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The Historical Geography of the Colorado Plateau, 1539-1991

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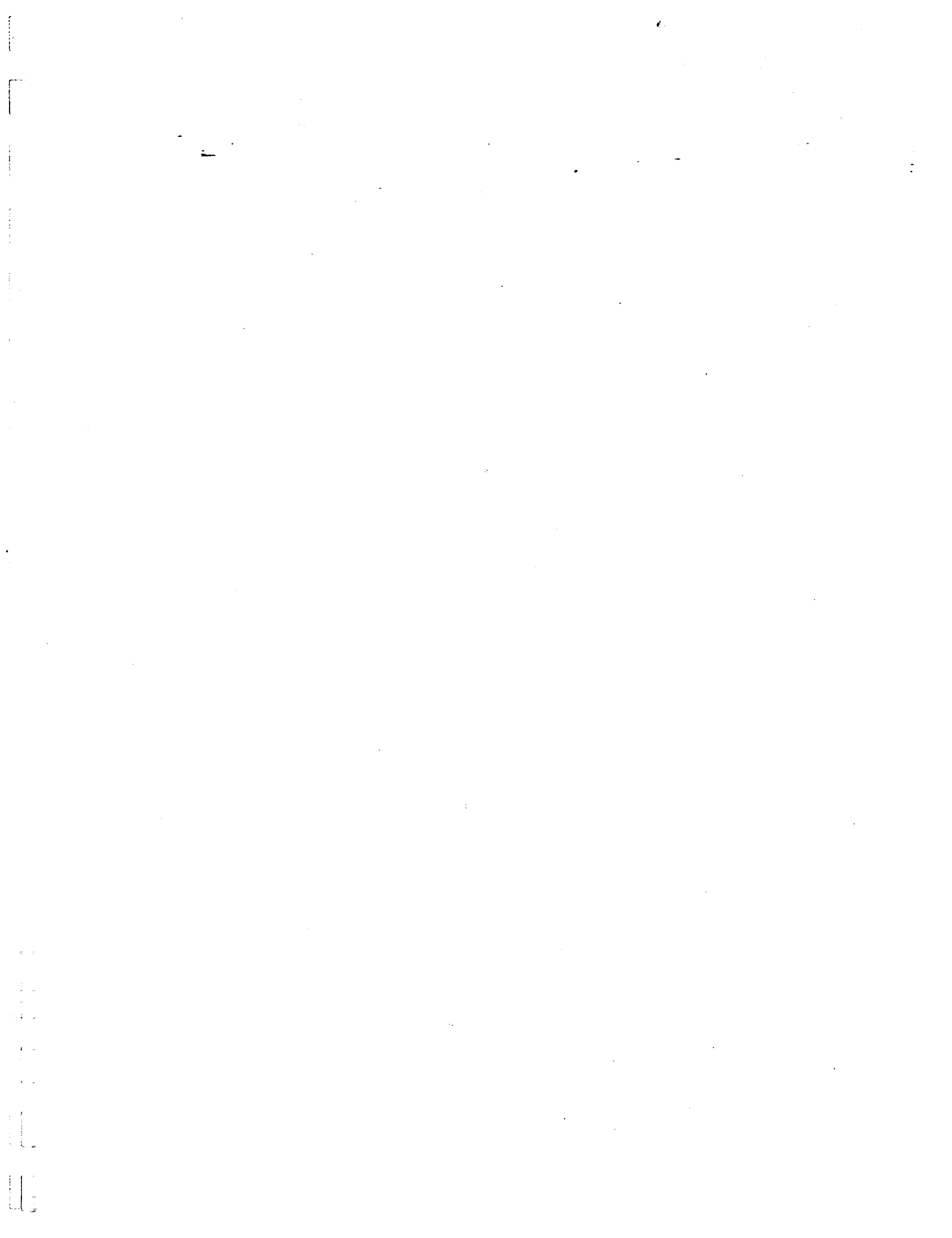
THE
HISTORICAL GEOGRAPHY
OF THE
COLORADO PLATEAU

1539-1991

by Michael J. Wurtz

a Scholarly Paper submitted for Partial Fulfillment of the
Requirements for the degree of Master of Arts in History
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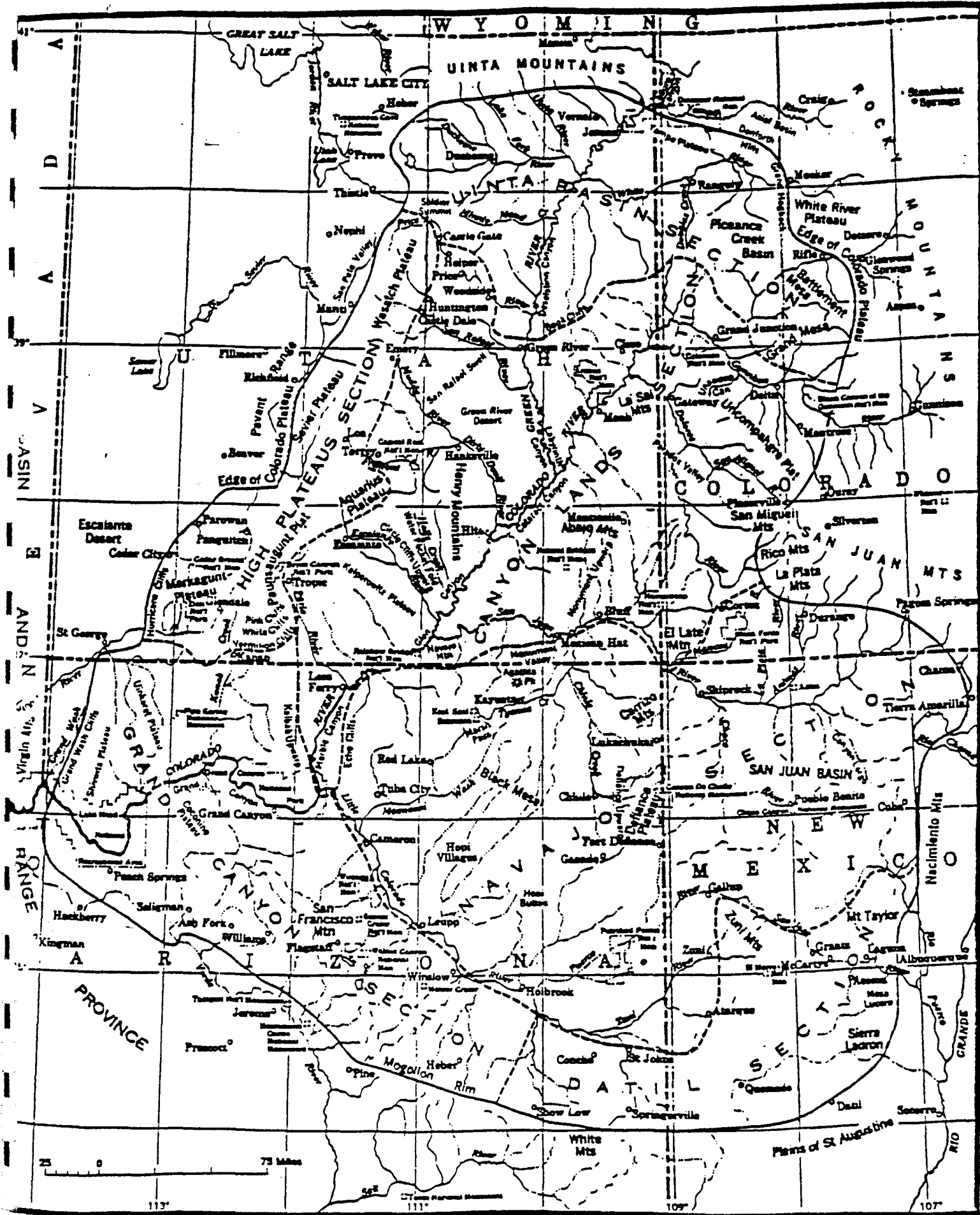


FIG. 1. The Colorado Plateau Region. Source: *Genozoic Geology of the Colorado Plateau*, op. cit., footnote 6, p. 3. From Durrenberger's *The Colorado Plateau*, p.213.

The moral I labor toward is that a landscape as splendid as that of the Colorado Plateau can best be understood and given human significance by poets who have their feet planted in concrete--concrete data--and by scientists whose heads and hearts have not lost the capacity for wonder.¹

-Edward Abbey

PREFACE

It must have seemed like the Gods were being terribly unfriendly. The drought ended any chance for their people to continue their existence as they had known it for 1500 years. As the crops began to fail and the hunters had to travel ever farther to find game, these humans started to believe this was a sign from the Gods. They must move on or join the waning foodstuffs in their fields. In the twelfth century a thriving culture on the southern Colorado Plateau ended abruptly. The Anasazi, who's people had begun to develop multiple story buildings, disappeared.² The full explanation for depopulation is not clear. However, most archaeologists believe it was due to drought.³

The Anasazi are believed to be the first human occupants on the Colorado Plateau. From about 200 B.C. to about 1300 A.D. they lived on the southern edge of this large geographic

¹Edward Abbey, The Journey Home: Some Words in the Defense of the American West, (New York: E P Dutton, 1977) p.87.

²Robert Durrenberger, "Colorado Plateau," Association of American Geographers Annals 62 (June 1972), p.217.

³Richard Ambler, The Anasazi: Prehistoric People of the Four Corners Region, (Flagstaff: Museum of Northern Arizona, 1977), p.2.

province. In the 1300's they experienced the impact of geographic phenomena on the cultural patterns that make up history. The lessons since then have taught many occupants on the Plateau that history is influenced by geography. But the persistence of man has made it possible that history can also affect geography. The relationships between history and geography on the Colorado Plateau are the topics of this paper.

Before describing this interdependence of disciplines, the Colorado Plateau should be defined. The Colorado Plateau is a physiographic province in the western portion of the United States. Roughly bordered by the Mogollon Rim in Arizona in the south, the Wasatch Range in Utah in the west, the Unita Range in the north and Rocky Mountains of Colorado in the east, it covers roughly 150,000 square miles, just a bit larger than the newly reunified Germany in Europe. Its distinctive characteristic is that it is a "great crustal block."⁴ This block is made up of a series of layered sedimentary rock. One can find great canyons, many smaller plateaus, escarpments, and volcanic formations in this region.⁵ Culturally, the Plateau encompasses no less than three races of people, many religions but less than a million residents. The Plateau covers parts of four states: Colorado, Arizona, Utah and New Mexico.

Unlike each of the states that it is part of, the history of this area can not be easily researched. It is a region defined

⁴Ibid., p.212.

⁵Ibid., p.212.

by its geography, not by the political units that have been assigned to it. Rather than presenting a strict time line historical sketch I have chosen steps that are defined by changes in geographical development. One can describe these changes by the effects that geography has had on history and, likewise, history's impact on geography. The first two sections, Exploration and Evaluation, and Settlement show that geography was a controlling factor of how history unfolded. The third section, Transportation, begins to show a shift in this relation to the heavier factors of history. The final two sections, Economics and Politics, demonstrate how history has affected geography.

