough to lie down and not in a horizontal position, but at an angle of about 45°. Instead of feathers we had pebbles and coarse sand which was yet warm from the heat of the sun and we kept them warm until morning and when the top side got cold we would turn over. In the morning at 5 o'clock we arose, being somewhat rested, yet very sore, and pursued on our journey, scrambling over the rocks without either supper, dinner or breakfast. After
we had gone about half a mile, we heard a man's voice below us and on going a little farther, saw one of our men, Dr. Rust of the Battalion at our left on a large rock. He called for help and said he was given out. We being in the same fix could not assist him. We reached camp at 7:30 a.m. where we found our other companion, Bro. Wilson, of the Battalion, who had made his way in through the night. We then returned to the city satisfied with our first attempt at climbing mountains (12).

While this account does not emphasize trail development or even allude to it, it does show a vital interest in exploration and adventure on the part of early inhabitants in the Salt Lake Valley -- an interest which led to exploration of the area delimited for study and beyond, and created a desire to return, not only to develop lumber, mineral, and water resources, but to enjoy the beauty and grandeur of some of the loveliest country on earth.

Canyon Residents and Early Resorts

Canyon based industries -- primarily logging, mining, and quarrying -- attracted people to settle within the confines of the canyons. Among the settlers were some who preferred a kind of solitary existence, while others, drawn together by joint economic interests, family ties, or just plain Mormon gregariousness, preferred to cluster together in blossoming settlements such as Silver Fork, Brighton, Argenta, Alta, and Tannersville, or alongside mills in large boarding accommodations or private dwellings. Some lived in the canyon year round while others retreated to the valley when the snow came and returned to re-establish canyon residency when melting would permit.

Very few specifics are given in diaries and accounts that would permit a conclusive identification of the actual trails enjoyed by early canyon residents, but those records that are extant certainly show that hiking was one of the forms of leisure important especially
to children whose families resided in the area. Contrary to this generalization, it is possible to show in Mount Aire Canyon, a box canyon running some five or six miles from the lower part of Parley's Canyon to the head of Church Fork in Mill Creek Canyon, a close tie between three currently catalogued trails and those trails enjoyed by early residents of Mount Aire.

Claire Noall remembers that during the first decade of the 1900's that Alma Pratt (Uncle Almy) used to take a crowd of children hiking to various peaks (17:373). From these peaks she recalls that Uncle Almy would roll huge boulders down the Mill Creek Canyon side (17:373). Sometimes, too, their hikes would lead to Pine Top, the diadem of the ridge leading down to Lambs Canyon on the one hand, and Mill Creek Canyon on the other. There is a distinct possibility that the Mount Aire Trail #8001A, the Church Fork Trail #8004, the Grandeur Peak Trail #8001, the Lambs Canyon Trail #8002, the Birch Hollow Trail #8070, and the Elbow Fork Trail #8065, were all, to one extent or another, part of the haunts of the children in Mount Aire. In addition to these, U.S.G.S. maps indicate the presence of a trail leading to the summit of Mount Aire, and one which follows the ridge leading to Murdock Peak to a point almost due north of where the paved road ends in Mill Creek Canyon. These may too have been hiked by Mount Aire residents as they followed Uncle Almy or ventured on their own.

While several families made their homes in Mill Creek Canyon, very little is known about the early hiking ventures that surely occurred as the children sought such pleasure as the canyon could provide. The same is true of Big and Little Cottonwood Canyons. However, it is possible in the settlement of Brighton, to build a rather strong
case for the pleasurable use — perhaps even development — of trails by permanent and temporary residents.

The first documented recreational use of Brighton occurred in July of 1856, and 1857, when this area was used as the location for the celebration of the ninth and tenth year anniversaries of the arrival of the pioneers to the Salt Lake Valley. More will be written about these events later. The settlement of Brighton occurred some fifteen years later. William S. Brighton and Catherine Bow Brighton, Scottish converts to the Church of Jesus Christ of Latter-day Saints arrived in Utah on September 11, 1857, as members of the Israel Evans Handcart Company. In 1871, they took up eighty acres of the area that today bears the family name (87). At first the family occupied a tent as their living quarters, later moving into a one-room log cabin owned by a prospector named Bohen. The following year William built a one-room cabin of his own which he enlarged the next year so as to accommodate a small store where they stocked a few food staples (17:381). Part of the motivation for building the store was the expansion of mining interests, but there is evidence that recreation was also a prime consideration. The following is an excerpt from an article written by Stella Brighton Nielson for the Daughters of Utah Pioneers:

There was a mining boom going on in Alta and Park City at this time and many men traveled between the two places, either afoot or on horseback, and Brightons was a convenient place to get a meal. Mrs. Brighton was a good cook and there was always freshly churned butter, cold buttermilk, hot biscuits, trout and meat. The lake was close by and Mrs. Brighton was an excellent fisherman . . . One of the early travelers to Alta was Joseph Walker. One day he said, "Why don't you build a hotel? I should like to bring my family here to spend the summers." So in 1874, the Brighton's built the first hotel in Big Cottonwood . . . It was a two story building with seven bedrooms, a dining-sitting room, and a lean-to kitchen. . . A number of one and two-room cottages were built to accommodate the guests who had children, so that the children
Figure 7. Plaque Commemorating the Settlement of Brighton. This photograph was taken at the dedication ceremony of the bronze plaque erected at Brighton, Utah, 1962, in honor of William Stuart Brighton, who built a hotel at this point in 1874. Courtesy of the Salt Lake Ranger District.
would not disturb the guests at the hotel (17:380).

In 1893, sometime following the return of William S. Brighton from his mission to Scotland, a larger hotel was erected. The *Journal History* for May, 1893, includes the following:

A three story structure to be erected at that resort at once. Mr. W.S. Brighton of this city has let the contract to Taylor, Romney, and Armstrong for the erection of a three story frame rustic to be used as a hotel at that popular little canyon retreat which bears his name and which is head of Big Cottonwood Canyon near Silver Lake. The building will be 30 ft. by 100 ft. and will be modern throughout. Work will be rushed to the finale. It is expected to be completed and ready by the middle of June. Old hotel will be resumed for emergency (18).

If this entry suggests the popularity of this spot as a favorite recreational resort, the numerous articles in early Mormon periodicals that pre-date and follow the journal entry confirm the same. As early as 1881, *The Contributor* ran an article entitled "Mount Eyrie" (125:308) that contains what would today be considered an affected description of the surpassing beauties in the resort area. Included in the description is the statement that

The excursions that may be made from Silver Lake as headquarters are numerous and varied in their attractions. Bridle paths lead out in every direction; penetrating the narrow defiles that lead further up towards the eminent snow-clad summits, they discover new beauties of scenery every mile. Lakes of various magnitude, studded with granite boulders of enormous size, for islands, lie closely girt within walls of adamant, whose precipitous cliffs reach to the skies above (125:308).

This same article includes a description of Mount Eyrie (the name of Clayton Peak seems to have been preferred by cartographers) and includes an accout of its naming by

... an adventurous and beautiful young lady, whose intrepidity led her to make its ascent. ... At the moment of reaching the top, and while thinking of a suitable name for the mount, an eagle rose from among the cliffs, and circling round above her head, seemed disposed to dispute the right of invasion of his eyrie home (125:309).
In 1884, the Utah Gazetteer reported on the resort, also suggesting that excursions either by foot or horseback could be made to local lakes, Park City, Heber City, Midway or Kamas, to the Big and Little Cottonwood mines, or to numerous local summits such as Bald Peak, Kesler's Peak, or Mount Clayton (103:173).

The November 1890 issue of the Contributor contains an article by Mae Wells entitled "A Trip to the Cottonwoods" (126:29). It is largely descriptive and confirms again the popularity of the Brighton Resort. Later, in 1892, the February and March issues of the same magazine carried a two-part article entitled "Mountain Scenery of Utah" (19:173). Not only do these articles tell of the trails in the Brighton vicinity, but first mention is made of the three lakes at the head of Mill B South Fork.

After the turn of the century the Brighton resort area continued to be featured in local church periodicals. Harold Howell Jensen has pictures of the Brighton area featured in volume 20 of the Improvement Era, and an article entitled "Utah's Switzerland -- A Travelogue" (55:509) included in the Juvenile Instructor for September, 1918.

All of these sources auger for the conclusion that the trails in proximity to Brighton have been sought out over a sustained period of time for recreational purposes both by canyon residents and pleasure seekers. The trails catalogued in this area include: The Ridge Trail #8060, the Brighton - Clayton Peak Trail #8025, the Brighton Lakes Trail #8028, the Catherine Pass Trail #8026, and the Alta - Brighton Trail #3027.

Another resort, known as Wasatch Resort was located at the
mouth of Little Cottonwood Canyon. It grew up alongside the quarrying activities that were so essential to the construction of the Salt Lake Temple. Actually the resort began as a kind of small community of cabins built with wooden floors and sides topped with tent roofs that served as dwellings for those involved with the quarrying. In 1885, the children of Edna L. Smith, wife of President Joseph F. Smith, were taken to the little community upon doctors recommendations following a siege of whooping cough. James C. Livingston, Foreman of the stone works, gave up his cabin for the mother and her children. The summer experience was so delightful that Joseph F. Smith built a larger facility complete with a kitchen and successive summers found it occupied by other members of the Smith family. In 1892, quarrying stopped, but by now the little community had another reason for existence and the families of other prominent Church leaders joined the Smiths. In time a small hotel was built, also a dance hall. The resort was sold July 14, 1922, by the Church to the Consolidated Stone Company (17:398-399).

No catalogued trails are in close proximity to the resort, even though accounts record that hiking was a favorite activity. However, across the ridge to the south, the Bells Canyon Trail #8030, may have occupied some of the hours of the resort hikers.

Celebrations at Brighton

For the early pioneers and for Mormons everywhere, there are many special days -- April 6, May 15, September 21, etc. -- but none are commemorated with greater celebration and more gusto than July 24, the anniversary of the arrival of the main body of the advanced party
into the Salt Lake Valley. In 1848, and every year thereafter, the
Latter-day Saints -- particularly those residing in Utah -- have
sought opportunity to remember in special ways the arrival of that
first company. For the purposes of this thesis, interest is taken in
the ninth and the tenth year celebrations that were conducted up Big
Cottonwood Canyon.

On the morning of the 23rd (July), Presidents Brigham Young,
Heber C. Kimball, and Jedediah M. Grant, and many citizens from
Great Salt Lake City, and surrounding country, with wives and
children, entered the mouth of Big Cottonwood Kanyon on their
way to the headwaters of that stream, to spend the ninth anni-
versary of the entrance of the Pioneers into the Valley of the
Great Salt Lake (124).

So begins the Deseret News description of the 1856 celebration held
on the large flat which later became known as Brighton.

Admittance to the canyon was by ticket, and all who passed up
the canyon were required to show the same at the gate close by the
first mill (probably Mill C near Storm Mountain). A sample of the
ticket follows:

PICNIC PARTY AT THE HEAD-WATERS
OF BIG COTTONWOOD

"President Brigham Young respect-
fully invites _______ and family
to attend a Pic-Nic Party at the Lake in
Big Cottonwood Kanyon on

THURSDAY, 24TH OF JULY

"You will be required to start
from the city very early on Wednesday
morning, as no one will be permitted,
after two o'clock, p.m., of the 23rd, to
pass the first mill, about four miles up the
kanyon.
"All persons are forbidden to make or
kindle fires at any place in the kanyon,
except on the camp ground.

"G.S.L. City, July 18, 1856" (124).
Evidently the Big Cottonwood Lumber Company, which as has been mentioned, Brigham Young held interest in, was commissioned, expressly for the occasion, to make about five miles of road above their upper cabin passable for carriages. In addition, they built two rafts for excursions on the lake and angling for the numerous trout in its water, and a bowery (forty feet by twenty-four) complete with benches and a floor (124).

The festivities included Revielle at five minutes before five a.m., complete with cannonade (two rounds at reville; three at five thirty for Representatives and Delegates; nine rounds at six o'clock -- one for each year the saints had dwelt in the valley; and at half past six, three rounds were fired for the First Presidency), morning prayers, a flag ceremony, music, dancing, the singing of songs especially written for the occasion, comic songs, and toasts, all interspersed with cannon fire. Eight rounds from the cannon signalled the setting of the sun, whereupon the Martial Band beat the retreat and the United States flag was furled. The camp assembled for prayers, the choir sang a hymn, and President Jedediah M. Grant pronounced the days benediction. Following the prayer President Brigham Young made a few remarks wherein he proposed:

... that we do not dissolve this meeting, if that is the feelings of those present, but adjourn until the 23rd day of July, 1857, to meet on this ground by 4 o'clock, p.m., preparatory to celebrating the 24th; that virtually gives the people present an invitation, aside from those I shall invite hereafter (124).