This paper is still a basic history of the Plateau. It should not, however, be considered the final word about the Colorado Plateau. I have skimmed the surface of many important issues and I encourage the reader to dig further into some of the more fascinating stories. To assist the reader there is a fairly complete bibliography. For further reading one should begin with Robert Durrenberger's 1972 article on the Colorado Plateau to get a geographic overview of the area. The reader may also want to consult the individual state and regional historical atlases listed in the bibliography. For useful histories of discrete regions of the Plateau one should use either of the picture filled Crampton books, Lavender's book exclusively about the Colorado River, or Vandebusch and Smith's book that deals specifically with the Colorado state section of the Plateau.

Finally, virtually anything written by John Wesley Powell concerning his explorations of this region will give the reader valuable insight to both geography and history of the Colorado Plateau. If the reader is interested in more fictional and semi-fictional accounts of Plateau life, they should find virtually anything by Edward Abbey or Tony Hillerman to be thought provoking and exciting. Between this paper, the books listed above and the many others listed in the bibliography the "educated layman" should be able to "map out," for themselves, exactly how the evolution of history and geography on the Colorado Plateau should be evaluated.

EXPLORATION AND EVALUATION

Before satellites and other forms of remote mapping, an area had to be explored before it could be mapped. If one were to look at maps of unexplored regions of the world from earlier times one would often find sea serpents and land monsters. As cartographers became more sophisticated land monsters were replaced by words like "unexplored" and "unknown territory." The process of making a reliable map depended on how well the land had been evaluated by explorers. The early history of the Colorado Plateau is predominantly one of evaluation of the Plateau for its resources and routes.

When the Colorado Plateau was first put on the "scales of worth" it had come up wanting. When the Spanish toured the area they were doing it for God, gold and glory. They eventually decided the region would not suffice for any of these endeavors; especially when compared to the lands farther south which they had already taken from the Aztec. Following the Spanish were the American fur trappers and small time miners. They too found the Plateau worth less than expected. The road and railroad surveys also met with fate in comparison to other routes across the country.

It was not until the last thirty years of the nineteenth century that the Colorado Plateau was finally evaluated on its own terms. Individuals like John Wesley Powell looked at the country within the Plateau to learn about its flora, fauna and geology. These surveyors were taking a look at the area to "map,

examine and describe the resources of the West."⁶ This is not to say that surveys of exploitative nature were through. In 1889 a surveyor looked at the possibility of routing a railroad through the Grand Canyon at river level.⁷ This exploitative nature of exploration is typical of the Plateau in its evaluation phase that begins with the entrance of the Spanish in 1539.

Three years earlier, in 1536, reports of the fabled seven cities of gold were reemphasized when the Spanish explorer Alvar Nunez Cabezea de Vaca traveled into what is now southern New Mexico. Someone had told de Vaca that the cities lay farther north. New life was breathed into the fable in 1539 when Fray Marcos de Niza and his group unknowingly became the first Europeans to reach the Colorado Plateau. De Niza came back from his trip, where he had found the Zuni Pueblos, and reported that one of the villages was bigger than Mexico city.⁸ Although the stories of the golden cities were principally to insure further financing for expeditions, the Plateau still benefited from the opportunity to be further explored.⁹

Francisco Vazquez de Coronado produced the first factual

⁶C. Gregory Crampton, Standing Up Country, (New York: Alfred A. Knopf, 1964), p.71.

⁷Roderick Peattie ed., The Inverted Mountains, (New York: The Vanguard Press, 1948), p.178.

⁸Cleve Hallerback, The Journey of Fray Marcos de Niza, (Dallas: Southern Methodist University Press, 1987), p.34.

⁹George P. Hammond, "The Search for the Fabulous in the Settlement of the Southwest," Utah Historical Quarterly 24 (1956), p.16.

account of a trip to the Plateau when the Spanish Government sent him on a two-fold mission in 1540. One, he was to determine whether there was a waterway to the Pacific Ocean and two, to find out whether the seven cities of gold truly exist. Coronado found that there were no waterways to the Pacific and that the Hopi and Zuni villages he came upon were not made of gold.¹⁰ Despite Coronado's findings cartographers continued to include the cities on their maps for some years to come.¹¹ However, his travels on the Colorado Plateau were not completely futile. One of his men, searching westward from the Hopi villages, came to the edge of the Grand Canyon and promptly determined that crossing it was impossible.

By the next time the Spanish explored the southern edge of the Plateau the Grand Canyon had been all but forgotten. In 1582 Antonio de Espejo brushed the southern Plateau when he went from the Zuni pueblos to where the present town of Prescott lies to pursue mining interests. Since Espejo was more interested in finding a job for himself as governor of the territory, he tended to glorify the Plateau as populous, for religious conversion, and wealthy, for economic gains.¹²

The Europeans visited the Plateau only four times in the next two hundred years. The most significant of the visitors was

¹⁰Herbert E. Bolton, Coronado: Knight of Pueblos and Plains, (Albuquerque: University of New Mexico Press, 1949), p.402.

¹¹Gloria Griffen Cline, Exploring the Great Basin, (Norman: University of Oklahoma Press, 1962), p.25.

¹²Hammond, "Search for the Fabulous," p.9.

Don Juan de Onate in 1605. His mission was to colonize the area. Instead he sent back reports of minerally worthless land. He was the first to leave his name on El Morro rock just east of the Zuni pueblos.¹³ This rock would serve as a historic record of travelers for years to come.

The most useful Spanish exploration on the Colorado Plateau occurred in 1776. Francisco Tomas Garces in conjunction with Fray Francisco Atanasio Dominguez and Francisco Silvertre Velez de Escalante were sent out to find a route between Santa Fe and the coastal mission of Monterey. Garces came from the west in the summer time and climbed down into the Grand Canyon at Havasupai, traveled to the Hopi mesas and realized that the trail between the two tribes was passable. But, he also called the canyon a "calabozo" (prison).¹⁴ The Dominguez-Escalante caravan did not complete the link either when they attempted to use a more northerly route than Garces. They ventured across the northern portion of the Plateau and cut through the middle of it on their return trip to Santa Fe.

Dominguez and Escalante left a legacy of confusion and criticism about the land. Staff cartographer Don Bernardo de Miera y Pacheco produced a map that mistakenly showed the Green River (which he named San Buenaventura) flowing into the Great

¹³see Marc Simmons The Last Conquistador: Juan de Onate and the Settling of the Far Southwest, (Norman: University of Oklahoma Press, 1991)

¹⁴Elliott Coues, On the Trail of a Spanish Pioneer, (New York: Francis P. Harper, 1900), p.408.

Basin and eventually to the ocean. This led to confusion for many years.¹⁵

Criticism mostly fell upon the barren rugged land. Miera's frustration could best be demonstrated by a journal entry made after the party crossed what is now the Arizona Strip and entered the Glen Canyon area. The entry states that the area should be called San Benito Salsipuedes, or "get out if you can."¹⁶

The advice of the expedition was obeyed for the next 50 years. In 1821, the year Mexico obtained its independence from Spain, explorers once again set foot upon the south-east corner of the Plateau with little or no effect. The last of the Hispanic explorers was Antonio Armijo in 1829. Increasing trade business was Armijo's primary goal.¹⁷ His contribution to the Plateau was a trail from Santa Fe to Los Angeles across the Arizona Strip which was eventually abandoned due to the strenuousness of the route.¹⁸

The long term effects of the Hispanics on the Colorado Plateau matched Armijo's. They went in looking for God, gold and glory, and left with little or nothing. The geography and history of the Plateau changed little except a few place names,

¹⁵Walter Briggs, Without Noise of Arms, (Flagstaff: Northland Press, 1976), p.181.

¹⁶Herbert E. Bolton ed. Pageant in the Wilderness, (Salt Lake City: Utah Historical Society, 1950), p.219.

¹⁷C. Gregory Crampton, Land of Living Rock, (New York: Alfred A. Knopf, 1972), p.50.

¹⁸Ibid., p.50.

an inaccurate map, and a rock with the inscriptions of some of the early travelers. They should, however, be commended for the courage to explore such a "hostile" area.¹⁹

The fur trappers and traders followed the Spanish onto the Colorado Plateau. These men were only here to trap the streams for beaver pelts. These skins were valuable for hats back East and in Europe. Unfortunately, the trappers left little for future generations in the way of beaver or written records. It can hardly be disputed that the fur men knew the Plateau better than anyone before them, or fifty years after them. However knowledge is virtually worthless unless someone else can benefit from it. What records the trappers did leave were brief. But many trappers served as guides for future exploration. The trappers had begun their travels shortly before Armijo made the last exploration for the Mexicans.

Entienne Provost was the first non-hispanic European to enter the Colorado Plateau. In 1824 with a group of his trapping companions Provost entered the Plateau via the Gunnison river. He then headed northwest and crossed the Green River at its junction with the White river. There he set up a base camp and promptly left the area heading for the Great Salt Lake. On his way out he met with William Ashley who had also recently entered the region.

Ashley floated down the Green river from Wyoming and eventually navigated Desolation Canyon before he joined Provost

¹⁹Durrenberger, "Colorado Plateau," p.219.

in leaving the Plateau. Between the two of them they determined that the Green River did not flow due west to the Pacific Ocean as Dominguez had believed, but rather that the Green flowed south to the Colorado River and then into the Gulf of California.²⁰ For the next few years the area of the Gunnison, the Green and the upper reaches of the Colorado (then known as the Grand) Rivers were heavily trapped.

During the year 1827 the most significant trek to date was made onto the Plateau. After trapping much of the area south of the Mogollon Rim five trappers rendezvoused and decided to cross Northern Arizona to return to Santa Fe.²¹ The first to decide not to stay with the group was Ewing Young. Young did not want to explore the large canyon to the north, so he headed straight to Santa Fe via a route that roughly follows where Interstate 40 is today. The other four dropped down into the Grand Canyon through what is now Spencer Canyon and reached the Colorado River. The group intended to hike upstream but soon found that impossible. They proceeded to hike downstream to the Virgin River and followed it northeast. Then, the party divided again and Thomas Smith went northerly to cross the Plateau.²² The rest of the trappers, which included James Ohio Pattie and Michel Robidoux, went directly east in hopes of crossing the Colorado

²⁰David Lavender, Colorado River Country, (New York: E.P. Dutton, 1982), p.39.

²¹Ibid., p.41

²²Ibid., p.41

River again. After climbing the Hurricane Cliffs, and following roughly the trail that Dominguez and Escalante took a half century earlier across the Arizona Strip, the weary travelers made an evaluation of the Colorado River in that area. They wrote that the mountains "cage...up" the River and "deprive all human beings of the ability to descend to its banks and make use of its waters."²³ Even though the trappers left less than adequate records, what they did leave was still an unflattering assessment of the land.

Many other trappers and non-trappers including the likes of Jedediah Smith, Bill Williams, Denis Julien, William Wolfskill, Antoine Robidoux, Kit Carson, and Antoine Leroux had all at one time or another over the next 20 years spent some time on the Plateau. Carson, with Ewing Young, is believed to have skirted the southeastern and southern edges of the Plateau in August of 1829 in efforts to avoid Mexican authorities.²⁴ Although this "reckless breed of men" did not take notes on their journeys they did help to "soften the shock" for future explorers.²⁵

It was beneficial that the trappers had softened the shock, for eight different government led expeditions would investigate the Colorado Plateau ten times between 1843 and 1859. These

²³James O. Pattie, ed. by Timothy Flint The Personal Narrative of James O. Pattie of Kentucky, Cincinnati: John H. Wood, 1831), p.97.

²⁴Robert Glass Cleland, This Reckless Breed of Men, (New York: Alfred A. Knopf, 1952) p.141.

²⁵David J. Weber, The Taos Trappers, (Norman: University of Oklahoma Press, 1971), p.229.

United States Government officials were mainly interested in surveying the land for railroads and wagon roads. The government wanted to make the new western lands accessible for military and civilian purposes.

The first government official on the Plateau eventually turned out to be the official who made the most trips across the region during this time period. Captain John Charles Fremont traveled on the Plateau three times in ten years. His first trip just barely caught the northern edge of the Plateau in 1843-44.²⁶ Two years later it is believed that Fremont passed near the present town of Moab.²⁷ His third trip in 1853-54 was in conjunction with two other expeditions that were surveying possible routes for a transcontinental railroad across the 38th parallel.²⁸ Fremont did not pioneer any new trails in the area. He instead brought along two companions that each added to the growing information about the Colorado Plateau. Charles Preuss, after traveling on the second trip, produced maps for Fremont's popular Geographical Memoirs. Fremont's party also included Solomon Carvalho, who is believed to have brought the first photographic equipment on to the Plateau.²⁹ Fremont popularized the west in his accounts that were ghost written by his wife.

²⁶Warren A. Beck and Yves D. Hasse, Historical Atlas of the American West, (Norman, Oklahoma: University of Oklahoma Press, 1989), p.36.

²⁷Crampton, Land of Living Rock, p.85.

²⁸Ibid., p.56.

²⁹Lavender, Colorado River Country, p.56.

His scientific research was also quite useful. Unfortunately, his politics would get the better of him. On his third trip into the region he was looking for an all weather railroad route west under the prompting of Senator Thomas Benton, who not only promoted the 38th parallel but was also Fremont's father-in-law. It may have been under this pressure that Fremont gave favorable reports even though he and his party nearly died in snowstorms - twice!³⁰

The next explorer for the government was just as stubborn. Lieutenant James Harvey Simpson did not believe the trappers who told him that the Grand Canyon was impassable. He would like to have seen it for himself. In 1849 the US government sent Simpson on an expedition into Navajo country. Although he produced an extensive report on the Zuni and Chaco Canyon ruins his writing was not flattering. He had written in his report that the colors of this region were "sickening" and stir a sense of "loathing."³¹ Simpson never made it to the canyon to test whether or not it was passable but it was under his prompting that Captain Lorenzo Sitgreaves got closer to the vast incomprehensible canyon.³²

Topographic engineer Sitgreaves, with the guidance of long-time Plateau trapper Antonio Leroux, embarked on the most ambitious exploration of the Plateau since Escalante. They were

³⁰Ibid., p.56.

³¹James H. Simpson ed. by Frank McNitt, Navaho Expedition, (Norman: University of Oklahoma Press, 1964), p.159.

³²Lavender, Colorado River Country, p.60.

to find out if it was possible to cross from Santa Fe to the Colorado River and sail to the Pacific. Instead, he wound along the Zuni river to the Little Colorado river and followed that to Grand Falls. It was here that he decided that boating on this river was futile and began an overland route.³³ The party then struck due west passing north of the San Francisco Peaks volcanic field. They then headed south toward the Mogollon Rim and eventually westward to the Colorado River. Sitgreaves was not impressed with what he had seen.

The trip was not successful in Sitgreaves' eyes. He did not find the water passage for which he was looking. However, some benefit came from the exploration. The topographic maps produced were of exceptional quality due mostly to the lieutenant's staff artist, Richard H. Kern. This was also the first time the region had been looked at scientifically. But even Sitgreaves' notes stressed the scarcity of water and he made special note to how "barren" the region appeared.³⁴

Lieutenant John W. Gunnison, also guided by Leroux, also found the Plateau not very appealing in 1853. Gunnison, an army Topographical Engineer was the first to cross along the 38th

³³Lorenzo Sitgreaves Reports of an Expedition Down the Zuni and Colorado Rivers, ed. by Robert Armstrong, 32nd Congress 2nd Session, Senate Executive Document 59 (Washington DC: Government Publishing Office, 1853), p.8.

³⁴Andrew Wallace, "Across Arizona to the Big Colorado: The Sitgreaves Expedition, 1851" Arizona and the West 26 (1984), p.353.

parallel. He decided that this was no route for a railroad.³⁵ Gunnison was killed shortly after leaving the Plateau.

Lieutenant Edward Fitzgerald Beale followed close behind Gunnison. He was looking over the 38th parallel sponsored, as Fremont had been, by Senator Benton. Beale found the area about as appealing as did his predecessors. One of his companions produced a book of Beale's findings called A Central Route to the Pacific in 1854.³⁶

At the same time that Beale was following Fremont on the 38th parallel Lieutenant Amiel Weeks Whipple along with Leroux and a group of scientists surveyed the southern region of the Plateau at the 35th parallel. After passing Inscription Rock, 250 years after Onate, the surveyors then paralleled Sitgreaves' route with a major exception, they went south of the San Francisco Peaks and dropped off the Plateau at Bill Williams River. The group took copious notes on the geology, botany and zoology of the region and produced many drawings. Whipple was the first to view the Plateau favorably. He felt the route was "advantageous" compared to the others and in a statement that sounded more like it had come from a land speculator he wrote that "in climate, as well as soil, this country far surpasses

³⁵Lavender, Colorado River Country, p.56.

³⁶Gwinn Harris heap, Central Route to the Pacific from the Valley of the Mississippi to California, (Philadelphia: Lippencott, Grambo and Co. 1854)

that of Kansas."³⁷

The next exploration, which took place in the winter of 1857-58 by Lt. Joseph Christmas Ives, was significant for three reasons. First, it was done to explore routes that could be used if it were ever necessary to fight the Mormons. Second, it was the first time the Grand Canyon was scientifically explored. And third, this expedition was the first to go to the Plateau rather than find a way through it or around it. Ives, with cartographer F.W. Egloffstein, artist Baldwin Mollhausen and geologist J.S. Newberry, sailed up the Colorado River and headed east from the vicinity of present day Bullhead City, dropped in to the Canyon at Diamond Creek, spent several days there, came back out and went in again down Havasu Canyon. Afterward they went to Fort Defiance by way of the Hopi mesas. On his trip, Ives concluded that the Colorado river was not navigable.³⁸ Needless to say Newberry was fascinated by the Canyon and its layered geology. The trip turned out to be of great scientific value but little else. Ives later included in his report that this area "is not of much value" and that "it is doubtful whether any party will ever again pursue the same line of travel."³⁹

The last of the explorations looking for roads also had an unfavorable report. Captain John N. Macomb, with Egloffstein and

³⁷U.S. Secretary of War, Pacific Railroad Reports, Vol. 3, p.124, quoted in Durrenberger, "Colorado Plateau,"p.220.

³⁸Crampton, Land of Living Rock, p.97.

³⁹Joseph C. Ives, Report upon the Colorado River of the West, (Washington DC: Government Publishing Office, 1861), p.5.

Newberry, tried to find a route from Santa Fe to Salt Lake City and map the confluence of the Green and Grand Rivers. Once again Newberry marveled at the scenery, this time it was Canyonlands, and Egloffstein drew more beautiful maps and scenes like he had done for Ives. It was also on this trip that Newberry gave the name "Colorado Plateau" to the region and defined it by its geologic structure.⁴⁰ Macomb's report concluded that he "cannot conceive of a more worthless and impracticable region than the one we now found ourselves in."⁴¹ This temporarily brought an end to surveys across this unknown land for transportation purposes.

The next epoch for the evaluation of the Colorado Plateau was also government sponsored. However, the goal was not to find paths across the region, but to evaluate the land to see if it held any worth at all. Regions of the Plateau were split up into three principal areas.⁴² Under the administration of the War Department, Lieutenant George Montague Wheeler led the United States Geographical Survey West of the One Hundredth Meridian, which covered all but the middle and northeastern parts of the Plateau. Under the administration of the Department of the Interior, Ferdinand Vandever Hayden lead the United States

⁴⁰J.S. Newberry, Report of the Exploring Expedition from Santa Fe, New Mexico to the Junction of the Grand and Green Rivers of the Great Colcrado of the West in 1859, (Washington DC: Government Publishing Office, 1876), p.62.

⁴¹Ibid., p.6.

⁴²Richard A. Bartlett, Great Surveys of the American West, (Norman: University of Oklahoma Press, 1985), p.xvii.

Geological and Geographical Survey of the Territories, which covered the northeast, or Colorado, part of the Plateau.

Although Wheeler covered a larger area, it was John Wesley Powell's United States Geographical and Geological Survey of the Rocky Mountain Region under the Department of the Interior that turned out to be the most important for the Plateau. Powell concentrated on the region north of the Colorado River on the Colorado Plateau. These surveys looked at the "topography, geology, and the natural sciences" of the Plateau.⁴³

The Hayden Survey was the last of these surveys, 1874-75, and had little significance to the Plateau. Hayden focused on Colorado's portion of the Plateau. His principal contribution was a better knowledge the mountain ranges north of the four corners region. It was Hayden's party that tested the hypothesis of the lacolithic origins of mountains.⁴⁴ His party investigated many ruins, including Mesa Verde and Hovenweep. Hayden's photographer on this expedition was William Henry Jackson. Jackson's photos gave the "world its first accurate concept of the lost cities of the Southwest."⁴⁵

When Lieutenant George Wheeler showed up on the Plateau in 1871, he had many goals. Wheeler's group wanted to survey the economic and cultural aspects of the region. Wheeler also wanted to determine the absolute limit of navigation of the Colorado

⁴³Ibid., p.xiv.

⁴⁴Ibid., p.103.

⁴⁵Ibid., p.117.

River. On his second expedition in 1874, Wheeler's main task was to classify the land as 1) arable or agricultural; 2) timber land; 3) pasturage of grazing land; and 4) arid or barren land.⁴⁶ Although the Wheeler Survey observed the geology, botany, zoology, topography and archeology, the party also included a journalist by the name of William Rideing, who felt he had a style that could match Mark Twain's. Rideing made most of the observations of the people and the land. He found the Navajo to be "lazy, and filthy in the extreme."⁴⁷ As far as the land was concerned, Rideing made the common mistake of comparing everything with his more humid home back east.⁴⁸ Wheeler, himself, was most impressed with the Grand Canyon. He wrote that the beauty of the Canyon will "attract the denizens of all quarters of the world who in their travels delight to gaze upon the intricacies of nature."⁴⁹ Powell could hardly have put it better.

John Wesley Powell had the largest impact on the Colorado Plateau. Within the Grand Canyon alone Powell is probably responsible for a majority of the names. But Powell's impact goes beyond place names.

As early as 1867 John Wesley Powell had his eye on the West.

⁴⁶Ibid., p.352.

⁴⁷New York Times, 6 August 1875, p.2.

⁴⁸Bartlett, Great Surveys, p.366.

⁴⁹George M. Wheeler, U.S. Geographical Surveys West of the 100th Meridian: Vol 1, Geographical Reports, (Washington DC: Government Publishing Office, 1889), p.170.