The proposal became a motion that was seconded and passed unanimously. Following President Young's remarks dancing continued until 2 a.m. of the 25th.
Sunrise on the 25th was heralded by six rounds from the cannon and music from the bands. Camp was struck and egress from the canyon commenced. During the return trip to the valley an interesting happening occurred:

... one of President Kimball's wives described a bear sitting upon a rock not far from the roadside, and apparently looking with amazement upon the strange spectacle of a long line of carriages in so wild a region. Not satisfied with a distant view, the bear approached the road and was shot by brother Charles Decker with a Sharp's rifle. Three shots were fired before the bruin succumbed; the first passed through the lights, the second grazed the heart, and the third pierced the brain (124).

And so passed the first pioneer celebration at Brighton. Some 450 persons had attended, conveyed by 71 carriages, drawn by 291 horses and mules (124).

The following year, a much enlarged entourage made its way up Big Cottonwood Canyon. Reports indicate that 2,587 persons, with 464 carriages and wagons, 1,028 horses and mules, and 332 oxen and cows assembled at the base of the Brighton Bowl (106:180). Two additional boweries had been erected by the Big Cottonwood Lumber Company. The festivities were enlarged to include addresses, athletic events, hiking, and drills by six companies of militia and a juvenile rifle company "styled the Hope of Israel" (127:602).

Undoubtedly, as the commemoration proceeded there were conversations that remembered the old times at Kirtland, Far West, Nauvoo, and Winter Quarters, the rigors of the journey west, and the early struggles in the valley -- but now was a time for celebration, a time to look forward from the vantage point of ten years of isolation and peace.

Near noon, while the festivities were at their height, four
men rode into camp. Abraham O. Smoot, Judson Stoddard, and Orrin Porter Rockwell (who had left Fort Laramie on the evening of July 18, and arrived in Salt Lake City on the evening of July 23rd -- a distance of over five hundred miles in five days) in company with Judge Elias Smith reported to Governor Young that a United States army was approaching the Territory and that mail service to Utah had been discontinued. A council of the leading elders present was called, and the mass of people were informed of the news when they assembled for evening prayers (127:604).

Dancing, singing, and general merriment continued, but, at least for some, and perhaps in some measure for all, the day had been marked by a measure of gloom.

At day break on the 25th, the camp ground began to be abandoned, and so concluded the tenth year anniversary celebration held at Brighton.

The impetus to trail-development and use arising from these celebrations cannot be accurately accounted for, but it is likely that the effects were significant. At the very least, the exposure of so many people to the beauties of the area must have done much to popularize this mountain retreat.

Artists, Authors, and Nature Lovers

In the summer of 1877, the distinguished John Muir made a visit to Salt Lake City. During his stay he composed a short series of letters, some of which appear in the book Steep Trails, edited by William Frederick Bade, wherein he briefly described the city, a storm in the valley, bathing in the Great Salt Lake, and a hike which he
made from Lake Point to the northern end of Utah Lake. And although he found the spirit of Mormonism "intensively exclusive and un-American" (83:110), and the Mormons themselves "in a state of perpetual apology" (83:111) -- except the Little Latter-Days (his rather affectionate title for the children) -- he revels in the beauty of the surrounding country, which is, of course, expected. But John Muir was not the first by any means to take particular delight in the mountain home of the Latter-day Saints, for notwithstanding the exigencies of survival, early writings reveal a deep appreciation for the mountains, vegetation, lakes and streams that were strewn like a path of roses amidst sage brush, sand, and salt.

Among those who were particularly sensitive to the beauties of the Wasatch, was a group of Utah artists who retired often to the canyons east of Salt Lake for inspiration. Alfred Lambourne, an important Utah artist in his own right, claims that George M. Ottinger -- one of the earliest artists in Utah -- was perhaps the first to sketch the scenery of the Wasatch where its lakes are situated (63: 1055).

Ottinger was born February 8, 1833, in Springfield Township, Pennsylvania, the son of a Quaker of German descent. His interest in art was awakened while attending school in Bedford, Pennsylvania. Early in his life a train of unfortunate circumstances reduced his family to poverty, and young George was sent to live with an uncle. Here he was kept busy, spending what little free time he did have in the pursuit of his talent. Pressures from his family to pursue a career in medicine led to rebellion, and at seventeen years of age George ran away and joined the crew of a whaling ship. Later, when
George's mother joined the Church of Jesus Christ of Latter-day Saints, she persuaded her adventuresome son to join her in the trek west. They arrived in the valley in 1861, whereupon George was engaged by Brigham Young and others to paint scenery for the Salt Lake Theatre. While busy in this work he met and married Mary June McAllister who shortly thereafter died giving birth to a son. Upon her death George decided to fulfill an old dream by going to California, but while making preparations to go he met Phoebe Neslen who he married on December 3, 1864. Phoebe had no desire to travel west, and George did have some ties in the valley, having been made the first president of the Deseret Academy of Fine Arts, organized in 1863, so it was decided that Utah would be their home (52:25-28).

George M. Ottinger sold landscape oils and portraits, but income from art being insufficient, he engaged in fire fighting, water works development, and organized the Utah National Guard. He also went into business with C.R. Savage and together they formed the company of Savage and Ottinger, Ambrotype (photographs on glass). Savage took the photographs and Ottinger tinted them. A studio was opened in Park City which flourished in the wake of mining developments. In 1882, the department of Fine Arts was first organized in the University of Deseret, with George M. Ottinger as principal and teacher. Sketching from nature was a prominent feature of the department (52:28-29).

Lake Phoebe, located in the southeastern end of the Brighton Bowl was named by Ottinger after his second wife, Phoebe Neslen (63:1055). The name is recognized on U.S.G.S. maps.

Alfred Lambourne, another painter of the Wasatch, was born in
England in 1850. While he was young, his parents were converted to the L.D.S. Church and came to America. After spending six years in St. Louis, Missouri, accumulating the equipment needed for the journey west, the family crossed the plains to the Salt Lake Valley. Alfred studied and taught at the Deseret Academy of Arts. He had a deep love for the beauties of nature which led him to extensive travel. In their biographical sketch of his life, the Kaysville Art Club recall that:

Long before the days of good highways, railroads and automobiles, Alfred Lambourne began his trips into the unknown territory of Utah . . . He traveled with C.R. Savage, a pioneer photographer of Salt Lake City . . . Mr. Savage photographed while Mr. Lambourne painted . . . Mr. Lambourne and Mr. Culmer traveled and explored the now well-known Wasatch Mountains and named some of the lakes in the upper Cottonwoods. He was one of the first artists to go to the Yellowstone National Park, Zion National Park, Bryce Canyon, Yosemite, Glacier National Park, Colorado and Arizona. He always took with him the familiar notebook and his palette. Many artists and photographers thought they were the first people to paint in remote areas only to discover Mr. Lambourne had visited there with his paint brush at an earlier date . . . He painted the rugged beauty of Utah nature; he seemed to have a special style for emphasizing the colors of the massive rock formations (52:32).

Lake Martha, directly above Lake Mary, was named by Alfred Lambourne after his mother (63:1055). He also named Lake Minnie (now Cecret Lake) near the Alta-American Fork Canyon divide, after his wife Wilhemine Marie Williamson and their daughter Mrs. Minnie Shanks (63:1055). In addition to these two lakes, he also named Lake Lillian, situated in what was known by early mountain visitors as Hidden Valley (Lake Blanche area), after his third daughter, Mrs. Lillian F. Walker (19:177).

In addition to his prowess as a painter, he also became a gifted writer. He was the author of fourteen published books, several
Figure 8. Lake Mary. Sketch was done by Alfred Lambourne in 1890. Taken from Senic Utah, by the artist.
unpublished manuscripts, hundreds of poems, and also was a regular contributor to newspapers and magazines. Three of his books deal either directly or indirectly with the Wasatch Mountains east of the Salt Lake Valley.

Lambourne's first volume dealing with the Wasatch is entitled *Jo: A Christmas Tale of the Wasatch*. The setting for the story, according to H.L.A. Culmer, is Lake Minnie (Cecret Lake) situated high on the south slope below Sugarloaf Peak (near Alta). Speaking of the lake and the writing of Mr. Lambourne Culmer writes:

> This is the Lake and this is the scene which he so beautifully portrays in his Christmas Story of "Jo," as the place called "Our Home." To attempt a description of this lake and its surrounding beauties after the publication of Mr. Lambourne's work, would be to shine dimly by contrast; for his word pictures are so clear and vivid that the writer did not require the assurance that the lake he described was the one which we first visited together (19:203).

In the story, Jo, mining partner of Sam, the teller of the tale, rescues Pletty and her father from the aftermath of a snowslide that brought havoc and death to a small mountain town on Christmas Eve. This provides the first meeting of Jo and Plet (short for Pletty), and after some character description, the tale commences to unfold. There are visits between the two in love, an important mining strike, the engagement, and finally another Christmas Eve locked in the grips of a raging storm. The tale concludes with a happy denouement. Some years later the story was restyled into rhyming couplets and published under the name of *Plet: A Christmas Tale of the Wasatch* -- but the plot and essential action of the tale remained the same.

Lambourne's other work is of a different sort. Instead of being fiction, he recounts *A Summer in the Wasatch*. Lambourne, who
had previously lived as a kind of hermit on Gunnison Island in the Great Salt Lake, decided to take up residence in an old vacated cabin situated on the edges of Blanche Lake high in the Wasatch. The former inhabitants of the cabin, to Mr. Lambourne's way of thinking, were miners, although he found no evidence of prospects in the valley (70:22-23). In the book he describes the entrance into this secret valley, and mentions that a trail leads thereto. From his description it is clear that the existing trail must be a remnant of what was, even in those early days, the established trail to the lakes. He also alludes to another cabin and garden plot part way down the glen whose occupant and caretaker had pointed out the route to the lake the first day Lambourne had visited the area, but had since been killed in a snowslide (70:54-55). Neither of the cabins remain today, and were it not for this account we would probably never have known of their existence. Accompanying his word descriptions of the area, the book includes rather faithful sketches of each of the lakes and the mouth of Mill B South Fork which leads to the hidden valley.

Another Utah artist who figured prominently in the history of the Wasatch was Henry Lavender Adolphus Culmer. Like Lambourne, Mr. Culmer was foreign born, emigrating to America from England at age fourteen. He rose from obscurity in the Salt Lake Valley to a man of prominence, achieving local recognition in business and national recognition in art (52:35).

Mr. Kenneth Culmer, son of H.L.A. Culmer said:

Father always loved fine paintings and the beauties of nature. But as far as I can determine, his art career actually began when he became acquainted with George Ottinger and Alfred Lambourne, prominent artists of the 1880's (52:32).
Figure 9. Lake Minnie, now known as Cecret Lake, as sketched by Alfred Lambourne. Taken from Senic Utah, authored by Lambourne.
It is by no means strange that these three should figure so prominently in painting the scenery of the Wasatch Mountains and the naming of the Cottonwood lakes. H.L.A. Culmer is credited with naming Annette Pool in 1875 (19:205), the tiny lakelet near Lake Phoebe, after Miss Annette Wells, daughter of Daniel H. Wells, early statesman, first mayor of Salt Lake City, and counselor to Brigham Young — later, in 1878, Miss Wells became the bride of Mr. Culmer. He also named Lake Florence, the middle lake in hidden valley, after his black-eyed daughter (19:177).

In addition to business and art, Culmer cultivated a literary talent and eventually enjoyed some prominence as a man of letters. He was editor of the \textit{Utah Miner}, the \textit{Utah Gazette}, the \textit{Salt Lake Times Daily}, the \textit{Salt Lake Journal of Commerce}, and the \textit{Provo Enquirer}. He was active in clubs and societies and participated in most civic affairs. He organized the first Rotary Club in Salt Lake City (52:36).

Notwithstanding the breadth of his interests and accomplishments, he is remembered best for his art. There is some evidence that he was influenced by Thomas Moran and Bierstadt, two outside painters that visited Utah, as well as Church, Turner, and other noted artists of the period. An ardent student of geology and botany, Culmer appreciated raw nature with an intellectual depth that enabled him to draw deeply for his own creations. In speaking of the inspiration for one painting, Mr. Culmer wrote:

I had seen this giant from afar several times in previous years and noted its noble outline against the sky from miles away. It is on the trail, yet off the trail, to Lake Solitude near Brighton. When Mr. Mont Ferry and Captain Jos. E. Caine proposed a walk in that direction I inveigled them up and down the steep slopes by flowery ways to the high ridge where it lords the landscape. Few things in nature delight me more than the association
of graceful feminine quaking aspens with the grim masculine pinion pines; and no place do they dwell together more beautifully than on that charming mountainside. So while we three foundered in delight in a sea of white columbines, golden glow, and purple asters, I found this theme for a picture I had long dreamed of painting (52:37).