In 1860 he traveled out to the Rocky Mountains and scaled a few peaks. It was at this time he decided he was going to ride the Colorado River to its end in the Gulf of California.⁵⁰ Powell and his first crew entered the Plateau Region on June 8th, 1869 when they passed through the Canyon of Lodore on the Green river. This first trip of Powell's was exploratory. But simple survival became more important as the crew descended the river. By the end three had abandoned the trip. It is difficult to determine exactly how much Powell learned on this trip mainly because his government report from his second trip liberally mixes in information that he obtained on his first trip. The first trip only paved the way for the second trip down the river and the exploration of a good part of the Plateau.

Powell took two years to prepare for his second trip to the Plateau. This time he received government funding for his project which was to be known as Geographical and Topographical Survey of the Colorado River and the West, or more informally - the Powell Survey.⁵¹

The contributions of the Powell Survey were great. The area studied, as mentioned above, covered the entire Colorado Plateau north of the Colorado River. However, Powell unofficially made a trip to the Navajo and Hopi areas (the four great surveys

⁵⁰John W. Powell, Explorations of the Colorado River of the West and its Tributaries, (Washington DC: Government Publishing Office, 1875), p.ix.

⁵¹Wallace Stegner, Beyond the Hundredth Meridian, (Boston: Houghton Mifflin Co., 1962), p.114.

officially missed a good part of the region that now is within the present day Hopi and Navajo Reservations).⁵² One of the major contributions was to set up a triangulation station south of present Kanab, Utah. With this station, fairly accurate maps could be made of the region and could then be locked into the national grid.

Powell was also interested in the great changes that occurred on the Plateau.⁵³ He was not as concerned with rock types as with his interest in uplifting blocks and the "desire of all moisture to return to the level of the sea."⁵⁴

Sometimes, in contrast to Powell's scientific thinking was one of his chief geologists, Captain Clarence Dutton. Dutton felt it was important to mention the flora and fauna in his reports. His text became so florid that in one passage where he is discussing the Kaibab Plateau he mentions that the region is so beautiful that "surely this is the home of woodland nymphs."⁵⁵

The conclusions in Lands of the Arid Region of the United States show how Powell truly felt about the Plateau. In his preface he states that it is his duty to suggest ways in which these arid regions can "be rescued from their present worthless

⁵²Bartlett, Great Surveys, p.xvii.

⁵³Ibid., p.313.

⁵⁴Ibid., p.313.

⁵⁵Clarence Dutton, Tertiary History of the Grand Canyon District 1882, (Reprinted by Salt Lake City: Peregrine Smith Inc., 1977), p.139.

state."⁵⁶ His primary suggestions for the arid west were to: classify the land as to its worth, determine ownership of land based on terrain and not by gridwork, make it impossible to monopolize water, and endorse a homestead of 2560 acres for ranchers instead of the maximum 640.⁵⁷ Basically, Powell was calling for a complete reversal of land policy for the arid west as was that followed in the east. The government did not take his advice.

As for the scenic beauty, Powell could hardly come to words. How can one use any other word but "grand" to describe the main canyon which he floated through. From Mt. Trumbull, he exclaimed that the view was a "vision of glory!"⁵⁸ Powell's descriptions were going to last for decades.

The era of exploration and evaluations ended with Powell. The scales of usefulness still showed the Plateau wanting. Most of the evaluations after Powell's were going to be economically driven: Where are the precious metals? Where can we put this railroad? Where can we put this dam? Some were going to be based on scenic value: Should we preserve these arches? Should we allow motor vehicles into this canyon? Some of these questions are still unanswered.

Now all the information and misinformation of the last 350

⁵⁶John Wesley Powell, Lands of the Arid Regions of the American West, (reprint ed., Boston: Harvard Common Press, 1983), p.viii.

⁵⁷Ibid., p.28.

⁵⁸Powell, Explorations, p.132.

years was going to be cested. Powell, Wheeler and Hayden may have collected the most valuable information and they all suggested that "climate, topography and the behavior of streams impose controls on the vegetation and that these conditions could serve as guides to economic development."⁵⁹ Hopefully the settlers of the region will follow their advice.

⁵⁹Crampton, Standing Up Country, p.76.

SETTLEMENT

Even though the Colorado Plateau is relatively isolated it has settlements that predate most of those in North America. Oraibi, estimated to have been founded in the 1100's on the Third Mesa of the Hopi Reservation, is considered the longest continuously occupied settlement in the United States.⁶⁰

Since history, by definition, usually does not consider unwritten record, settlement history on the Plateau did not truly begin until the Spanish Entrada. At that time Native American settlement in this region was sparse. The oldest pottery sherds from the Plateau date from about 7500 AD.⁶¹ Many tribes of people have moved to and away from this region. When the Spanish arrived there were five principal groups settled here. The three Pueblo-type indians were the Acoma, Hopi, and the Zuni. The Navajo, Southern Paiute and Ute were the most prevalent nomadic tribes. All of these groups, with the exception of the Ute, tended to live and roam in the southern regions of the Plateau. Some chose the security or shelter of canyon walls of Canyon de Chelly or Mesa Verde while others, like the Hopi, chose mesa tops. Native American settlement on the Colorado Plateau has not changed much since the intrusion of the Anglos. The principal change had been reduction of population, but even that is beginning to change. More recently the Hopi and Navajo have had problems trying to deal with the changes that have occurred in

⁶⁰Peattie, The Inverted Mountains, p.111.

⁶¹Lavender, Colorado River Country, p.5.

their clashing settlement patterns. I will deal with this topic in a later section.

Settlement of the Colorado Plateau has never been vigorous. There have been no rushes or rampant homesteading. The first Europeans to effect the settlement of the Plateau were the Spanish. Most of their towns were set up virtually on top of the older tribal villages. At this time the Spanish wanted to convert the natives to Christianity. By bringing God to the natives they felt they were bringing civilization.⁶² It was at this time, about 1620, that the entire northern province of New Spain was named Custodia de la Convercion de San Pablo del Nuevo Mexico.

The conversion process on the Plateau was mostly limited to three tribes: the Acoma, the Zuni and the Hopi (the Hopi region and its people were also know as Moqui or Tusayan, while the Zuni villages were sometimes also known as Cibola).⁶³ The Franciscans entered the villages of Acoma and became an instant hit when one of the Friars healed an ill child.⁶⁴ In July of 1629, shortly after the success at Acoma the Spanish held their first mass at the first christian church on the Colorado Plateau in the Zuni villages. The site of the first church had to be off the main

⁶²Edward Spicer, Cycles of Conquest, (Tucson: University of Arizona Press, 1962), p.5.

⁶³Beck and Hasse, Historical Atlas of the American West, p.15.

⁶⁴Watson Smith, "Seventeenth-Century Spanish Missions of the Western Pueblo area," The Smoke Signal 21 (Spring 1990), p.6.

mesa of Zuni because the mesa top was already too crowded.⁶⁵ For the next 43 years the Zuni and the missionaries were not completely friendly due particularly to the fact that the Missionaries were not protecting the Zuni from the roving Apache from the south. Sometimes the Zuni would attack their "saviors" and quickly retreat to nearby Corn Mountain.⁶⁶

The Hopi were next on the list of those to be converted. Three missions and two visitas were established in the Hopi area.⁶⁷ Usually the Mission was built directly on top of the old religious sites principally to show the dominance of the new religion over the old.⁶⁸

The Native Americans could only tolerate this disregard for their ways until 1680 when all groups from the Rio Grande and Plateau region staged a rebellion and either killed or chased off all of the Spanish. Peace was restored for 12 years. Most of the church buildings were either destroyed or turned into apartments. The Hopi decided at this time to rebuild their villages on top of the mesas in order to resist future Spanish intrusion.⁶⁹ The Spanish never regained control of the Hopi, although the Hopi would occasionally feign submission in an

⁶⁵Ibid., p.13.

⁶⁶Ibid., p.6.

⁶⁷Henry P. Walker and Donald Bufkin, Historical Atlas of Arizona, (Norman: University of Oklahoma Press, 1986), p.14.

⁶⁸Smith, "Seventeenth-Century Spanish Mission," p.10.

⁶⁹Lavender, Colorado River Country, p.22.

attempt to appease them.⁷⁰

In 1692 the Spanish returned under the leadership of Diego de Vargas. The Franciscans quickly moved into the Zuni region which became an area of unrest until the reestablishment of churches in 1700. The Zuni also tended to have more of a "veneer of civilization" with their true religious practices continuing in secret until the Spanish influence had all but left the Plateau.⁷¹

The Spanish had little long term effect on the Colorado Plateau. The most notable element was perhaps a combining of peoples and cultures. Much of the architecture and tools imported by the Spanish were adopted by the natives of the region. However, Spanish domination never took hold. Edward Spicer explains in his book about the southwestern clash of cultures, that the dominance over Native Americans in this region was difficult because of the many different groups and languages, or "cultural enclaves."⁷² Rather than one large group with a structured government that would be comparatively easy to defeat like the Aztec, there were many groups and no centralized government.

Shortly after the Spanish influence ended, another hispanic group was found on the Plateau. But it appears that no Mexican family or group ever settled on the Colorado Plateau when the

⁷⁰Ibid., p.22.

⁷¹Ibid., p.24.

⁷²Spicer, Cycles of Conquest, p.9.

area was part of Mexico. Perhaps the only effect the Mexicans had was the establishment of property ownership among native groups.⁷³ Even this concept was probably the responsibility of the coming Americans.

The first "American" groups on the Plateau were also of little consequence. The trapper and traders were not the settling type. Their only imprint were the sites that Provost had established as early as 1825 at the confluences of the Green and the Colorado Rivers.⁷⁴ These camps were probably soon engulfed by nature. Robidoux also establish a small site where present day Delta, Colorado sits.⁷⁵ It is doubtful if Robidoux's site was continuously occupied until it was named Delta. The scant settlement by the trappers and traders is the complete opposite of the next group to settle on the Plateau.

It can be said with little or no argument that the one group that has had the greatest effect on the Colorado Plateau would be the followers of the Church of the Jesus Christ Latter-Day Saints or, as they are more commonly know, the Mormons. The Mormons swept across the Plateau with purpose and duty. Their history begins off the Plateau.

Joseph Smith founded the Mormon Church in 1830 in New York. After much persecution, which resulted in Smith's death, a new leader by the name of Brigham Young took over the Church

⁷³Ibid., p.5.

⁷⁴Lavender, Colorado River Country, p.39.

⁷⁵Ibid., p.43.

leadership and eventually moved his people to Salt Lake City in the 1840's. From Salt Lake Young began to build an empire.

The empire that Young wanted to build was to be called Deseret. The expanse of his nation was to easily encompass the entire Colorado Plateau.⁷⁶ Another characteristic of this region is that it encompasses an area that J.W. Powell had figured only three percent of the land would be arable. This lack of agricultural land would be a large obstacle for the Mormons to overcome because the Mormons, at this time, were predominantly an agricultural society. Their settlement pattern was based on farming opportunities rather than the more common western pattern based on mining.⁷⁷ This turned out to be an even greater accomplishment due principally to frequent drought, short growing seasons, unreliable stream flow, a non-cooperative federal government and problems with natives.⁷⁸

The Mormons felt that these problems were minor because they were preparing for the Second Coming of Christ and that preparation for this was the most important goal. The land would give them what they needed and since they felt that man was only a steward of the land any extra produced from the land would go

⁷⁶Beck and Hasse, Historical Atlas of the American West, p.39.

⁷⁷William E. Smythe, The Conquest of Arid America (Seattle: University of Washington Press, 1969. Originally published by Harper and Brothers in 1899) p.51.

⁷⁸Durrenberger, "Colorado Plateau," p.221.

to who needed it most.⁷⁹ They also adopted irrigation and dry farming techniques to wrestle crops from this hostile land. Dealing with natives also presented interesting problems. According to the Book of Mormon the tribal people are ancestors of a group that left the church long ago. The Mormon duty was to bring these people back into the "fold" by missionization.⁸⁰

Missionization, however, was not their only goal. They wanted isolation. To secure their isolation Young felt that they must expand outward to protect the core. Under Young's direction the Mormons started to colonize the Plateau. This colonization pattern of development had never occurred in the American West.⁸¹ First Young would send out an exploratory party to determine whether or not an area would be suitable for growing crops. Then the call would go out for volunteers and their families to give up their land and settle the new area. This "directed settlement" was usually necessary when the church had an eye on especially dry regions while the "non-directed" settlement was usually started by Mormons seeking better lands.⁸² But the job of colonization of these non-directed settlements was soon taken over by the church.

Before actually sending families to the Plateau Young tried

⁷⁹Joel Ricks, Forms and Methods of Early Mormon Settlement, (Logan, Utah: Utah State University Press, 1964), p.105.

⁸⁰Lavender, Colorado River Country, p.79.

⁸¹Crampton, Standing Up Country, p.101.

⁸²Dean C. Greer, Atlas of Utah, (Provo, Utah: Brigham Young University Press, 1981), p.92.

to establish a passage to the Pacific Ocean port of Los Angeles. On the trail to Los Angeles many towns had to act as a conduit for the travelers. Most of these towns between Salt Lake City and Las Vegas virtually sit on the western border of the Colorado Plateau. Towns such as Provo, Fillmore, Cedar City and Saint George are not more than 20 miles from the edge of the Plateau. The push southward was also to colonize areas that were rich in iron (Cedar City) and areas that might produce citrus and cotton (Saint George). These particular towns are significant because they were the launching points for settlement onto the Colorado Plateau.⁸³

The first attempt to establish a Mormon settlement on the Colorado Plateau was the mission at Elk Mountain (very close to the present site of Moab, Utah) by Alfred Billings in 1855. Billings faced many obstacles such as too much sand for farming, lack of wood for heating, and intense sun.⁸⁴ After three months the mission failed due to an attack by natives. Five years later there was another expedition to the northern regions of the Plateau to see about settlement possibilities. The "Uintah Basin Survey" basically found the area worthless for colonization.⁸⁵

Following the failure of Elk Mountain and the Uintah Basin Survey the Mormons regrouped before making a second attempt at colonizing the Plateau. Eventually, there were nine distinct

⁸³Ibid., 92.

⁸⁴Crampton, Standing Up Country, p.79.

⁸⁵Greer, Atlas of Utah, p.89.

regions of mormon settlement on the Colorado Plateau.

The first permanent settlements on the Colorado Plateau by the Latter-Day Saints were along the Arizona Strip spreading from the western edge of the Plateau. One of the more ambitious Mormons by the name of Jacob Hamblin was very instrumental in the settlement of this corridor. He led exploratory parties from St. George south and east, and then up the Hurricane Cliffs. He reached the future site of Pipe Springs in 1858. It was here he noticed the potential for cattle grazing and ease by which the region could be protected due to few water sources.⁸⁶ Hamblin's ultimate goal was the Hopi Mesas. He eventually reached them and left some men in order to set up a mission. The Hopi were skeptical of the white men and gave them menial tasks which soon drove the Mormons away.⁸⁷

Mormons began founding towns on the Arizona Strip area in 1873 with Pipe Springs as the cornerstone. Other towns were established at Moccasin and Kanab during the early 1860's. However, this expansion onto the Plateau was slowed when the Black Hawk War began.⁸⁸

The Black Hawk War (not to be confused with the conflict in the 1830's that occurred in the Midwest) started in 1860 when Hamblin tried to make his third trip to the Hopis to establish a mission. On the way over, one of his men was killed. It might

⁸⁶Lavender, Colorado River Country, p.83.

⁸⁷Ibid., p.85.

⁸⁸Crampton, Standing Up Country, p.128.

be said that the United States Government was responsible for the 70 people who died in this war because both the Mormons and the Navajo, who turned out to be the main actors in this war, were in some way trying to avoid the U.S. government and its persecution of minorities. The Mormons, driven southward, were trying to escape the anti-polygamy harassment of the Americans by establishing isolated outposts to follow their church doctrines as they pleased. The Navajo, driven northward, were trying to get away from Government troops who wanted to subjugate them.⁸⁹

It was during this war that Captain James Andrus was put in charge of the Utah Territorial Militia to investigate the region the Colorado River flowed through between the Kaibab Plateau and the Green River. Although Andrus' punitive expedition resulted in the death of one of his own men and they never reached the Green River, the crew did see much unexplored country.⁹⁰

The war continued until 1870 when Powell wanted to find out what had happened to three of his rafting companions, the Howland brothers and Dunn, after they left his first river trip in 1869. The natives admitted to the killings in the name of war although there was speculation that they may not have killed Powell's companions.⁹¹ Powell, with Hamblin, continued to Fort Defiance where they signed a treaty with the Navajos on November 9, 1870.

⁸⁹Ibid., p.128.

⁹⁰Ibid., p.94.

⁹¹Robert Brewster Stanton, Colorado River Controversies, (New York: Dodd, Mead and Co., 1932) p.209.

After the treaty the Mormons and Navajo traded vigorously with one another and the Canaan Cooperative Stock Company began running cattle in the Arizona Strip region. This Company built the fort like structure at Pipe Springs in 1870.⁹² Over the next 13 years settlement of this region grew quickly. By the 1890's overgrazing had so hurt production that the Mormons sold their holdings to larger cattle companies in the west.⁹³

In the mid-1860 another valley was settled on the extreme western edge of the Plateau. Circleville was established in 1864 under the orders of Brigham Young. The town had some problems which reached a point of intolerance in 1867 by the War and was temporarily abandoned.⁹⁴

The most interesting colonization took place on the upper end of the east fork of the Virgin River. It was here that the United Order began. The United Order was a concept of Joseph Smith's in 1831. He felt that there should be a distribution of wealth and an inheritance function in society.⁹⁵ People should live communally but they should be able to have private property. Smith's experiment had failed before in Missouri mainly due to harassment. Now, Young could try this United Order in virtual isolation.

The first settlements on this part of the Virgin were

⁹²Crampton, Land of Living Rock, p.139.

⁹³Ibid., p.139.

⁹⁴Ricks, Forms and Methods, p.87.

⁹⁵Ibid, p.105.

established after the failure of towns along the Muddy River in southern Nevada. The town of Mt. Carmel, founded in 1871, was abandoned quickly due to heavy frosts and grasshoppers.⁹⁶ It was reestablished in 1874 as a United Order town and became the first town in the third region to be colonized on the Plateau. Orderville was settled quickly afterward and it too was under the United Order. By 1880 Orderville was completely cooperative. Unfortunately, Orderville buckled due to overpopulation.⁹⁷

North of Bryce Canyon was the fourth region to be settled. Between 1874 and 1875 Clifton, Cannonville, Henrieville, Escalante and Boulder were all founded.⁹⁸ It was in this region that Ebenezer Bryce allegedly said it would be a "hell of a place to lose a cow" after seeing the canyon that would receive his name.⁹⁹ It is clear from Bryce's description that this region was not an easy area to settle.

The fifth region colonized was just north of the last settlements. In 1875 the Mormons moved east onto the Colorado Plateau from the Sevier River Valley to establish the towns of Fremont, Cainville and eventually Hanksville, close to the intersection of the Fremont and Dirty Devil Rivers.¹⁰⁰

The next region, number six, was the farthest from Salt Lake

⁹⁶Crampton, Land of Living Rock, p.137.

⁹⁷Ibid., p.138.

⁹⁸Crampton, Standing Up Country, p.102.

⁹⁹Ibid., p.116.

¹⁰⁰Ibid., p.102.

City on the Colorado Plateau. The Little Colorado River settlements were principally founded between 1876 and 1880. The Mormons colonized this area because of: stronger anti-polygamy pressure from the federal government on Utah, the economic pressures of increased populations and most important, according to Chas Peterson in Take Up Your Mission, was the "conviction that colonization was an imperative in the unfolding of God's will."¹⁰¹

To aid in "God's will" the Mormons set up "rest stops" along the way. The first was at Lee's Ferry on the Colorado River at the Paria River. Also called Lonely Dell, this crossing served as a refuge for John Lee who was trying to escape the law for the part he played in the Mountain Meadow Massacre almost 20 years earlier. The Mormons established a stop at Moenkopi about midway between Lee's Ferry and what was to become the center of the Little Colorado settlements.

The first try at colonization on the Little Colorado River came in 1873 when a group of Mormons led by Horton H. Haight went as far as House Rock Springs and decided to turn back.¹⁰² Three years later, under Lot Smith, a group of 200 pioneers reached Sunset Crossing, a site very close to the present town of Winslow. Within that first year there were four towns set up along the Little Colorado between the present day cities of

¹⁰¹Charles S. Peterson, Take Up Your Mission, (Tucson: University of Arizona Press, 1973), p.vi.

¹⁰²Crampton, Land of Living Rock, p.143.

Winslow and Holbrook. Once an organizational structure was formed under the example of the United Order, the Mormons could begin to settle farther upstream. Their first settlements here were on Silver Creek in 1877 and 1878 included the town of Snowflake. It was also in 1877 that the Mormons built Fort Moroni north of the present town of Flagstaff. The last settlements in the Little Colorado River Valley to be colonized were at the upper reaches of the main river during 1879 and 1880 which included the towns of St. John and Springerville. The goal of isolation soon became impossible with the crossing of the region by the railroad in the 1880's. Therefore the region the Mormons hoped most would keep them free from contact turned out to be the point of great contact.¹⁰³

On the northeastern part of the Plateau the seventh colonization process began in the Castle Valley area. Towns like Price and Castle Dale lined up along the eastern edge of the Wasatch Plateau. These villages turned out to be quite successful due to their position at the base of the Wasatch where moisture would run off this plateau and easily irrigate the valley.¹⁰⁴

The eighth distinct region of settlement may have been the hardest for the LDS church to gain dominance. This region started from the south on the San Juan River, about 20 miles downstream from Four Corners, and grew north to Monticello. The

¹⁰³Peterson, Take Up Your Mission, p.v.

¹⁰⁴Crampton, Standing Up Country, p.103.

fear of the Church was the intrusion of gentile cattlemen into the state of Utah.¹⁰⁵ It was possible that Mormons could lose control of these counties. In order to prevent this, the church felt that a series of villages should block further intrusions.