Perhaps the excerpts recorded below epitomize best the inspiration Culmer received from the canyons east of Salt Lake City:

Down near the mouth of Big Cottonwood Canyon is a little bungalow, sheltered by trees, and edged by the big stream which flows from its icy sources far up among the peaks. Here, H.L.A. Culmer through much of the spring, summer, and autumn seasons hibernates (in artist, not in bear fashion) and at the end of the period of seclusion brings back squares of delectable canvas, laden with fruits of contemplation and hand artistry, to grace the walls of the town studio on West South Temple Street. There at present, a half dozen new pictures are placed, bringing distinctive new tones and subjective imagery among the less recent themes of mountain, desert and river. One of these, "Rushing Waters," represents a scene within a hand's throw of Mr. Culmer's canyon bungalow -- a bit of the Big Cottonwood Creek which "rushes" over boulder and pebble in it's tumultuous way down the canyon path.

"A Dream of Spring" is the title of a picture of an idyllic spot near the canyon mouth, a wild nook tinged with pale hues of a coming season, not yet wearing its regnant robes of verdure. "There is a new season each week, up there," said Mr. Culmer. "I can go out one time and get hues and shades and tints which in a week's time will be replaced with new impressions. They change with the week as sunlight and shadow through the day."

... One of the Cottonwood lakes, "Lake Florence," is another picture completed during the summer and is a study in iris shades, the lake covered by reflections from near mountains tinted in delicate sunset hues (52:38).

Culmer passed away in 1914. His final painting, Moonlight on the Water, like so many of his earlier paintings, took it's inspiration from the mountainous beauty of Utah.

John Hafen and James T. Harwood, important Utah artists and contemporaries with Ottinger, Lambourne, and Culmer, sought and found, albeit to a lesser degree, themes for some of their finest works in the Wasatch Mountains east of Salt Lake City. In addition to home artists, H.L.A. Culmer points out in an article written for The
Contributor that Albert Bierstadt sketched nearly all of the Cottonwood Lakes (19:175), and Thomas Moran, while he did not paint the Wasatch scenes, did paint at a very early date the high lakes in the Uintah's. Hartwig Bornemann, an artist of New York City, visited Big Cottonwood Canyon in company with some resident artists, and while there christened Lake Mary in honor of his wife (19:205). This took place sometime in the 1870's -- prior to this time the lake was known as Granite Lake (63:1055).

Today, in retrospect, it is futile to conjecture on the number of artists, authors, and nature lovers who have felt a deep inspiration and kinship to the mountain haunts of the Wasatch, but anyone who spends time in the canyons today is likely to see sketch books, pallets, note pads, cameras, and other accoutrements borne by devotees who still find in the mountains, lakes, streams, and vegetation touchstones to the beautiful.

Scouting

Late in 1910, or early in 1911, a committee comprised of B.H. Roberts, George H. Brimhall, and Benjamin Goddard were commissioned by the General Board of the Young Mens Mutual Improvement Association to study the Boy Scouts of America, with the task of making recommendations as to whether or not the Church should affiliate with the national program. At a meeting of the General Board held on March 22, 1911, the recommendations were read which said in part:

In review of all that has gone before in this report, your committee, while recognizing the very great excellence of the Boy Scout Movement in and of itself, and appreciating the high aims of the very distinguished gentlemen with whom it originated, feel no necessity either for giving encouragement to the creation of units of Boy Scouts, or for entering into confederation with such
separate units and other organizations taking up scout work; since in our YMMIA Associations we are already provided with both sufficient and efficient organization to cover the field of activities proposed by scouting; and manifestly to multiply organizations where they are not needed would be a waste of energy. Moreover, to create new scout units, or to confederate with other organizations would likely result in dividing the interests of the junior members of our associations, and perhaps wean them from love and loyalty to their own organization founded through the inspired leaders of our Church, for which there would be and could be no compensating returns.

Your committee therefore recommend that the General Board say in answer to all solicitations to participate in the Scout Movement in Utah and in other places where the organizations of the Church of Latter-day Saints are established, that we are provided with organizations that cover and provide for the good work proposed, and that it would not be to the best interests of our own organizations to take up the Scout Movement and organization. And we also recommend that this decision, if it meets with the approval of the General Board, be at once imparted to the stake superintendents and ward presidents (10:541-542).

The report was unanimously adopted.

It seems clear that the solicitations referred to in the above quote came from anxious ward and stake leaders who, seeing some advantages in affiliating with the Boy Scouts of America, sought approval from the General Board. There is little doubt that correspondence continued after the report was published in the Improvement Era, with the result that on November 29, 1911, on the motion of Antony W. Ivins, then a member of the YMMIA, the MIA Scouts (96), were officially organized by the General Board. Plans and policies were quickly formulated and were soon forthcoming -- one of which was that the handbook of the Boy Scouts of America should be secured and used by MIA leaders. Dr. John H. Taylor was given the responsibility to promote scout work in the stakes and wards under the direction of the athletic committee. In the June Conference of 1912, the Saturday afternoon session of June 7th, was devoted entirely to Scout activities. John D. Giles observes that this was the first general scout gathering in
Figure 10. Sketch of a mountain lake drawn by Alfred Lambourne, 1890. Taken from Senic Utah, authored by the artist.
the church (45).

In May, 1913, the MIA Scouts, upon invitation from the national council, affiliated with, and became part of the Boy Scouts of America. The official action of the executive board was taken May 2, 1913, at which time Dr. Taylor was given special commission as representative of the national council in charge of all MIA Scouts. The national charter of the MIA Scouts of the Boy Scouts of America was issued on May 21, 1913, which becomes the official date of the entry of the MIA Scouts into the national organization (45).

Statistics reveal that scouting was an immediate hit in the Church of Jesus Christ of Latter-day Saints. The percentage of participation and rank advancements were soon higher in Utah than anywhere else in the nation.

The emphasis of scouting on the out of doors sent troops to the mountain areas situated in their locales. The concentration of population in the Wasatch front area led to the frequent use of forest lands in the area endemic to this study -- including the many trails that had grown up in the area. In 1924, Russell L. Tracy gave 1100 acres of land up Mill Creek Canyon to the Boy Scouts of America. The Tracy Wigwam is closely adjacent to catalogued Mill Creek Canyon trails and scouts continue to make use of these trails.

**Fathers and Sons' Outings**

It is not altogether clear when wards and stakes (local congregations) began to sponsor annual fathers and sons' outings. In all likelihood they were an outgrowth of attempts to put into practice the council of general authorities that local leaders provide opportunity for church-sponsored outings and activities. In all probability these were first entered into on a sporadic basis, found successful, and grew into annual affairs. Word of mouth popularized the
outings and finally the YMMIA General Board sent out word that:

Under the leadership of the YMMIA provision should be made for a fathers' and sons' outing to be taken sometime during the summer (1921). The place, date, and duration of the outing are left to each stake. Where it is thought advisable by the Stake Superintendency, the ward instead of the stake unit may be used.

With proper preparation, giving announcement early, this event can be made one of the most pleasurable and profitable of the season. Have a vacation, do something different, get close to your boys, go out into the open country and play, sing, rest, and worship. Every bishop, father, son, and every YMMIA officer should go. Keep away from resorts; it interferes with the camp social spirit. If possible, plan for at least three days in order that you may establish a regular camp. Avoid Sunday (2:853).

The annual outings that arose both prior and after this directive appeared in the Improvement Era, met with huge success. The General Board of the YMMIA, acting as a kind of clearing house and dispenser of ideas, solicited from wards and stakes photographs accompanied by written reports of outings that were held. These were featured in the Improvement Era and other church periodicals along with suggestions for the planning of activities, menus, daily schedules, etc. The program soon spread into the furthermost branches of the church as evidenced by the 1925 report of the fathers' and sons' outing held in the Mowbray Branch in South Africa (93:604). The vigorous, regular reporting in the Improvement Era, of these outings begun in 1920, continued until 1928. In 1926, the General Board published a beautifully illustrated 24-page pamphlet entitled Fathers and Sons' Annual Outing, Summer of 1926.

It goes almost without saying that ward and stake units native to the Salt Lake Valley made extensive use of local canyons. That this was so is evidenced by 1922 reports in the Improvement Era, wherein a picture shows a flag raising ceremony at an outing held in East Mill Creek Canyon. No attempts were made to research ward and stake
historical reports so as to ascertain the actual number of outings held in the canyons, but undoubtedly they were legion. The author recalls one such outing held at the head of Mill Creek Canyon wherein he was a participant. A favorite activity at the outings was hiking, and the trails that laced their way through the forest were trodden firmer by the footsteps of fathers and sons.

MINING DEVELOPMENTS

In a very real way the earth is a huge matrix and the labyrinth of life that inhabit its land and waters draw sustenance from her constituent elements. Some of her habitats are hostile and barren, some so austere that only an occasional plant form can find a tiny ecological niche — while others literally teem with plant and animal life. Due to his divine origin and surmounting intellect, man occupies a unique position among her varied species. Yet there is a sameness that pervades his distinctness, for he too must depend on her for life — perhaps more so than any other biological form. Having needs that outrun existence he drinks deeply at her well springs drawing to himself a cup that overflows into civilizations characterized by abundance, ease, and luxury. Ever searching for ways to increase his dominion, man returns again to the earth from which he draws his life, for earth provides the blocks and masonry of progress.

Early Mining in Utah

Turning earthward, the author desires to include part of the introductory paragraph of an article written for the issue of the Utah Historical Quarterly devoted to commemorating the centennial of
commercial mining in Utah:

Next to human resources, available minerals are among our most essential and prized possessions. Mining provides essential raw materials for the tools and equipment used in agriculture, in industry, in transportation and communication, and in the ordinary household. Indeed, mineral products constitute the building blocks of both developing and advanced societies (4:192).

The dream of a zion in the tops of the mountains was firmly implanted into the minds and hearts of the pioneers, who made the Salt Lake Valley their home. Had not the prophet Joseph Smith predicted that some of the saints would

... go and assist in making settlements and build cities and see the Saints become a mighty people in the midst of the Rocky Mountains (104:85)?

Certainly the vision was there, and dreams and visions do have a way of becoming realities -- especially where there is determined industry and unflinching commitment. The pioneers set out to build the tools that would transform dreams. They looked to the earth.

In speaking about the beginnings of mineral resource development in Utah, Leonard J. Arrington points out that:

It is not true, as some historians have asserted, that Utah's pioneers were uninterested in mining or that they "deliberately retarded" mining activity. Mormon leaders seem to have known, as other statement have known, that an advanced and progressing economy could not be built without mining, and some of their strongest statements are those relating to the necessity of coal and iron mining. Their official interest is indicated by the fact that mining was not left to unaided private enterprise. The church called official exploring missions, and it dispatched official parties of miners to work the finds and prepare the mineral for use (104:194).

Notwithstanding church interest in encouraging mining ventures, there were fairly definite limits beyond which the position of the church was negative. It does seem consistent with the sources to assert that insofar as the development of precious mineral mines was
concerned, church leaders and official church policy discouraged participation. The conclusions of Anna Viola Lewis seem pertinent:

One is brought to the conclusion that Brigham Young wished to develop any mines necessary for providing equipment or comfort in building up his colonies, but . . . his policy . . . was to confine his people to agriculture; to develop a self-sustaining, rural population, quiet, frugal, industrious, scattered in small valleys, and so manageable by church organizations.

Then, too, he strove against a mad rush for mineral wealth with the attendant evils that go with mining camp life and the inrush of Gentiles that would, he thought, destroy the community life of the settlements.

Sensing keenly the hard struggle necessary to turn a desert into a producing area, he foresaw that if large numbers left the farms to seek minerals, those remaining would not be able to produce enough to feed the communities and thus famine would result. He wished to build up cooperative, social and economic community life (74:48).

In addition to these conclusions, the present author would add one additional rationale unmistakably present in Brigham Young's public statements regarding the pursuit of precious minerals but no where made explicit by Anna Viola Lewis, viz., that Brigham was keenly concerned with individual salvation in terms of the scriptural ideas of not setting one's heart on the things of the world. There is no doubt that he taught that treasure could best be accumulated in heaven through the toil that built cities and raised grain -- the embellishments could wait.