Although the isolated settlement of Montezuma Creek was initially founded in 1879 the other villages were not settled until the late 1880's. Clashes between Mormon and non-Mormon were sporadic. The violence was usually limited to killing cows, harassment of settlers and an occasional shooting. The Mormons soon established a sufficient majority and retaliated by governmental action such as tighter controls over water distribution.¹⁰⁶

The Mormons' final area of mass settlement was the extreme northern part of the Colorado Plateau when in 1905 the United States government significantly reduced the size of the Uintah reservation. The Mormons moved in by the thousands to obtain some of the choice land that was made available.¹⁰⁷ Although the settlement pattern was not truly colonization it was the last notable mass Mormon settlement.

The legacy of Mormons on the Colorado Plateau has been one of form. The typical Mormon community has some very distinctive traits. Richard Francaviglia describes the typical Mormon town in his book on the Mormon landscape. According to Francaviglia

¹⁰⁵Lavender, Colorado River Country, p.144.

¹⁰⁶Ibid.,p.145.

¹⁰⁷Greer, Atlas of Utah, p.96.

the most obvious characteristics are wide streets, roadside irrigation, homes made of brick, and a distinctive LDS chapel.¹⁰⁸ This is not a complete list of things one would find in a typical Mormon village, however a Mormon founded and dominated town would exhibit these characteristics. Many of these Mormon indicators have roots in the 19th century and very few ever gave in to subsequent patterns.

The unique nature of the Mormon settlement on the Colorado Plateau was not to be repeated in this region. One can say that their settlement was mostly for reasons of geography. They were trying to establish a large and productive area that was geographically isolated and, if necessary, accessible to further isolation in the form of corridors to the sea and Mexico. Their pattern of settlement was also primarily due to geography. A town's survival was limited by the physical influences of the land and climate. Was the soil useful for farming? Could the water be harnessed from the streams? Was the growing season long enough? These were all physical constraints on the land.

However, one should not ignore the cultural or historical influences on the Mormons. They sought physical isolation to avoid persecution by the people in the East. But one can still argue that seeking geographical isolation is still a greater geographic pull than the push factors of history. Religious organizations seek peace within themselves or isolation to truly

¹⁰⁸Richard V. Francaviglia, The Mormon Landscape: Existence, Creation, and Perception of a Unique Image in the American West, (AMS Press: New York 1978), p.67.

be divinely touched. Eventually the Mormons found it nearly impossible to achieve this peace when the course of history meant more gentiles would settle on the Colorado Plateau.

Even though settlement on the Plateau does not end with Mormon colonization, this chapter is basically the end of history's dependence on geography. In fact, settlement would increase due to new factors. These new factors are not as dependent on geography as they are on the history of economics and politics on the Colorado Plateau. In the next section I will discuss the link that transportation provides to the greater influences of history.

TRANSPORTATION

The great transition between geography's influence on history, like exploration and settlement, to a greater emphasis of history on geography, like economics and politics, is the story of transportation. Transportation history on the Plateau is about traversing a barrier. The goal of travelers for many years was not the Colorado Plateau. Their goal was California or other points west. The Plateau region with its canyons and nearly non-navigable rivers became an obstacle rather than a conduit to westward bound folks. This problem of geography usually made other routes more attractive. Gold seekers would prefer going north on the Oregon Trail or way south by either the Isthmus of Panama or clear around South America by boat.

Trails that already existed on the Plateau were also shaped by geography. The natives would usually follow the tracks created by animals that were seeking the next watering hole. Dominguez and Escalante probably did not carve a brand new trail when they were determining a route to Monterey. They probably followed still older trails laid out by earlier travelers.

Water as a source has always been a factor on the Colorado Plateau, however water as a route has not. The pattern in the east of setting a raft on a river and floating down or sailing up to new promised lands was not common on the Plateau. Unpredictable flow, extreme rapids and a dry climate that could render a boat useless in a few days of being out of the water were just some of the problems a boatman would face.

The influence of geography on the history of transportation on the Plateau did not remain a strong factor after about 1900. Even as early as 1850 history was determining the location of transportation routes across the Plateau. Before discussing the transportation after 1850 there will be a survey of trails before 1850.

The "Old Spanish Trail" was the first established trail on the Colorado Plateau. The trail started in Santa Fe and curved northward to where Green River, Utah is today. From there it curves back southward toward Los Angeles. Originally the trail was to be a link between Santa Fe and Monterey, California. Since Dominguez and Escalante did not complete the road to the Pacific coast Antonio Armijo found a route westward by way of the Dominguez and Escalante crossing of the Colorado River with its terminus at Los Angeles. Armijo wanted to establish a trade route.¹⁰⁹ This trail lasted only about a year due to the rough terrain through the canyon.¹¹⁰

In the winter of 1830-31 William Wolfskill and George Yount took the Old Spanish Trail across the Plateau and then hooked up with a trail that ran from Salt Lake to Los Angeles. For the next 20 years this route became the principal way between Santa Fe and California.¹¹¹ It was a popular route mainly because one

¹⁰⁹Beck and Hasse, Historical Atlas of the American West, p.29.

¹¹⁰Crampton, Land of Living Rock, p.82.

¹¹¹Ibid., p.82.

could avoid the apparent danger of the Apache to the south and the trader could pick up a few Ute slaves as additional merchandise to be sold when they arrived at their destination.¹¹² The Old Spanish Trail soon lost popularity when people traveling to the gold of California opted to go further south in order to go west.

Another significant road on the Colorado Plateau was forged by Mormon trailblazer, Jacob Hamblin. Hamblin had traveled extensively on the lower regions of the Plateau in the 1850's looking for a proper route to the Hopi. In 1854 he settled on a road that went from St. George, across the Arizona Strip, crossed the Colorado river at the Paria river and dropped southward to the Hopi villages. This route was and is still the major route between Arizona and Utah.¹¹³ Where Hamblin's road crossed the Colorado John Lee set up a ferry service which lasted until the canyon was crossed by a bridge in 1929.

Hamblin's route also became popular in the 1870's when young couples from the new Little Colorado River settlements wanted to get married. The temple in St. George was the closest place to get their celestial marriage performed. The trail soon became known as the Honeymoon Trail. Honeymooners could expect to be on the trail for about a five month round-trip.¹¹⁴

The Mormons also pioneered a road to their new settlements

¹¹²Ibid., p.82.

¹¹³Ibid., p.103.

¹¹⁴Ibid., p.146.

around Bluff, Utah. In 1879 Silas Smith with Platte Lyman made a new trail that literally had to cut into the rocks at the Colorado River. The Hole In The Rock route was one of the more dangerous roads on the Plateau. At one point the road dropped 1000 feet in about 3/4 miles. What may have been even more frustrating was that travelers then had to cross the river and climb up a precipitous dugway on the other side, and then pass through a forest so dense that trees had to be cut just to get through it.¹¹⁵ Charles Hall established a new route in 1880 that was a little better. Where his road crossed the river became Hall's Crossing.

In the late 1850's, under War Department Secretary Jefferson Davis, Lieutenant Edward Fitzgerald Beale was called upon to create a road along the 35th parallel. The 35th parallel was not a new route. In 1857, Beale followed roughly the routes Sitgreaves and Whipple had taken earlier, but this time Beale would bring camels, which the US government was considering using to explore desert regions. By 1859 the Beale Wagon Road was complete.¹¹⁶

The army built two other government roads on the Plateau. One was a short wagon road that went roughly from Salt Lake City to Duchesne Fort on the far northern part of the Plateau. The other, found by Colonel J. Francisco Chaves in 1864 almost by accident, entered the Plateau from the south near Camp Verde and

¹¹⁵Crampton, Standing Up Country, p.107.

¹¹⁶Crampton, Land of Living Rock, p.96.

went northeast to the Hopi Mesas.¹¹⁷ What is striking about these roads and Beale's road was how they stayed very close to the perimeter of the Colorado Plateau. In fact, while much of the rest of the country was a network of wagon roads the Plateau was virtually void of them. There was not even a post road in the region.¹¹⁸ Even into the 1880's when the Plateau began to show economic usefulness, there were, besides the Beale Road, only a few roads that sat on the Plateau. Not until 1895 did a stagecoach make it to the Grand Canyon. This all changed when the Railroads enter the Plateau.

The Railroads mark the beginning of history effecting the geography of the Colorado Plateau. At first the railroad was heavily influenced by geography. A railroad had to have water and easy grades. However, the history created in Washington DC determined when and where the Plateau would get its first railroad.

In 1866 the US government granted lands to the Atlantic and Pacific Railroad in order to build a line that would approximately follow the 35th parallel. The company soon folded and it was not until 1881 that the Atchison Topeka and Santa Fe Railroad first laid tracks on the Colorado Plateau. By the end of 1883 the tracks were guiding trains to more desirable points

¹¹⁷James Byrkit, "The Palatkwapi Trail," Plateau Magazine (Fall 1988), p.17.

¹¹⁸Beck and Hasse, Historical Atlas of the American West, p.34.

farther to the west.¹¹⁹

The effects of a railroad on the southern Plateau were great. Land that was granted by the government was distributed in a checkerboard pattern. That is, the railroad received every other section of land in a buffer region directly adjacent to the railroad. This distribution was to discourage land speculators from buying all the land around a town and charging outrageous prices. Since much of the land acquired in the grant was worthless the ATSF never really tried to colonize the areas on the Plateau like many other railroads did in the more humid environments to the east and west.¹²⁰ Eventually, the Aztec Cattle Company bought large tract of land to run their livestock.

New towns were built along the railroad. Large towns such as Flagstaff began to grow like the Plateau had never seen. To the Mormons the railway was a blessing and a curse. It was good for their economy by supplying jobs and a market for their goods, but the railroad split the Little Colorado River settlements in two.¹²¹ The railroad also meant a greater influx of hostile non-Mormons.

Through the advertisements created by people like Fred Harvey, who built his businesses on ATSF's lines, the southern Plateau region was beginning to receive recognition as a

¹¹⁹Lavender, Colorado River Country, p.158.

¹²⁰William S. Greever, Arid Domain: the Santa Fe Railway and Its Western Land Grants (Stanford, California: Stanford University Press, 1954) p.49.

¹²¹Durrenberger, "Colorado Plateau," p.225.

beautiful tourist destination.¹²² In 1901 the Santa Fe Grand Canyon Railroad and ATSF built a spur line to the Grand Canyon. By doing so, the railroad recognized that there is a destination on the Plateau. The Plateau was no longer only a barrier.

General William Jackson Palmer built another railroad farther north. Palmer wrote favorably of the Plateau in his 1869 publication Report of Surveys Across the Continent in 1867-1868. He saw beauty in the canyons and peaks of this rugged region. He also saw the need for a railroad to the mining regions that were growing in the Rocky Mountains.¹²³ With only these assets and a dream Palmer created the Denver and Rio Grande Railroad. Palmer was a very persistent man and with private financial backing and no government land grants he brought his railroad into Grand Junction, and eventually Salt Lake City, from Colorado Springs in 1883. What is very interesting about this railroad is that its spur lines covered much of the difficult terrain of the Rockies but only had one principal line on the Plateau.¹²⁴ By the 1890's the Denver and Rio Grande had two small spur lines on the Plateau. One connected Durango and Silverton (and eventually Farmington, New Mexico) to the main line off the Plateau and the

¹²²Beck and Hasse, Historical Atlas of the American West, p.57.

¹²³Crampton, Land of Living Rock, p.155.