Although Brigham Young seemed to sense the presence of precious minerals in close proximity to the valley, it was left to the federal government under the auspices of the United States Army to make the finds. Harboring some question as to the position of the Mormons respecting the United States Government, the Administration of Abraham Lincoln provided that the Secretary of War be empowered to order a force of approximately 750 California and Nevada volunteers to Utah.
Under the command of an ambitious Irishman, Patrick E. Connor, Fort Douglas was established in October of 1862. Connor detested the Mormons (at least at first) whom he described as "a community of traitors, murderers, fanatics, and whores" (91:119). His first solution to the Mormon problem seemed to have been military force, but having been instructed to pursue a more peaceful policy he looked for other means (4:196). In 1863 they came.

Accounts differ with respect to the discovery of a vein of ore in Bingham Canyon, but in 1863, Connor became involved with the find. Other veins were located and claims staked, meetings were held and by-laws instigated, districts were organized, and mining companies incorporated under the laws of the State of California (the Utah Territorial Legislature failing to pass laws permitting the general incorporation of mining companies). Keenly aware of the allurement of precious mineral mines, Connor wrote to his superior in San Francisco concerning a new solution to the Mormon problem:

I desire to inform the Department Commander that I have considered the discovery of gold, silver, and other valuable minerals in the Territory of the highest importance and as presenting the only highest prospect of bringing hither such population as is desirable or possible. The discovery of such mines would unquestionably induce an immigration to the Territory of a hearty, industrious, and enterprising population, as could not but result in the happiest effects, and, in my opinion, presents the only sure means of settling peaceably the Mormon question. I have looked upon the discovery of mines in the Territory as in the highest degree important, for the reasons stated. I have instructed commanders of posts and detachments to permit men of the commands to prospect the country in the vicinity of their respective posts whenever such work would not interfere with their military duties, and thus furnish every proper facility for the discovery and opening of mines of gold, silver and other minerals (91:514).

Such encouragement in the presence of mineral finds led to excited prospecting activities -- not only in the Oquirrh's, but in the Wasatch
Mountains and then more distant places.

**Mining in the Cottonwoods**

Having provided this basic foundation, let us move now to the area endemic to the study. Accounts generally chronicle the first discovery of ore in the Wasatch Mountains in 1864, maintaining that the organization of the third district in Utah occurred prior to July of that year. It was named the Wasatch mining district and was large enough to include most of the territory in the Wasatch Forest east of Salt Lake City. On July 20, 1864, a meeting of interested parties was held and the name was changed to the Mountain Lake District. The boundaries of this district were specified in the *Daily Union Vedette* for July 22, 1864:

> Beginning at the junction of Parley's Creek with Jordan River, thence up the right bank of said creek to the original eastern boundary line of the Wasatch mining district, thence along the eastern margin bounday to the head of Utah Lake, thence along the eastern margin of said lake to the head of the Jordan River, thence along the eastern bank of said river to the point of starting (27).

In 1869-70, the Mountain Lake district was further divided and separately organized into the Big Cottonwood, Little Cottonwood, and American Fork districts. Near the same time the eastern part of the Mountain Lake district (Park City area) was divided into the Uintah, Snake Creek, and Blue Ledge districts (14:72).

Mining activities in the Cottonwood Canyons were slow to develop due to poor transportation facilities and the lack of knowledge for profitable extraction of the minerals (74:94-95). The most productive period was between 1871 and 1877.

Most of the mining in Big Cottonwood Canyon was carried out on
the southern ridges, the most notable exception being the Maxfield Mine located on the northern slope of the canyon about a quarter mile below Argenta. Brief consultation of U.S.G.S. maps reveal that mines proliferated in Cardiff Fork (Mill D South Fork -- earlier may have been known as Mill G Fork), Silver Fork, and Honeycomb Fork, although prospects were made throughout the upper southern portions of the canyon.

Turning first to Cardiff Fork, two trails are catalogued by Wasatch National Forest personnel: the one running the entire length of the fork crossing the divide and terminating in Alta --- the Cardiff - Little Cottonwood Trail #8021 --- and the other, a short scenic trail leading to Donut Falls --- the Donut Falls Trail #8022. While it is true that lumber interests preceeded mining activities, there is no doubt that roads were standardized and extended as a result of the latter. Heikes points out that various plans were made to tunnel from Alta to the Big Cottonwood Creek side of the divide where better wagon roads of more even grade could be used (14:74). Such a tunnel was never constructed, in fact, contrariwise, records indicate that in some of the earlier operations of the Carbonate Mine (located in Big Cottonwood drainage on the divide between Mineral Fork and Cardiff Fork) the ore was hauled over the Big Cottonwood - Little Cottonwood divide and down Little Cottonwood Canyon (15:105). It is likely that this practice accounts for the existing trail's southern terminus in Alta. Major mining activity persisted in Cardiff Fork for four decades in this century. The prolonged and pronounced interest in this fork had great influence on trail development.

Silver Fork and its easterly tributary, Honeycomb Fork, were
areas of active mining interests. Maps that grew out of U.S.G.S. Professional Papers detail crude roads to the head of Honeycomb Fork, and a significant distance up Silver Fork (15). The Hikers Trail Map printed by the Salt Lake Ranger District of the Wasatch Forest show no catalogued trails located within the ridge confines of these forks, nor are there any trails shown on more recent U.S.G.S. maps.

The Little Cottonwood district was comprised of a staggering number of mining claims covering an area of about two and one-half square miles at the head of the canyon. Such a concentration of claims in so small an area gave rise to the town of Alta. Several authors have chronicled the alternate boom and devastation that marked the rather tumultuous and stormy history of this little town.

Even a cursory view of U.S.G.S. maps reveal a veritable host of prospects, tunnels, and shafts, some of which yielded rich returns. Running therefrom, trails and roads connect the finds with the former stores, bars, hotels, and dwellings down on the flat. Early maps show roads on Emma Hill, high into Albion Basin, a short distance into Collins Gulch, high up Peruvian Gulch, and half-way to Gad Valley -- not to mention a connective road crossing the northern ridge into Big Cottonwood Canyon. Trails radiate out in almost every direction. Actually there are at present in Little Cottonwood Canyon four trail segments that lead into Big Cottonwood Canyon, namely, the Cardiff - Little Cottonwood Trail #8021, the Days Fork Trail #8023, the Alta - Brighton Trail #8027, and the Catherine Pass Trail #8026. In addition, there are three trails within the confines of Little Cottonwood Canyon, in close proximity to Alta -- the Secret Lake Trail #8071, the Germania Pass Trail #8058, and the Gad Valley Trail #8054. Inasmuch as
Figure 11. Abandoned mining road shows remnants of by-gone mining era. Used by permission of the Salt Lake Ranger District.

Figure 12. Miner's cabin at Bakers Spring -- adjacent trail remnant. Such scenes indicate the effect of mining on trail development. Used by permission of the Wasatch Forest Service.
accounts which describe mining activities speak incidentally of road and trail construction, it seems apparent that mining activities, at least to some extent, account for trail etiology in this area.

WATER COLLECTION SYSTEMS

Certainly, for the pioneers, there was no more valuable natural resource in their new home than the water which brought life to parched ground. With it there would be grain and fruit, vegetables and flowers, and shade and suitable comforts for a home in an otherwise inhospitable valley. This must have been emphasized to the minds of those in the advanced party as they attempted to turn dry soil on the 23rd of July, 1847, only to witness the breaking of several plows. At 2:00 p.m., men who had been appointed for the purpose began to build a crude dam across City Creek and dig a simple system of ditches to allow the water to run onto the land. After a good soaking, the land yielded to the plow, and on the following day potatoes were planted (95:145).

The Need for Water

The scarcity of water and the cooperative nature of early pioneer life sort of dictated that water allocation should not be based on the doctrine of riparian right, which to this point in time was the dominating principle in water-use privileges. Basically, it declares that persons who hold title to property on the bank of a river or stream have access to and use of the water; further, that if a person owns land upon which a spring originates he holds controlling power to its use. The pioneers decided that there would be no private
ownership of water -- instead, allocation would be based on need and prior appropriation (95:157). This was fine at first, but as time passed it became increasingly apparent that among the various vicissitudes of pioneer life in the valley, there was a gnawing threat that water resources would not be sufficient for the swelling population.

The growing scarcity, magnified by drough seasons led to civic surveys and reports, and on October 21, 1879, a committee of Aldermen reported to Salt Lake City officials that:

... There are two classes of land owners within the corporate limits (of Salt Lake City); one who by appropriation and use of the water flowing into the city for many years have secured a permanent title in said waters; another, who purchased or took up lands on the outskirts of the city proper, after the waters flowing therein had been appropriated and used by the class first named. This latter class, although they have been allowed to use surplus water, when there was any, have no permanent water right, and when the waters are deficient, as during the past summer, they are left entirely without, and are the greatest suffers as they are not only deprived of irrigating water, but also of water for household purposes (50:4).

By the time the problem became noticeable and then increasingly severe, channels of recourse had greatly diminished. As early as 1860, practically all of the waters from the several mountain streams had been appropriated for agricultural purposes by families whose livelihood was dependent on the success of farming ventures. This restricted municipal use almost entirely to City Creek -- and City Creek could not meet the swollen demands accruing from increased population. In 1880, city population was 20,000, and during the next eight years it more than doubled. Now it became all too clear that the water shortage problem not only effected agriculture, but the actual culinary needs of the people.
In solving the dilemma it was decided that certain exchange agreements should be worked out whereby water from the recently completed Jordan and Salt Lake City Canal would be exchanged on an equivalent basis for the use of the waters originating high in the Wasatch Mountains. Over the next four and a half decades exchange agreements of differing types were negotiated. Mr. A.F. Doremus, City Engineer in 1892, was a strong advocate for exchange agreements. He stated:

The exchange of lake for mountain water would be a mutual benefit, inasmuch as the growth of the city is essential to the prosperity of the farmer, and the farmer is equally as necessary to the growth of the city (50:11).

His statement recognizes the interdependence of the municipality and the adjacent farming and suburban territory.

During the period from 1892 to 1920, and even beyond, there was a movement to construct reservoirs and distribution facilities (50:11-12). This trend was not only felt by the Salt Lake Municipality, but also by irrigation companies who represented expanding farming interests. Indeed, insofar as farming is concerned, this period may be characterized as a final expansion period before suburban expansion and a broadening industrial base led to eventual decline. It is in this period that interest is taken for the purposes of this thesis.

Upper Bells Canyon Reservoir

Insofar as records show, this reservoir was the first one constructed in the canyons delimited for consideration. The State Department of Water Rights hold two files on the Upper Bells Canyon Reservoir. File 57-85, contains correspondence and reports that indicate
that an unnamed reservoir lake was constructed at the 9300 Foot level in Bells Canyon by Bell Canyon Irrigation Company, Draper Irrigation Company, and North Dry Creek Irrigation Company headed by E.O. Brothers, Richard Carlquist, and George H. Poulson, respectively. The water right was evidenced by diligent right by use, the date of first use being August 24, 1894 (39). How long the dam was in construction records do not indicate, but in all probability it was of significant length for later correspondence regarding the repair of the reservoir state that:

The reason for not using the full capacity of the reservoir has been the extremely high cost of transportation of the material necessary for the repair of the existing dam. The site can be reached only on foot or by pack train (39).

The other file contains some brief statements as to dam origins in a response written by F.W. Cottrell (dated August 7, 1944) in answer to a U.S. Forest Service complaint issued in the fall of 1943. The following is quoted from the letter:

The reservoir is at elevation 9,300 feet above sea level, the location and elevation having been taken from the U.S.G.S. Ft. Douglas quadrangle sheet. This dam and reservoir are apparently owned one-half by the Bell Canyon Irrigation Company and one-half by the Draper Irrigation Company. The impounding dam is an arched structure having an upstream granite masonry wall approximately six feet in thickness, backed by a combined earth and rock fill intermediate section confined by a downstream dry rubble wall. The crest width of the dam is approximately 24 feet including two walls. The structure was built many years ago, some say in excess of sixty years, prior to this time (39).

It is not entirely clear what first attracted early settlers to Bells Canyon, but in all probability water interests were preceded by mining and lumbering ventures — possibly livestock operations as well. Evidence indicates that the canyon derived its accepted name from a prospector who mined in its confines, and, later, a wagon
road and saw mill were built in the canyon (sometimes called Dry Creek Canyon) by Hyrum Despain and David Archibald (9:42). Undoubtedly those parties who later constructed the impounding dam appreciated the road and trail development that had preceded them. Indeed, were it not for these earlier efforts the project may never have been contemplated. It is likely, however, that the extreme elevation of the upper reservoir site required an extension to the trail that was then extant. If this was the case, not only did water interests help to standardize and more firmly establish the existing trail, but it played a role in developing the upper segment leading to the dam.

A few years ago the dam was demolished by Ray Lindquist of the U.S. Forest Service. This action was taken because of complaints that the dam had deterioriated and was no longer safe for impounding water (76).

**Lower Bell Canyon Reservoir**

The construction of this reservoir began in 1900, and appears to have risen through the joint efforts of the Bell Canyon Irrigation Company headed by Gordon E. Mickelson, and the Dry Creek Reservoir and Irrigation Company led by Adolph Mickelson with M. Burgess Andrus as secretary. The dam was approved on February 11, 1914, and underwent state inspection on August 12, 1915. In 1921, the owners submitted a proposal for enlargement of the existing structure, but enlargement did not occur until 1949, when it was raised an additional twelve feet (39). The dam is located near the mouth of Bells Canyon at the 5400 foot level.

This reservoir had little effect on trail development in the
canyon as it is situated so near the mouth, however, the road that leads to it is an important corridor to the Bells Canyon area.

Red Pine Lake Reservoir

On February 26, 1913, the Little Cottonwood Water Company of Sandy, Utah, made application to appropriate water by the construction of an impounding dam on the Red Pine Lake. Construction commenced in 1915, but progressed so slowly that an application for extension was requested on September 21, 1927, for the completion of the dam. The following is quoted from the application:

The actual construction work on the dam for the reservoir situated on the Red Pine Lake was begun in 1915, and during each open season during said period construction work has been performed, and there has been expended by the Little Cottonwood Water Company in construction work a sum in excess of $13,000.00, but owing to the shortness of the season and difficulty of access to the place of construction, and the fact that it is practically impossible to haul cement by any conveyance except pack animal, that the construction is therefore necessarily slow. The total cost of construction is estimated at approximately $30,000 (42).

State files indicate that proof of appropriation was received in November of 1929, and on June 5, 1930, the Certificate of Appropriation was granted (42).

In all probability, dam construction had a great deal to do with trail development. U.S.G.S. maps show no prospects or shafts in close proximity to the Red Pine Trail #8050.

White Pine Lake Reservoir

On September 10, 1929, at 10:45 a.m. James A. Muir, president of the South Despain Ditch Company filed the initial request for the construction of the impounding dam at White Pine Lake. The following season work commenced and was continued sporadically for the next
several years. Apparently, however, there was not intense motivation to complete the construction, as the files indicate a virtual flood of requests for reinstatement and extensions to complete the dam until finally, on October 8, 1963, contract was made with the Utah Water and Power Board to repair and enlarge the White Pine Dam. The estimated costs were $58,382.60, but by the time the work was completed on October 13, 1966, the dam carried a price tag of $72,948.83. In addition to the actual dam construction costs, the ditch company spent $17,000 to construct five miles of road from the Little Cottonwood Highway to the reservoir (44).

There is no doubt that the road greatly facilitated the work of construction, but it has also led to the demise of the foot trail that sufficed for so many years. Indeed, today there are sections of the trail that are entirely obliterated, and the remainder so obscure that it would be unusual to see hikers off the roadway. In their book, *Wasatch Trails*, the Wasatch Mountain Club makes no mention of the trail whatever.

**Lake Phoebe - Mary Reservoir**

**Lake Martha**

Growing municipal requirements for culinary water led the Salt Lake City Municipal Corporation to make application for the appropriation of Big Cottonwood waters on December 15, 1909, through the construction of the Lake Phoebe-Mary Dam. A later injunction ruled that the city must let out the work by contract, and on August 13, 1913, the Owen H. Gray and Company won the bid. Five days later the contractor established his camp at the dam site and commenced the work of excavation down to bed rock (41). Most of the actual dam
Figure 13. Construction of the Lake Mary Dam. Taken from the darris report on water development.
construction occurred during 1915 and 1916 (50:12). Concerning the waters of Lake Martha the following entry was found:

Application No. 2880 — A 175, for appropriation of water of Lake Martha at the head of Big Cottonwood Creek (place of storage having been changed to Lake Phoebe-Mary Reservoir, Application No. 2878) would be due March 27, 1915 (41).

Trails proliferated early in this area. Prior to reservoir interests loggers, miners, artists, hikers, and other recreationers had been attracted to the Brighton Bowl. But with the advent of dam construction and the heavy machinery used to excavate and build, trails were enlarged into roads or fell out of use in favor of new roadways. In any event, there is no doubt that water resources wielded significant impact on trail development and standardization.

Twin Lakes Reservoir

Just sixteen days after application had been made to appropriate water from Lake Phoebe, Lake Mary, and Lake Martha, the Salt Lake City Municipal Corporation made application to construct the Twin Lakes Reservoir and thereby appropriate additional Big Cottonwood water. Notice of this action was published in the Herald Republican. The dam was constructed during the same period as the Phoebe-Mary Dam. Proof of appropriation was tendered on April 24, 1916, and the Certificate of Appropriation for 897.88 acre feet was granted September 8, 1916 (43).

Correspondence related to the application for extension of the water right included the following items of interest:

That on January 27, 1914, said Salt Lake City was informed that its proof of application in Application No. 2895 for appropriation of water from Twin Lakes Reservoir to store said waters for public uses in Salt Lake City, was due on April 1, 1914. That the region wherein said lakes and waters and said proposed
reservoir are situated is high up on the Wasatch Mountains, is difficult of access and the season for work therein is very short and never longer than three and one half months in each year. . .

Said city has proceeded with diligence in performing all work connected with said project described in said Application No. 2895; said City has put in and has done all work reasonably possible in clearing site for reservoir, excavating dam site and making roads and forwarding said enterprise (38).

The road construction mentioned herein provides some evidence that water impounding systems gave rise to trail development.

Lake Blanche, Lake Florence, and Lake Lillian Reservoirs

On November 5, 1904, the Brown and Sanford Irrigation Company of Murray, Utah, made application to appropriate water wherein they

. . . proposed to construct dams across the mouth of each of three lakes, near the head of what is known as Mill 8 South Fork of Big Cottonwood Canyon (40).

On December 15, 1905, formal request was made to the U.S. Forest Service to construct the reservoirs as the lakes were situated on their lands. Apparently there was no immediate reply so request was remade on March 17, 1908, and this time approval was granted on condition that proper Certificate of Appropriation would be secured.

Construction progressed slowly and extensions were required to complete the structures. The following is taken from correspondence wherein extension was requested:

The said reservoirs sited are high in the mountains, the means of access thereto being difficult and precipitous, the dugway from the main canyon road to the sites being so steep that materials for construction have to be packed on animals, sand and gravel and rock conveyed on sleds and rock boats, and the season applicable to construction work is short, hence the construction work is expensive, difficult, and proceeds slowly (40).

Certificate of Appropriation was granted for Lake Blanche No. 1 and No. 2 (Lake Blanche and Lake Florence) on April 27, 1920, and
finally on November 29, 1939, for No. 3 (Lake Lillian). Information also suggests that there was an enlargement on the Lake Blanche Dam that was included in the terms of the later certificate (40).

No mention is made in any of the correspondence regarding vestigial roads or trails extant from logging ventures, prospectors, or artists, although it is certain that Mill B South Fork was harvested for timber and for beauty. Regardless of what marks predecessors may have left on the land, and to what extent they penetrated the fork, it is certain that the pack animals, sleds, and rock boats that laboriously moved toward the reservoir sites left their imprints on the land and prominently figure in trail development.

CCC DAYS

Some historians are quite adamant in maintaining that the fourth of March, 1933, marked the turning point of the depression into which the United States had plunged some years earlier. The dismal accumulation of financial crises that had led to breadlines, staggering unemployment, wage reductions, apartment and home evictions, repossessions, bank runs and the like had finally reached a murky bottom. In the words of William Manchester:

The financial heart of the country had stopped beating. Banking in every state was wholly or partly suspended. Flags flew in Wall Street honoring the inauguration, but the stock exchange was officially closed, and so, for the first time in eighty-five years, was the Chicago Board of Trade (80:76).

But the gloomy sediment of depression and the public despair that accompanied it was about to become turbid by the clarion call of the nation's thirty-second President. Without hat or coat on a cold, blustery day, Roosevelt repeated the oath of office after Chief Justice
Charles Evans Hughes. Ignoring applause he turned to the podium:

Let me first assert my firm belief that the only thing we have to fear is fear itself — nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance. . . I shall ask Congress for the one remaining instrument to meet the crisis — broad Executive power to wage a war against the emergency, as great as the power that would be given me if we were in fact invaded by a foreign foe. . . The people of the United States have not failed. In their need they have registered a mandate that they want direct, vigorous action. They have asked for discipline and direction under leadership. They have made me the present instrument of their wishes. In the spirit of the gift, I take it (77:231,234).

There were some critics, of course, complaining of undue ambiguity, some who were a bit unsure, but for the people as a whole the speech was a triumph. Nor was Roosevelt's promise for action an idle one. From the March 9th passage of the Emergency Banking Act, to the passage of the National Industrial Recovery Act on June 16th — a withering hundred days of legislative war against the all too manifest effects of the depression — Roosevelt showed his determination to answer the mandate of the American public. William E. Luchtenburg observed:

When Congress adjourned on June 16, precisely one hundred days after the special session opened, it had written into the laws of the land the most extraordinary series of reforms in the nation's history. It had committed the country to an unprecedented program of government-industry cooperation; promised to distribute stupendous sums to millions of staple farmers; accepted responsibility for the welfare of millions of unemployed; agreed to engage in far-reaching experimentation in regional planning; pledged billions of dollars to save homes and farms from foreclosure; undertaken huge public works spending; guaranteed the small bank deposits of the country; and had, for the first time, established federal regulation of Wall Street (72:61).

Yet, in all of this, it could be argued that Roosevelt's single greatest contribution to the American politics of the 1930's was the fresh breath of hope and courage he instilled in the people (72:42). There are those today who still recall with rich nostalgia the National
Recovery Administration's Blue Eagle campaign. Many American movie-
goers will recall the newsreels showing banks reopening, viable labor
in progress, and President Roosevelt's face superimposed on the wav-
ing American flag. Perhaps some will remember the tune for the fol-
lowing lyrics that provided the audio counterpart:

There's a New Deal in view
There is gold in the blue
There is hope in the hearts of men.
From the field to the hill
From the farm to the mill
Oh the road is open again.

There's an eagle blue in the White House too
On the shoulder of our President there
With a lusty call telling one and all:
"Brother, do your share."

There's a New Deal in view
There is gold in the blue
There is hope in the hearts of men.
From the field to the hill
From the farm to the mill
Oh the road is open again (47).

The Civilian Conservation Corps was an outgrowth of the legis-
lative reforms that were so historic. The actual date of its birth
was March 31, 1933 (58:220). Of its instigation the United States Go-
vernment Organization Manual records:

Civilian Conservation Corps. Created by act approved June 28,
1937 (50 Stat. 319; 16 USC 584), as amended, to succeed Emergency
Conservation Work established by E.O. 6106 of April 5, 1933, under
act of March 31, 1933 (48 Stat. 22), as amended. Was made a part
of Federal Security Agency by Reorganization Plan I, effective
July 1, 1939. Established to provide employment, as well as vo-
cational training, for youthful citizens of the United States who
were unemployed, and, to a limited extent, for war veterans and
Indians, through performance of useful public work in connection
with conservation and development of natural resources of the Uni-
ted States, its Territories, and insular possessions 119:639).

Robert Fechner was appointed director of the Corps from its
establishment in April, 1933, until his death in December, 1939. In
March of 1940, James J. McFate became Director. The Civilian Conservation Corps operated as an independent government agency from April 1933, through June 30, 1939, after which time it was, as has been stated, incorporated in the Federal Security Agency until the time of its liquidation on June 30, 1943.

Notwithstanding the independent nature of the CCC for the first six years of its existence, the Denver Federal Archives and Records Center points out in a pamphlet advertising research opportunities that:

The work performed by the corpsmen was planned and supervised by certain technical agencies, the chief of which were the Forest Service, Grazing Service, National Park Service, Biological Survey, and Fish and Wildlife Service. Records created by the above agencies in connection with their CCC projects have been retired to the Denver Center. Although the volume and type of records vary from agency to agency, most of the records consist of monthly and quarterly narrative reports describing each camps progress (118).