¹²⁴J. Valerie Fifer, American Progress, Chester, Connecticut: Globe Pequot Press, 1988), p.270.

other ran through San Pete valley in Utah.¹²⁵

The principal effect of this railroad on the Plateau was similar to the ATSF. Along the D&RG many new towns grew. More significant was the impact on economics in the area. Many Mormon cattle companies had a new market for their products. The geography began to change. The town of Bluff that used to have an orientation westward toward St. George now looked north to the rails that would connect them to large populations centers such as Salt Lake City and Denver.¹²⁶

A railroad frenzy was forming on the Plateau. It reached a high point in the late 1880's when Denver investor S.S. Harper felt there was a need to bring Colorado coal to Southern California.¹²⁷ Frank Brown was appointed president of the Denver, Colorado Canyon and Pacific Railway and Robert Stanton was named chief engineer. The railroad was to run along the Colorado river through the Grand Canyon. This seemingly optimal route was chosen because of its easy grade, lack of ice, and available electricity from the river.¹²⁸ The unprepared crew (they did not even bring life jackets) soon embarked on the journey in which they would lose their leader, Frank Brown. The rest of the crew

¹²⁵Robert G. Athearn, Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad, (New Haven, Connecticut: Yale University Press, 1962)p.356.

¹²⁶Crampton, Standing Up Country, p.112.

¹²⁷Peattie, Inverted Mountains, p.178.

¹²⁸Crampton, Land of Living Rock, p.192.

gave up without completing the trip. Stanton with a new, better prepared crew in the Winter of 1889-90 surveyed the whole canyon for a route to California. The railroad was never built principally due to the discovery of oil in California.¹²⁹ Unfortunately, exploitative endeavors such as this were only beginning.

The impact of railroads on the Colorado Plateau may have set the stage for economic change in the region. Mining, lumbering and tourism began to grow rapidly on the Plateau. The growth of tourism grew even more rapidly by the introduction of the automobile on the Plateau.

The automobile on the Plateau, and in the West in general, changed much of the geography. Now the tourist were no longer bound to the railroad and the few scant stagecoaches in this region. Although the car was not commonly seen on the Plateau until after the First World War, its impact grew quickly. In 1913 the Plateau was connected to a national grid of roads when the National Old Trails road cut across the southern part along the 35th parallel.¹³⁰ By 1926 more people were visiting the Grand Canyon by car than by train.¹³¹ By the end of the 1920's one could see cars at Zion and Bryce canyons too. In fact, there was a grid of roads on the Plateau that connected most large towns

¹²⁹Lavender, Colorado River Country, p.158.

¹³⁰Charles Davis, National Old Trails Road, (Washington D.C., 1914), p.40.

¹³¹Lavender, Colorado River Country, p.169.

and attractions. These roads generally followed the lines set by earlier railroads. Roads, unfortunately, could not keep up with demand. Most roads on the Plateau were virtually impassable throughout the year. Mud in the Spring and floods in the Summer made travel in those parts of the year very difficult. In some cases it was probably best to make plans for winter driving when the roads were solid ice. The Union Pacific railroad helped some of its passengers to get to Zion from their mainline that ran along the northwest edge of the Plateau. In 1923 they provided bus service to this natural wonder. The growth of industries such as mining and lumbering also brought more roads to the Plateau. By 1929 there was a bridge "built across the Grand Canyon" just downstream from Lee's Ferry.¹³²

The highly variable relief of the region dictated that roads would continue to be inadequate into the 1930's, especially for the newer faster cars.¹³³ The paving of many of the principal arteries was complete by the 1940's. As road building and automobile technology improved, history's influence grew. No longer did roads have to have water stops or rest stops every 50 or 60 miles. In the 1950's the interstates began to appear on the Plateau. The wide safe divided highways bypassed older roads such as Route 66 with its interesting architecture and dangerous

¹³²W.L. Rusho, Desert River Crossing: Historic Lee's Ferry on the Colorado River, (Salt Lake City: Peregrine Smith, Inc. 1981), p.83.

¹³³Warren A. Beck and Yves D.Hasse, Historical Atlas of New Mexico, (Norman: University of Oklahoma Press, 1969) p.54.

curves. These new interstates had little regard for small scale geography, preferring to cut through mountainsides rather than go around them.

The impact of new transportation on the Colorado Plateau demonstrates the new concern for non-geographical phenomena. Destination, not landscape, would determine the route of a new road. Entire hillsides could be cut away to fill a small valley. In addition, cars that could travel faster would see less and less of the surrounding countryside. Another striking characteristic of these new roads was the resurgent view of the Plateau as a barrier. Although there are many sites to see on the Plateau many of the principal transportation routes appear to enter the region and immediately find the quickest way across. These factors increase isolation of smaller towns off the interstate and homogenize the towns that happen to sit on major thoroughfares. Economics probably drove the decision to create such a bleak urban landscape.

ECONOMICS

Transportation is only a part of the exploitative nature of economics on the Colorado Plateau. Economics have had an influence in the region since the beginning of human settlement. Even the native tribes may have had economic as well as survivalist goals. The Spanish who first entered the Plateau wanted first to achieve religious and economic goals. With the coming of the Americans the Plateau faced an even greater challenge to its landscape.

The first truly economically exploitative activity on the Plateau was the fur trapping industry during the 1820's and 1830's. Their activity was held to mountain streams where the beaver and the trappers usually took their goods to Taos, New Mexico or north to the Rendezvous above the Uintah mountains. This true economic activity is shrouded in their lack of records.

The Mormons on the Colorado Plateau of the early years can not fully be considered as a viable economic unit. This is due to the fact that for many years they were more interested in producing for themselves than for a market of hostile easterners. Farming on the Plateau was extremely difficult, so there was rarely extra crops for profit anyway. Non-Mormons fought droughts and poor soils in the area around Grand Junction, Colorado and on the Uncompahgre to grow potatoes beginning in 1882, mainly to supply the mines.¹³⁴ They too learned of the hard

¹³⁴Duane Vandebusch and Duane A. Smith, A Land Alone, (Boulder, Colorado: Pruett Publishing Company, 1981), p.147.

economic realities of farming on the Plateau.

The Mormons entered the common market in the 1860's in response to the Kansas and New Mexico Land and Cattle Company run by Edmond and Harold Carlisle.¹³⁵ This company and a few others started running their stock in the region of the Uncompahgre valley and La Sal or Abajo Mountains because of fertile feeding grounds and the closeness to the mining communities in the Rockies.¹³⁶ When the Mormons realized that they may lose their majority in smaller southeast counties of Utah they reacted with economics. They formed the Bluff Pool cattle cooperative. They learned ranching was not much easier than farming. Lack of water and small valleys limited the size of herds. It was not until the 1890's that Jim and John Scorup built the Scorup-Somerville Cattle Company. In 1917 they built their headquarters at Indian Creek and became the first successful cattle company on the Plateau.¹³⁷ Their success can mostly be attributed to corporate methods of running the business and a greater integration into the American market.¹³⁸

Another cattle outfit on the Colorado Plateau was the Aztec Land and Cattle Company or simply Hashknife. In 1884 the Hashknife brought in 40,000 head to run on Atlantic and Pacific

¹³⁵Lavender, Colorado River Country, p.144.

¹³⁶Ibid.,p.143.

¹³⁷Ibid.,p.147.

¹³⁸Ibid., p.148.

land grant lands.¹³⁹ The company survived until about 1900 when cattle rustlers forced them out of business. The Babbitt brothers of Flagstaff, Arizona picked up parts of what was left of the Hashknife and with "careful management" became the largest outfit in northern Arizona.¹⁴⁰

Ranching was also prevalent along the Arizona strip. The Canaan Cooperative built the fort at Pipe Springs and later the Winsor Cattle Stock Growers Company took over the Canaan Company with its fort and renamed the building Winsor Castle.¹⁴¹ North of there the Kanarra Cattle Company ran cattle on the Markagut Plateau and around Bryce Canyon. By the 1890's most ranching in the middle Colorado Plateau region was struggling due to overgrazing.¹⁴² Cattle raising was also difficult because cattlemen were usually required to bring in hay during the winter. The rise of homesteading brought great difficulty as did the never ending dispute between sheepmen and cattlemen.¹⁴³

Where there was not a range on the Plateau there was usually a forest. The Lumber industry on the Colorado Plateau has been one of the longest running economic activities. The Atlantic and Pacific Railroad needed railroad ties, so in 1883 a Chicago investor named Edward Ayer started the Ayer Lumber Company in

¹³⁹Ibid., p.137.

¹⁴⁰Crampton, Land of Living Rock, p.158.

¹⁴¹Ibid., p.139.

¹⁴²Ibid., p.139.

¹⁴³Vandenbusche and Smith, A Land Alone, p.157.

Flagstaff, Arizona.¹⁴⁴ Three years later he sold his business to Dennis Riordan who changed the name to the Arizona Lumber and Timber Company. Soon Flagstaff, Williams and McNary, Arizona were all logging in the ponderosa pine forests of the southern Colorado Plateau. By 1966 one-half of Arizona's lumber was coming from Coconino County.¹⁴⁵

Colorado's lumber mills were also profitable due to the demand from the mines and the Denver and Rio Grande Railway. McPhee, Colorado held one of the larger operations in western Colorado between 1924 and 1948.¹⁴⁶ Further north on the Plateau in the Uintah range lodgepole pine has been, and continues to be, a source of strong economic activity in Utah.¹⁴⁷

The largest extractive industry on the Plateau has traditionally been mining. Much of the Plateau holds mineral resources including gold, silver, coal and uranium. In 1866 Lieutenant Marcy of the US Army felt that it was possible for the Colorado Plateau to have profitable mineral resources. He was proven right in less than four years.

Silver was found in 1869 on the western edge of the Plateau in a sandstone region. The area, which was going to be named Silver Reef, was mainly productive between the years of 1877 to

¹⁴⁴Walker, Historical Atlas of Arizona, p.10.

¹⁴⁵Ibid., p.10.

¹⁴⁶Vandenbusche and Smith, A Land Alone, p.300.

¹⁴⁷Greer, Atlas of Utah, p.205.

1888.¹⁴⁸ After that first discovery the Plateau had shown its worth and prospectors began to take a closer look at the area they may have passed up on the way California.

Besides the first discoveries on the western edge, the principal mining activity took place around the Four Corners region. When Powell came through the Grand Canyon on his second trip in 1871, the supply crew he met at the Crossing of the Fathers showed his men that they had panned out very fine gold.¹⁴⁹ Paryn Dodds and the two men with him sparked the first gold rush on the Plateau. The rush lasted just about four months before the waters of the Colorado river rose and covered up the placer lodes.

In 1873 Charles Spencer found that the Redwall Limestone in Havasu canyon had silver in it.¹⁵⁰ However, mining on the steep walls proved hazardous. In 1880, after Daniel Mooney fell to his death mining these walls, his friends gave his name to one of the beautiful waterfalls in Havasu Canyon. Also in the 1870's Seth Tanner found gold where the Little Colorado river entered the main Colorado. John Lee even claimed to have found gold near Lee's Ferry.¹⁵¹ In 1877 Spencer showed up again, but this time he was mining silver where Tanner had earlier found gold. Between 1873 and 1878 Richard Bentley mined copper on the Arizona Strip.