It is lamentable that better records were not kept by Wasatch Forest Officials for work performed by CCC enrollees on their lands and under their jurisdiction. However, there seems to be a general paucity of historical and descriptive records for individual camps nationwide. The National Archives in Washington D.C. house records for thirty-four representative camps (117), and private libraries contain occasional scrapbooks with mounted pictures and job descriptions for more major projects. The Western Americana Collection at the University of Utah library catalogues just such a scrapbook for the Vernal, Utah Camp, but has nothing for the Woods Cross Camp, the camp at Ft. Douglas, the camp situated at the mouth of Big Cottonwood Canyon, and the camp located in Albion Basin above Alta, Utah (this camp has been all but forgotten by everyone who has written concerning the CCC
In a CCC pamphlet entitled, The Civilian Conservation Corps and Public Recreation, the activities of the Corps having to do with recreation are lumped regionally for the forty-eight states. The section dealing with the Mountain States includes the following statement:

The region embraces much of the highest and most spectacular of our mountain, canyon, forest, and glaciated scenery, and is the equal of any in the opportunity it offers for recreation in the wilderness and high country. Civilian Conservation Corps developments have recognized the special recreational character of the region and have been carried forward chiefly on such federally owned areas as National Parks and Forests. Thousands of miles of trail, constructed or reconstructed primarily for protection, invite those who seek their outdoor enjoyment far from civilization; scores of campgrounds, constructed and adequately equipped by the Corps, provide the accommodations they require (113:19).

A search of Wasatch Forest and Regional files housed at the Federal Archives and Records Center in Denver, revealed that prior to the Roosevelt administration, federal unemployment relief projects were carried out in the Salt Lake District. Correspondence under the signature of A.G. Nord, Forest Supervisor, directed to an unnamed regional forester under the date of November 4, 1932, makes reference to cooperative agreements with Salt Lake City in the employment of a force of men to be used on trail and road construction. The memorandum mentions the Mill B - Mill A Basin Trail, Mount Olympus Trail, Mill Creek Bowman Fork Trail, Bowman - Butler Fork Trail, and the Elbow - Smith Fork Trail (36).

That the work begun in 1932 was carried on into the CCC period may be strongly inferred by the presence of a large number of individual trail files that are conspicuously present in the Denver Center's accession 73-A-434, files T-28410 and T-28411, for the period of 1935.
to 1938, and not found in the same concentrations before or since. Corroborating this evidence, the statistical reports for the CCC in Utah show a marked increase in foot trail development and maintenance for the period between September 30, 1935, and March 31, 1936 (see appendix). Forest Service files for this period suggest that CCC enrollees expended labor on the following trails: The Storm Mountain Trail, the Church Fork Trail, the Doughnut Falls Trail, the Green's Basin Trail (no longer catalogued), the Kesler Peak Trail, the Maple Grove Trail (probably now known as the Terraces Trail #8006), the Days Fork Trail, the Mill A Basin – Neff Canyon Trail (now the Neff – Thayne Trail #8011, and part of the Desolation Trail #8148), the Elbow – Smith's Fork Trail, and the Olympus Trail (37).

Local residents and long-term members of the Wasatch Mountain Club, Harold Goodro and O'dell Petersen, both remember CCC work on trails during this same period (92). Harold Goodro mentioned that he made occasional trips to witness trail construction on the Mount Olympus Trail in 1936 (perhaps it was reconstruction or maintenance) (46). Merrill W. Miller, a CCC supervisor, while he was not concerned with trail activity remembers that trail construction and maintenance procedures were carried out throughout the Salt Lake Ranger District of the Wasatch National Forest (82).

Perhaps it would be good to note at this point a discrepancy undiscovered in researching CCC efforts in trail construction. Whereas statistical reports accumulated in the Forest Service Regional Office in Ogden, Utah, show that by March 31, 1940, a total of 237.5 miles of foot trail had been developed in Utah (30), a letter just prior to the liquidation of the CCC from Fred Morrell, Assistant Chief of
Figure 14. Original portal entrance to Mill Creek Canyon. Built by the CCC in 1936. Used by permission of the Salt Lake Ranger District.

Figure 15. Rock bridge built in Mill Creek Canyon by the CCC. Courtesy of the Salt Lake Ranger District of the Wasatch National Forest.

Figure 16. Spruce's shelter under construction in 1935 by enrollees in the CCC. Used by permission of the Salt Lake Ranger District of the Wasatch National Forest.
the Forest Service, showing the cumulative construction projects for nine and a third years in Utah indicates a total of only 45.2 miles of new foot trail construction, with only 33.2 miles constructed on National Forest lands (see appendix). The presence of trail files, the memory of local residents, the growing accumulation in local statistical reports auger for the acceptance of regional totals.

In the Salt Lake District files, the Forest Service has a collection of photographs showing various CCC projects under construction on their lands, but, regretedly, there are none showing trail development or maintenance.

Before leaving this particular section, perhaps it would be well to mention that the CCC did play a role in road construction as well as trail development. Records indicate that they participated in the construction of the Brighton Loop Road (37), as well as other small access roads to picnic sites and trail heads in the local canyons (there was a manifest reluctance to use CCC efforts or relief funds to construct roads to private cabin sites). It was also during this time that a request was made for the improvement or construction of mineral access roads (including the improvement of the Mineral Fork road in Big Cottonwood Canyon), probably with the thought in mind of utilizing CCC labor, but the project was disapproved on the grounds that mine access road money could only be allocated for the production of strategic metals for war purposes, and sheep men felt the existing road was adequate.

In conclusion, the CCC figured prominently in the Wasatch Forest Trail story. Enrollees routed out new trails and expended
efforts to improve and maintain others that had come into existence at an earlier time. From the paucity of documents and the incompleteness of existing records it is not always clear where reconstruction ended and new trail development began -- but undoubtedly both were important.

1943 - PRESENT

Without being redundant let it be stated that, as far as Wasatch Forest auspices are concerned, the greatest amount of trail development and maintenance occurred during the decade of the CCC. Manpower was available, financial resources were allocated through emergency relief legislation, and, for the most part, elementary and inexpensive tools were all that were required to do the job.

From the liquidation of the CCC in 1943, to the present, comparatively small effort has been expended in trail development or maintenance -- at least in that part of the Wasatch Forest that lies within the confines of Salt Lake County. Funds have been harder to obtain, manpower has not been so readily available, and other demands and concerns have taken precedence over the trail.

Trail Maintenance

The maintenance of Wasatch Trails, sporadic as it has been, has been effected by local groups and organizations who have volunteered their services (Boy Scouts, Wasatch Mountain Club, etc.), by the Youth Conservation Corps, county youth trail crews, college age youth hired on part time, and forest service personnel acting in supervisor capacities. The author could find only scant reference regarding trail maintenance during the 1940's and 1950's. During the years of 1967 -
Figure 17. Youth Conservation Corps boys constructing a bridge on the Mill B South Fork Trail. Courtesy of the Salt Lake Ranger District.
1971, forest service files indicate that of the 170 miles of trail that was catalogued during that period, 97.4 miles of trail were maintained. However, in a letter reporting the 1971 accomplishments, Ray Lindquist reported that:

Light maintenance is about all that is undertaken under these programs. Time and funds do not permit rehabilitation which is needed very badly on many trails in the District (34).

Other private groups that have played an unorganized, yet significant role in trail maintenance are the sheep herders and cattlemen. Grazing allotments, while they have been somewhat curtailed in recent years, are still extant, and, in the opinion of Lindquist, the individuals involved in the livestock industry on District lands are due at least some credit for helping to maintain the higher regions of some trails within the district (76).

The surge in trail interest that came in the wake of the nation-wide trail study conducted in 1965 and 1966, led to the appointment of Floyd Iverson, Regional Forester as Chairman of the Regional Trail Committee. In correspondence under the date of August 31, 1966, he reported regional expenditures for trails at $500,000 annually, he raised questions concerning trail standards, and cost analysis, and requested reports concerning trail accomplishments for the previous five year period as well as a proposed program for the next five years (33). Questionnaires regarding trail standards were circulated throughout the region, and it looked as if action would be forthcoming. Presently the five year program appears to be scrapped (76).

In recent years, with the spiraling cost required to perform adequate maintenance procedures, coupled with a growing pre-occupation for environmental protection and energy shortages, etc., sufficient
funds have not been allocated to meet trail care demands. Some Wasatch trails have been virtually untouched for twenty years (76), and travelways have become cluttered and treads all but obliterated in the wake of sloughs and the encroachments of undergrowth.

New Trail Construction

Construction efforts since the CCC have been limited to a section of the Desolation Trail #8148, the Big Water Trail #8042, and the lower quarter mile of the Lake Blanche Trail #8020 (a needed addition after the erosion of the previous trail in the flooding of 1969).

The Desolation Trail surveys and reports were prepared by Julian Thomas. It was decided by forest officials that the trail segment, some ten and a half miles in length, should be contracted. The Aspen Corporation of Provo, Utah, won the bid at $32,346.50. A prework conference was held August 16, 1967, after which time work commenced and rapidly progressed until November 18, 1967, when winter weather brought the work to a halt. The following spring work recommenced and continued through the summer. Apparently, judging from existing records, changed conditions brought an alteration in the contract, and after the final inspection conducted on October 28, 1968, final payment was made. The contract time was overrun by 29 calendar days. Later reports indicate that this trail was poorly constructed (32).

Preliminary use and survey reports for the Big Water Trail were prepared by H. Ames Harrison. Having been approved, bids were secured for the necessary construction and the contract was let to Mecham Brothers of Ogden, Utah, for $9,566.00 on January 6, 1969.
Work that was to begin on July 7, 1969, was deferred one week due to weather conditions, after which it progressed through the summer. Last work was performed on September 12, 1969. Final inspection was by Herbert L. Comstock — all items checked (29).

We out not consider it strange that this development took place in the last half of the decade of the sixties — precisely the same time as the nation-wide study on trails which resulted in the National Trails System Act of 1968, and the National Symposium on Trails conducted in 1971. It is interesting that Durray G. Dalley, Staff Engineer for the fourth region of the Forest Service, and a Utah participant in the National Symposium was invited to a meeting held April 26, 1972, wherein Marvin T. Smith, Director of the Utah State Historical Society invited several state officials, and representatives of the National Park Service, the Bureau of Land Management, and the U.S. Forest Service, to discuss a network of scenic recreation and historic trails throughout Utah. Quoting from a letter that grew out of this meeting, the following was expressed:

At Mr. Smith's request, I gave a short accounting of Forest Service participation in recreational and scenic trail studies as established by the National Trails System Act of 1968.

Mr. Smith said that he was aware that many of the local county, state, and Federal Governmental organizations had already planned individual trail systems. He proposed that the Historical Society undertake the assignment of coordinating the various trail systems in an effort to eliminate duplication. Mr. Smith also mentioned the possibility of a Skyline Trail along the Wasatch Front. I informed Mr. Smith that the Cache, Wasatch, and Uinta National Forests had already prepared a rather extensive plan for such a trail network.

Chandler St. John suggested that if the Historical Society was interested in perpetuating some of these trails as they leave National Forest lands, perhaps another meeting could be scheduled to discuss the various trail systems and investigate the possibility of a statewide trail plan.

Mr. Smith adjourned the meeting and thanked all of those who participated and mentioned that he would like to schedule
additional follow-up meetings in the near future (31).

The author of this thesis could find no follow-up correspondence indicating further Forest Service participation in future meetings. As late as 1974, apparently in answer to a written regional inquiry regarding a crest trail the length of the Wasatch Front, John W. Nielsen, Forest Engineer, wrote the following:

The trail system along the Wasatch Front on the Wasatch National Forest portion is very poor. We cannot at this time make recommendations. We are in the process of doing the land use planning for portions of the Forest. An integral part of this planning will be the completion of an up-to-date transportation plan which would include the trail system.

A crest trail the length of the Wasatch Front may be a very desirable trail. We feel that a study coordinated with our transportation planning should be initiated.

The inherent incongruity implicit in these two letters is suggestive of a loss in trail prestige since the National Trail Systems Act of 1968. As the past merges with the present, it seems apparent that, for the time being, trail efforts will continue to creep -- perhaps not fast enough to guard against nature's encroachments, certainly not fast enough to keep pace with travelway and corridor closure that results from private investors and land developers, so called -- unless, perhaps, we can, amidst the growing complexity of mounting pressures, seek new means of preservation and a new prestige for the trail.
Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

Statement of the Problem

The problem undertaken in this study was to provide a history that accounts for the development of the wildwood hiking trails on Wasatch Forest lands directly east of Salt Lake City. It was discovered that the main thrusts for trail development were economic in nature and resulted from the efforts of early settlers to wrest a living from their environment. This does not mean, however, that other forces were unimportant. On the contrary, it was discovered that recreation, if it did not explain trail etiology, did, at least, contribute significantly to the standardization, popularization, and, ultimately, the preservation of trails that had been impressed into the land. In addition to the economic efforts of settlers and the recreation pursuits of valley inhabitants, the federal government also played a significant role in the Wasatch Trail story, especially Civilian Conservation Corps enrollees who, in cooperation with the Wasatch Forest Service, constructed and maintained trails.

Sub-problems

1. Early lumbering. The urgent need for shelter drove early settlers to canyon timber and in so doing provided the first impetus to trail development on what later became the Salt Lake Ranger
District of the Wasatch National Forest. Lumber, shingle, and lath mills dotted the canyon bottoms for nearly five decades. Roads were pushed deep into steep side canyons so that timber could be harvested to meet the growing demands. Improved transportation and early conservation brought an end to the lumbering activities carried on in these canyons, and deserted roads remained a mute testimony of earlier times.

2. Livestock operations. The Wasatch Mountains east of the valley provided range area for the cattle and sheep that were so important to the livelihood of early settlers. With the passing of time federal rules and restrictions have reduced the amount of grazing allowed, but even at the present time these operations exert an influence on trail development and maintenance.

3. Pioneer recreation. As stated in the opening paragraph of this chapter, not all of the forces that led to trail development were economic. The canyons had drawing power for major celebrations as well as personal inspiration and respite. The ninth and tenth year anniversaries of the arrival of the pioneers in the valley were commemorated by large-scale celebrations at the head of Big Cottonwood Canyon. Later a resort was built at this same site and certain clientele sought commercial recreation. Trails leading to lakes and other kinds of canyon splendor became favorite haunts of early artists and authors. Institutionalized groups such as the Boy Scouts of America and Y.M.M.I.A. Fathers' and Sons' Outings, as well as family groups and individuals made use of existing trails. It is doubtful if early pioneer recreation accounted for trail development, but it did lead to standardization and popularization of trails.
4. Mining developments. The cry of silver and the promise of wealth brought a new breed of men to discover canyon resources — this time in the earth. The latter part of the nineteenth century, particularly the decade of the 1870's, saw the colorful drama of prospecting and mining in Big and Little Cottonwood Canyons unfold. Roads and trails, concomitant aspects of the era, connected shaft and tunnel openings with the towns of Alta, Argenta, and Silver Fork. When the boom was past and the mines largely abandoned trails remained — some of which have persisted to this day.

5. Water collection systems. The scarcity of water and the swelling demands of valley residents led to the building of small storage reservoirs high in natural basins. In the area important to this study, the majority were built by irrigation companies that represented agricultural interests, the only two exceptions being the Lake Phoebe-Mary Reservoir and the Twin Lakes Reservoir built by the Salt Lake City Municipal Corporation. Dam construction accounted for new trail development as well as existing trail standardization as different modes of conveyance transported men and materials to the sites.

6. CCC days. The decade of the 1930's was a particularly fruitful one for trail development and maintenance nation wide. Part of the recovery efforts that accompanied the legislative reforms to shore up the economic floundering of the depression were directed to emergency conservation work. On March 31, 1933, the Civilian Conservation Corps was born. Almost overnight CCC camps began to spring into existence and young enrollees were put to work on myriads of projects. One of the prominent activities of this agency was the
development and maintenance of forest transportation systems, including foot trails. In the Salt Lake Ranger District several miles of trail were constructed or reconstructed. In addition, maintenance procedures were also carried out.

7. 1943 - present. Since 1943, comparatively little new trail development has been undertaken on Wasatch Forest lands east of Salt Lake City. That which has taken place occurred concurrently with the interest aroused by the events associated with the National Trails System Act of 1968. In the past five years interest in trails has waned being subordinated by demands that have impinged rather sharply on an individual and national level. It is a bit of a paradox that the greatest amount of trail development occurred during a period of depression. Let us hope, however, that in future days we are not forced to admit that the pain of trails lost is more severe than the past pain of preservation and development.

Findings

The findings of this study can be broadly classified into two general areas -- those that center around the trail itself, and those that deal directly with the sources used to obtain the data.

Turning first of all to those that center around the trail, the following may be enumerated:

1. The existing trails in that part of the Wasatch Forest that lies directly east of Salt Lake City, in the great preponderance of cases, have their roots in the past. A great many grew out of the economic pursuits that were crucial to valley settlement and florescence. The majority of the remainder were imprinted into the land by
Civilian Conservation Corps enrollees that labored under Forest Service supervision during the decade of the 1930's. Those constructed by corpsmen often were the outgrowth of forest management -- fire control, range management, environmental protection, etc. with recreational purposes being relegated only by-product status.

2. Foot trails, as one might naturally expect, have enjoyed a greater prestige in later years, and that whereas their earlier value seemed to be primarily utilitarian as percurors to roads, communication links, or corridors of economic access, contemporary trail values are primarily recreational, historic, or aesthetic in nature.

3. Notwithstanding the growth in trail prestige, trails are still considered societal fringe benefits. As such they are summarily subordinated in the face of what are considered to be matters of greater urgency. While this is to be expected, it is a pity that ostrich-like we ignore real estate encroachments that close corridors to trail travelways and bar public use.

4. Trail use in the area delimited has greatly increased in the past ten years. The author's own experience and conversation with Forest Service personnel confirm this finding.

5. Trail histories, except in the case of national settlement trails, are practically non-existent.

Those findings that deal directly with sources used to obtain the data were:

1. There is a general lack of historical exegesis on trail development.

2. U.S. Forest Service files on earlier trails, at least in the Salt Lake District, were sketchy and incomplete. In recent years
files have been upgraded considerably.

CONCLUSIONS

While the Mormon migration was considered unique, the agricultural and industrial base that accompanied their colonization was similar enough to other peoples in other localities. All people must eat, all require shelter, all have need of raw products with which to expand the economic base, and all, whether in those days they were willing to admit it or not, had need for recreation and aesthetics. If it is possible, therefore, to generalize, one is led to conclude that a great deal of trail development, throughout the United States, occurred as a result of the economic measures taken to ensure survival and comfort to early settlers. This was true in the area east of Salt Lake City -- the author believes this was true in like situations nationally.

Besides providing additional evidence that recreation requires free, discretionary time beyond subsistence, the study also shows that recreation is often parasitic. After economic ventures pass into obsolescence and are abandoned, avenues are often opened to recreation. Such was true in trail development.

Finally, it was concluded that demands for trail use are generally increasing, but so are demands for private developments — especially ski-oriented development. These two demands are not always compatible, and it is usually true that where profit-motives are present, they tend to primacy.
RECOMMENDATIONS

Based on the findings and conclusions arrived at in this study, the following are recommended:

1. Trail history should be included as a part of modern trail interpretation.

2. Like trail studies should be conducted in other areas -- particularly near population centers where use-potential is great, or in areas of pronounced historical interest.

3. Corridors to trail heads and travelways should be purchased so as to guard against private encroachment.

4. There should be a renewed effort made to secure cooperation between governmental agencies and private sectors for the development, maintenance and protection of trails.

5. In the Wasatch Front area Salt Lake City Municipality and Salt Lake County should purchase right of ways and develop trails up canyon drainage routes that will connect to forest trails.

6. An integrated trail system should be planned and developed for the entire Wasatch Front area, whereby trails link into adjacent forest areas.

7. The departments of Recreation Education in universities throughout the nation should give more emphasis to historical studies.

8. The Department of Recreation Education at Brigham Young University should provide, either through their own auspices or those of the Department of History, a course on historical methods for those graduate students who plan to conduct historical studies.
BIBLIOGRAPHY


18. Church of Jesus Christ of Latter-day Saints. *Journal History*. Church Historical Department microfilm copy. Church Office Building, Salt Lake City.


29. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, reports on the Big Water Trail #8042 in file 7730.

31. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, correspondence from Durray G. Dalley, Staff Engineer for Region Four, in file 7730.

32. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, reports on the Desolation Trail #8148, in file 7730.

33. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, correspondence of Floyd Iverson, Regional Forester, in file 7730.

34. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, reports of Ray Lindquist, General District Assistant, in file 7730.

35. General records of the Salt Lake Ranger District, Wasatch National Forest, United States Forest Service, District Office, Salt Lake City, reports from John W. Nielson, Forest Engineer, in file 7730.


40. General records of the Water Rights Division, Utah State Government, State Capitol Building, records concerning the Lake Blanche Impounding Dams in files 57-6, 57-41, and 57-42.


49. Hardy, Roma K. Personal interview. Salt Lake City, Utah, June 14, 1975.


82. Miller, Merrill W. Personal interview. Salt Lake City, Utah, June 13, 1975.


92. Petersen, O'dell. Personal Interview. Salt Lake City, Utah, June 12, 1975.


96. Roberts, David Lawrence. "Fifty Years of Scouting, The Church of Jesus Christ of Latter-day Saints." Unpublished MSS, Church Historical Department, Salt Lake City.


105. Steward, Julian H. Early Inhabitants of Western Utah. Salt Lake City: University of Utah, 1933.


115. U.S. Corps of Topographical Engineers. Preliminary Map of Routes Reconnoitered and Opened in the Territory of Utah, Western Americana Collection, University of Utah, Salt Lake City.


APPENDICES
APPENDIX A

HIKERS TRAIL MAP -- WASATCH NATIONAL FOREST

SALT LAKE RANGER DISTRICT
APPENDIX B

U.S. GEOLOGICAL SURVEY QUADRANGLE MAPS SHOWING

THE AREA OF CONCERN IN THIS THESIS
The following maps are mapped, edited, and published by the U.S. Geological Survey, and are available for purchase at the Federal Building in Salt Lake City. The quadrangles (7.5 minute series) listed detail topographic features in the area endemic to the study.

<table>
<thead>
<tr>
<th>Quadrangle</th>
<th>Years available</th>
<th>Photorevision -- not field checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draper</td>
<td>1952, 1963</td>
<td>1969</td>
</tr>
<tr>
<td>Sugar House</td>
<td>1934, 1963</td>
<td>1969</td>
</tr>
<tr>
<td>Dromedary Peak</td>
<td>1955</td>
<td></td>
</tr>
<tr>
<td>Mount Aire</td>
<td>1955</td>
<td></td>
</tr>
<tr>
<td>Brighton</td>
<td>1955</td>
<td></td>
</tr>
<tr>
<td>Park City West</td>
<td>1955</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

MAPS INDICATING THE APPROXIMATE LOCATIONS

OF CANYON MILLS
Letters indicate the approximate location of mills in Mill Creek Canyon. See following page.
The letters running down the left of this page correspond to the circled letters found on the map of the preceding page.

MILL CREEK CANYON

Mill

A. This mill was owned by Gausant and Reed and built by Fred Foyer. It was later sold to Osguthorpe and Skidmore. The mill was water-powered and the owners sawed lumber, shingles, and lath.

B. Joseph Stallings located his mill at the mouth of the canyon just west of the old power house.

C. Charles Stillman mill — built near the mouth of the canyon.

D. Peter White mill — built at Thaynes Flat.

E. This mill was built by Edmund Ellsworth and later sold to Mr. Thayne who employed Jack Hill and Daniel Brian to run the mill.

F. Mr. South built this mill. Later it was sold to a Mr. Barton. It was equipped with a circular saw and a flutter-wheel.

G. Chauncey Porter mill. It was water-powered and had a circular saw. Fire destroyed this mill.

H. Archibald Gardner built this mill. It was equipped with a sash saw. The lumber sawed in this mill was used to make table tops.

I. This mill, situated at the mouth of Alexander Basin, was built by Alva Alexander and his sons. Later it was owned by John Osguthorpe.

J. This shingle mill, built by Peter Ranck, was located also at the mouth of Alexander Basin.

K. This mill was known as the Upper Gardner Mill. It was built by Archibald Gardner, but owned by David B. Brinton and James Hawker.

L. Built by Archibald Gardner, this mill was later purchased by Hyrum Rose.

M. Hyrum Rose built this shingle mill closely adjacent to the mill he had purchased from Archibald Gardner.
Letters indicate the approximate location of mills in Rig Cottonwood Canyon. See following page.
The letters running down the left of this page correspond to the circled letters found on the map of the preceding page.

BIG COTTONWOOD CANYON

Mill A. Alva Butler constructed this mill near the mouth of the canyon in 1890, after most of the canyon mills had been dismantled. The Seventies Mill, if indeed there was one, was built somewhere between A and B as they appear on the Big-Cottonwood Map.

B. Known as Mill C -- first constructed in the 1850's. It is probable that the mill was first built by the Big Cottonwood Lumber Company. One of the later owners was a man named Standish.

C. Nelson Wheeler Whipple and his sons constructed a shingle and lumber mill at this location in 1874. Later, in 1881, this mill was dismantled and moved up to Butler Fork, where it was operated until 1886.

D. It is claimed that the first mill built in the canyon was constructed at this location. It was a pit-mill according to some sources. Some claim that Butler bought this mill in 1876.

E. Mill B was located near the mouth of Mill B South Fork. It is probable that the first mill built at this site was constructed by the Big Cottonwood Lumber Company. Later a mill was built here by David Brinton.

F. Mill A. Probably the first mill constructed at this site was built by the Big Cottonwood Lumber Company also. This mill was destroyed by an avalanche, but later John Maxfield built another mill here. Maxfield sold the mill to a Mr. Williams, who in turn sold it to Phylander Butler. In 1875 a snow slide swept the mill to the bottom of the fork.

G. Archibald Gardner built this mill sometime after 1880.

H. Meri Butler, after whom this fork is named, built a mill some distance up its confines in 1880.

I. Nelson W. Whipple built this lumber and shingle mill between 1865 and 1867. Later the mill was sold to Phylander Butler.

J. Mill D was built by Ferramorz Little of the Big Cottonwood Lumber Company at an early date.

L. Alvin Green built a mill at this approximate location. After his death, his son ran the mill for a number of years, then sold it to one Julius Cook.

M. Matt Fleson mill. Built during the 1880's. Both Green and Fleson got their logs from basins on the south side of the canyon. These basins were called after them. The names still appear on U.S.G.S. maps.

N. Armstrong - Bagley mill built at Silver Fork. It was in operation for only two years.

O. Steam sawmill moved up the fork by Richard Maxfield in 1890. It was never a successful venture so it was sold to a party that moved it out of the canyon altogether.

P. Mill E. Built by the Big Cottonwood Lumber Company in 1856.

Q. Mill E. Built in 1857 by the Big Cottonwood Lumber Company -- Brigham Young at the head and Daniel Wells as the manager.

R. Nelson Wheeler, at the request of Brigham Young set up a shingle mill here in 1865, for the purpose of furnishing shingles for the tabernacle on temple square.

S. Steam engine sawmill -- also built by the Big Cottonwood Lumber Company. Constructed in 1858.

T. In the year 1950 Leslie Butler and sons, a son of old耐里 Butler -- pioneer millwright -- built a gasoline-powered sawmill. The mill lasted about two years and then was moved out of the canyon.
Letters indicate the approximate location of mills in Little Cottonwood Canyon. See following page.
The letters running down the left of this page correspond to the circled letters found on the map of the preceding page.

LITTLE COTTONWOOD CANYON

MILL

A. This mill was built by the L.D.S. Church in 1880. John Taylor was put in charge. Later the mill fell into the hands of the Taylor brothers.

B. Solomon Despain's mill -- built sometime near 1862.

C. According to some accounts, this was the first mill built in the canyon. It was constructed at a place called Tanner's Flat. The flat still bears the original name.

D. This mill was built at Miners Spring, about half-way up the canyon by Alva Butler.

E. Steam mill built by Archibald Gardner in about 1860.

F. Hyrum Despain and David Archibald, Sr., built a mill in Bells Canyon sometime near 1880. They sawed lumber and stovewood.
APPENDIX D
REGIONAL CIVILIAN CONSERVATION CORPS REPORTS
SHOWING TRAIL DEVELOPMENT IN UTAH
The chart found below shows cumulative regional totals for trail construction performed by the Civilian Conservation Corps in Utah. These totals were taken from accomplishment reports on file at the Federal Archives and Records Center in Denver -- Accession 58-A-84, file 327993.

<table>
<thead>
<tr>
<th>Date</th>
<th>Miles of new foot trail constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 30, 1933</td>
<td>10</td>
</tr>
<tr>
<td>September 30, 1934</td>
<td>18</td>
</tr>
<tr>
<td>January 25, 1935</td>
<td>18</td>
</tr>
<tr>
<td>April 1, 1935</td>
<td>18</td>
</tr>
<tr>
<td>September 30, 1935</td>
<td>24.9</td>
</tr>
<tr>
<td>October 31, 1935</td>
<td>181.2</td>
</tr>
<tr>
<td>March 31, 1936</td>
<td>228.2</td>
</tr>
<tr>
<td>March 31, 1937</td>
<td>233.4</td>
</tr>
<tr>
<td>June 30, 1937</td>
<td>233.4</td>
</tr>
<tr>
<td>January 1, 1938</td>
<td>235.8</td>
</tr>
<tr>
<td>December 31, 1938</td>
<td>237.5</td>
</tr>
<tr>
<td>September 30, 1939</td>
<td>237.5</td>
</tr>
<tr>
<td>March 31, 1940</td>
<td>237.5</td>
</tr>
</tbody>
</table>
APPENDIX E

FEDERAL CIVILIAN CONSERVATION CORPS REPORTS

SHOWING ACCOMPLISHMENTS IN UTAH
Chart of Civilian Conservation Corps accomplishments in Utah (performed under Forest Service supervision) accompanying a letter written by Fred Morrell, Assistant Chief of the Forest Service, December 10, 1942, on file in the Federal Archives and Records Center, Denver -- Accession 58-A-84, file 327992.
### CONSTRUCTION

<table>
<thead>
<tr>
<th>State of Texas</th>
<th>April 5, 1933 to July 31, 1933</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TYPE OF JOB</strong></td>
<td><strong>UNIT</strong></td>
</tr>
<tr>
<td><strong>FOREST CONSERVATION</strong></td>
<td></td>
</tr>
<tr>
<td>Field planting or seeding (trees)</td>
<td>Acres</td>
</tr>
<tr>
<td>Forest road improvement</td>
<td>Acres</td>
</tr>
<tr>
<td>Surveying</td>
<td>Miles</td>
</tr>
<tr>
<td>Tree care</td>
<td>Man-days</td>
</tr>
<tr>
<td>Cuttings (cancer)</td>
<td>Acres</td>
</tr>
<tr>
<td>Roadside - firebreaks</td>
<td>Miles</td>
</tr>
<tr>
<td><strong>FOREST PROTECTION</strong></td>
<td></td>
</tr>
<tr>
<td>Fighting forest fires</td>
<td>Man-days</td>
</tr>
<tr>
<td>Fire breaks</td>
<td>Miles</td>
</tr>
<tr>
<td>Fire hazard reduction</td>
<td>Miles</td>
</tr>
<tr>
<td>Grazing</td>
<td>Acres</td>
</tr>
<tr>
<td>Fire prevention</td>
<td>Man-days</td>
</tr>
<tr>
<td>Tree and plant disease control</td>
<td>Acres</td>
</tr>
<tr>
<td>Tree insect pest control</td>
<td>Acres</td>
</tr>
<tr>
<td><strong>LANDSCAPE AND RECREATION</strong></td>
<td></td>
</tr>
<tr>
<td>General housekeeping</td>
<td>Acres</td>
</tr>
<tr>
<td>Landscaping, differentiation</td>
<td>Acres</td>
</tr>
<tr>
<td>Horticulture and planting trees and shrubs</td>
<td>Acres</td>
</tr>
<tr>
<td>Parking areas and parking improvements</td>
<td>Acres</td>
</tr>
<tr>
<td>Public improvement work</td>
<td>Acres</td>
</tr>
<tr>
<td>Outdoor public improvement facilities</td>
<td>Acres</td>
</tr>
<tr>
<td>Public parks, playgrounds</td>
<td>Acres</td>
</tr>
<tr>
<td>Hunting, fishing, recreation</td>
<td>Acres</td>
</tr>
<tr>
<td>Tree planting</td>
<td>Acres</td>
</tr>
<tr>
<td>Soil prods. (fertilizing, planting, idle acres)</td>
<td>Acres</td>
</tr>
<tr>
<td>Other; encroachment, grade, drainage, etc.</td>
<td>Acres</td>
</tr>
<tr>
<td><strong>RESERVE</strong></td>
<td></td>
</tr>
<tr>
<td>Range protection</td>
<td>Acres</td>
</tr>
<tr>
<td>Range driveways</td>
<td>Miles</td>
</tr>
<tr>
<td><strong>WILDLIFE</strong></td>
<td></td>
</tr>
<tr>
<td>Fish rearing ponds</td>
<td>Acres</td>
</tr>
<tr>
<td>Ponds and water plantings and seeding</td>
<td>Acres</td>
</tr>
<tr>
<td>Loss and pond development</td>
<td>Acres</td>
</tr>
<tr>
<td>Stocking fish</td>
<td>Acres</td>
</tr>
<tr>
<td>Scope development (wildlife)</td>
<td>Acres</td>
</tr>
<tr>
<td>Other wildlife activities</td>
<td>Man-days</td>
</tr>
<tr>
<td>Wildlife feeding</td>
<td>Man-days</td>
</tr>
<tr>
<td><strong>OTHER ACTIVITIES</strong></td>
<td></td>
</tr>
<tr>
<td>Roads, guards, etc., road work</td>
<td>Man-days</td>
</tr>
<tr>
<td>Emergency work</td>
<td>Man-days</td>
</tr>
<tr>
<td>Work of pids., weed, brush plants</td>
<td>Acres</td>
</tr>
<tr>
<td>Experimental work</td>
<td>Acres</td>
</tr>
<tr>
<td>Road and bridge construction</td>
<td>Man-days</td>
</tr>
<tr>
<td>Mining and mining</td>
<td>Man-days</td>
</tr>
<tr>
<td>Mining operations</td>
<td>Miles</td>
</tr>
<tr>
<td>Domestic control, disbelieving</td>
<td>Acres</td>
</tr>
<tr>
<td>Prop. and temp. of animal wildlife</td>
<td>Man-days</td>
</tr>
<tr>
<td>Administrative and investigative work</td>
<td>Man-days</td>
</tr>
<tr>
<td>Entrance and weather animal control</td>
<td>Acres</td>
</tr>
<tr>
<td>Surveys</td>
<td>Man-days</td>
</tr>
<tr>
<td>Timber reduction</td>
<td>Acres</td>
</tr>
<tr>
<td>Tree preservation</td>
<td>Man-days</td>
</tr>
<tr>
<td>Equipment, repair or construction</td>
<td>Man-days</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Man-days</td>
</tr>
<tr>
<td>Base camp, construction and repair</td>
<td>Man-days</td>
</tr>
<tr>
<td>General, repair shop labor</td>
<td>Man-days</td>
</tr>
</tbody>
</table>

Note: Includes both construction and reconstruction.

/ Includes miscellaneous and class batters which do not involve reconstructing in a higher standard.

/ All of this work was performed on Military Reserve.

/ All of this maintenance work was performed on Military Reserve.

/ Includes both construction and reconstruction.

/ Includes miscellaneous and class batters which do not involve reconstructing in a higher standard.

/ All of this work was performed on Military Reserve.

/ All of this maintenance work was performed on Military Reserve.
VITA

NAME: Clyde Brian Hardy

PLACE OF BIRTH: Salt Lake City, Utah

UNDERGRADUATE AND GRADUATE PREPARATION:

   Undergraduate major: Sociology
   Graduate major: Recreation Education

DEGREES AWARDED:

   B.S. Degree, University of Utah, 1968 (Magna Cum Laude)
   M.A. Degree, Brigham Young University

AREAS OF SPECIAL INTEREST:

   Family, Church Activity, Music, Hiking, Backpacking, Mountain Climbing

PROFESSIONAL EXPERIENCE:

   Seminary Teacher for the Church of Jesus Christ of Latter-day Saints

PROFESSIONAL AND HONORARY ORGANIZATIONS:

   Phi Kappa Phi

CHURCH POSITIONS:

   Missionary, Western Canadian Mission, 1962-1964
   Member, Aaronic Priesthood Writing Committee, 1972-1973
   One of the Seven Presidents of Seventy in the S.L. Hunter Stake
THE HISTORICAL DEVELOPMENT OF WASATCH TRAILS

IN SALT LAKE COUNTY

Clyde Brian Hardy

Department of Recreation Education

M.A. Degree, August 1975

ABSTRACT

In this study investigation was made concerning the etiology of the foot trails that thread their way through Wasatch Forest lands in Salt Lake County. The time delimitation was 1847 to 1975.

The origin of the majority of these trails dates back to the nineteenth century and is closely tied to the efforts of pioneers who labored to wrest a living from semi-arid land. Early lumbering, livestock operations, mining activities, water collection systems, and pioneer recreation all provided impetus for trail development. In a sense these trails are a kind of anthology of human endeavor.

Passing into the twentieth century it was found that with the exception of emergency relief programs, particularly the Civilian Conservation Corps, very little development has occurred and trail maintenance has been inadequate.

Trail prestige increased in the wake of the surge of interest that found legislative expression in the National Trails System Act of 1968. However, in recent years they have been subordinated in the face of what are considered to be matters of greater urgency.

COMMITTEE APPROVAL:

Benjamin F. DeHoyos, Committee Chairman

Jay Naylor, Committee Member

William J. Hafen, Department Chairman