¹⁴⁸Crampton, Land of Living Rock, p.146.

¹⁴⁹Ibid., p.149.

¹⁵⁰Ibid., p.151.

¹⁵¹Peattie, Inverted Mountains, p.145.

During the 1880's claims of gold in Glen Canyon were far from over. Two mining District were established in the area under the guidance of Cass Hite. Prospectors were not limited to the immediate canyon within those districts. One stretched up to encompass the Henry Mountains, which were at one time considered the source of Grand Canyon gold.¹⁵²

The 1890's brought more mining to the Canyons of the Colorado and its surrounding area. W.H. Ashurst and P.D. Berry organized the Grand Canyon Mining District in 1893 to mine copper. Although the Panic of 1893 virtually stopped mining in and around the Canyon, activity was back to normal by 1897.¹⁵³ Activity on the south rim, especially the Anita copper mine run by William "Buckey" O'Neill, had boomed so much that part of the reason to build a railroad to the South Rim was to haul copper to the smelter in Williams.¹⁵⁴

Meanwhile Robert Stanton, who eight years earlier was surveying the potential of building a railroad through the Canyon, heard of gold in Glen Canyon. In 1897 Stanton brought in a gold dredge and started test drilling. The tests had proved successful and he enlarged his operation and called it the Hoskaninni Company. After he upscaled operations, he soon found that the gold to be too fine to mine with any profit.¹⁵⁵

¹⁵²Crampton, Standing Up Country, p.128.

¹⁵³Crampton, Land of Living Rock, p.191.

¹⁵⁴Ibid., p.191.

¹⁵⁵Lavender, Colorado River Country, p.161.

In 1902 the Zahn family started the largest gold mining operation on the San Juan river. By 1909 Charles Spencer also was operating in this area. Spencer believed that if he crushed the sandstone he could get straight to the gold without having to pan for it. Of course this venture was unprofitable.¹⁵⁶ Soon Spencer was in Glen Canyon with another scheme. In 1911 he had a full sized boat assembled in Glen Canyon and began hauling coal from Warm Creek to Lee's Ferry. However, that idea did not work because it took all the coal he brought down just to get his boat back up stream.¹⁵⁷ It is believed that Spencer was later looking into the oil business in this same area.¹⁵⁸

Spencer was not completely crazy when he looked for oil on the Colorado Plateau. Oil and natural gas exploration started in the region as early as the 1880's.¹⁵⁹ Since the demand was not yet great enough and most of the deposits found were small the industry was small scale.¹⁶⁰ However, in the 1950 petroleum and natural gas became booming businesses in the San Juan basin and around Four Corners.

Coal was first exploited in the 1890's around the Book

¹⁵⁶Crampton, Standing Up Country, p.142.

¹⁵⁷Ibid., p.142.

¹⁵⁸ Valeen Tippetts Avery, Free Running, (Flagstaff, Arizona: Flagstaff Corral of Westerners International, 1981), p.26.

¹⁵⁹Beck and Hasse, Historical Atlas of the American West, p.69.

¹⁶⁰Greer, Atlas of Utah, p.211.

Cliffs.¹⁶¹ Although most of the coal on the Plateau is bituminous, coal has activity been mine on the Plateau since the 1890's at the Cliffs, the San Juan river basin, the Henry Mountains, Black Mesa and the Kaiparowits plateau. The Cameo mine in Colorado extracted four million tons of coal between 1899 and 1969.¹⁶² One of the more interesting characters in the Plateau coal industry was Violet Smith of Hesperus, Colorado. She insisted on running her mine her way. At one point in her 39 year career, that ended in 1977, she was chasing government inspectors with kitchen knives.¹⁶³

Although the minerals of oil, coal and natural gas on the Plateau are difficult to extract (strip coal mining on the reservations and in the San Juan basin have left much of the region permanently scared) they have not yet been fully exploited due to distances from the markets. Only future demands will dictate whether these resources will be fully exploited.

In the 1890's Tom Mckee of Montrose, Colorado found some uranium in a district that was later going to bear copper and gold.¹⁶⁴ Uranium mining did not truly boom until the 1950's when it was discovered again near Grants, New Mexico and the US government wanted to buy it in large quantities to build atomic

¹⁶¹Ibid., p.211.

¹⁶²Vandenbusche and Smith, A Land Alone, p.131.

¹⁶³Ibid., p.125.

¹⁶⁴Ibid., p.115.

weapons.¹⁶⁵ It was the first and only mineral rush triggered by the government.¹⁶⁶ Peak production was achieved in 1957 when the state of Arizona alone extracted 303,000 tons of ore.¹⁶⁷

Unfortunately, it has been found that uranium miners and people who live near the mines are in danger of radon poisoning.¹⁶⁸

Recently pushes for uranium mining around the Grand Canyon have caused much public outcry.

Although mining on the Colorado Plateau has proven to be unhealthy for its residents and its environment it will continue for a long time. Just as stories of diamond mines and the lost mine of Pish-la-ki near Monument Valley have attracted miners in the past, large companies of today see an easily exploitable resource that will virtually guaranteeing a profit.

Early reports from the government and miners describing the mineral and scenic wealth of the Plateau began to spread out to the east coast as early as the 1870's. Within ten years tourism was on the rise.

The first individual to see tourism as a source of income on the Plateau was J.H. Farlee. Farlee built a very modest "hotel" at Diamond Creek on the Colorado River in 1884 (where Ives had

¹⁶⁵Beck and Hasse, Historical Atlas of New Mexico, p.9.

¹⁶⁶Raye C. Ringholz, Uranium Frenzy, (New York: W.W. Norton Co., 1989), p.11.

¹⁶⁷Walker, Historical Atlas of Arizona, p.48.

¹⁶⁸Ringholz, Uranium Frenzy, p.12.

camped in 1858).¹⁶⁹ Within about five years he faced challenges by the towns of Williams, Ash Fork and Flagstaff as the hub of Grand Canyon tourism. John Hance, a miner turned "dude wrangler", would guide his tourists into the Canyon from Grand View Point as early 1885. By 1892 Pete Barry, also a former miner, built a hotel at Hance's trailhead and within the year was running tourists, by stagecoach, from Flagstaff to the South Rim. Meanwhile, William Wallace Bass was guiding tourists down the Havasupai Falls region from Ash Fork. Between Bass and Hance more than half of the trails in the Grand Canyon were established.¹⁷⁰

By the 1890's the Canyon was a popular destination for people coming west to "see America." They were encouraged by Thomas Moran's paintings and photographs by Henry Peabody. Fred Harvey had hired both of these men to record the scenery for the sole purpose of attracting tourists.¹⁷¹ Fred Harvey saw the potential of canyon tourism and helped to build the El Tovar Hotel at the South rim of the Canyon in 1904. The potential that he saw was fueled by the connection of the Canyon to the Atchison Topeka and Santa Fe Railroad three years earlier. By 1906 the Canyon had earned national monument designation and was a national park by 1919 and continued to expand for the next half-century.

¹⁶⁹Lavender, Colorado River Country, p.166.

¹⁷⁰Peattie, The Inverted Mountains, p.146.

¹⁷¹Lavender, Colorado River Country, p.168.

Within the walls of the Canyon inaccessibility did not slow the tourist trade. As early as 1896 Nathan Galloway was boating down the river taking tourists with him. Galloway, a Mormon, is responsible for revolutionizing the whitewater boating business by turning around in his boat and facing each rapid.¹⁷² His predecessors usually sat with their backs to the rapids and had someone tell them which way to turn the boat. In 1911 Ellsworth and Emery Kolb were taking motion pictures of the hazards of rafting the Colorado. By 1938 Norman Neville had started regular tourist runs through the Canyon by boat. The post World War Two era brought the use of rubber rafts to the Canyon. By tying the large surplus rafts together Georgie White made the whitewater experience of the Canyon available to large groups.¹⁷³

On the other side of the Canyon, at the North Rim, development was a little slower than that which occurred on the south. A rim to rim trail through Phantom Ranch at the bottom of the Canyon was complete in 1907 by David Rust. It was not until 1928 that the Union Pacific Railroad built a hotel on the North Rim. However, tracks were never laid to that hotel.

Tourism activity on the Colorado Plateau was never limited to the Grand Canyon. In December of 1888 Richard Wetherill and Charley Mason came across a virtual metropolis of ruins in southwestern Colorado. The Wetherill family eventually found no

¹⁷²Peattie, Inverted Mountains, p.180.

¹⁷³Rose Marie DeRoss, Adventures of Georgie White, (Palm Desert CA:Desert Magazine Press, 1958), p.5.

fewer than 182 ruins.¹⁷⁴ By 1895 the push for recognition as a national park began and by 1906 congress passed the Antiquities Act and Mesa Verde was established as a national park. It appears that the original purpose of creating the park was for preservation rather than tourism.¹⁷⁵

The automobile changed tourism on the Colorado Plateau like no other single phenomena. Great distances between parks and cities helped to create a dependence on the car.¹⁷⁶ National parks and monuments began multiplying on the Plateau. Between 1900 and 1915 no fewer than half a dozen new parks or monuments were officially designated as such. These include Petrified Forest, Natural Bridges and Navajo national monument. This also includes the most remote of the national sites on the Plateau at Dinosaur National Monument clear up in the northeast corner. The "See America First" tourism program set in motion by the state of Utah and the Union Pacific Railroad brought in tourists to the newest national parks in the southwest corner of the Plateau.¹⁷⁷ Zion, Bryce, Cedar Breaks, and the North Rim of the Grand Canyon all prospered under the boom in tourism. Bus tours became quite common in this region.

Small health spas and resort towns also sprang up on the

¹⁷⁴Lavender, Colorado River Country, p.163.

¹⁷⁵Ibid.,p.164.

¹⁷⁶Lynn I. Perrigo, The American Southwest, (New York: Holt, Rinehart and Winston, 1971), p.346.

¹⁷⁷Crampton, Land of Living Rock, p.214.

Plateau. Skiing in Utah and other recreational pursuits have made much of the Plateau depended on tourist dollars to support the economy. This vulnerable economic structure could collapse in the event of high gas prices or any other signs of a weakening national economy. The other drawback of such an economy is the impact on the fragile Plateau environment. As Durrenberger puts it in his article about the Plateau, "... along with greater income will come greater numbers of people, greyer skies, and a degraded landscape."¹⁷⁸

The government, federal, state and local have perhaps the greatest impact on the economy of the Plateau. If one were to look at a map of the Colorado Plateau that shows private lands versus public lands, one would find that the majority of land on the Plateau is administered by government organizations.¹⁷⁹ The Bureau of Land Management, Bureau of Reclamation, National Forest Service, Bureau of Indian Affairs and the National Parks Service all have a important role in the region. The building of dams by the Reclamation Service alone has accounted for many jobs along rivers. Once again, this increased dependence on government money has put the Plateau in a compromising position. If the US economy falters and budgets are cut back it will be the regions with the greatest dependence that will suffer. Politics and politicians created this subjugation on the Colorado Plateau.

¹⁷⁸Durrenberger, "Colorado Plateau," p.231.

¹⁷⁹Wilma Frey, Map entitled Federal Lands of the Colorado Plateau Region, (Alexandria, VA:Global Printing Inc.,1987)

POLITICS

One should consider two important ideas when discussing the political aspects of the Colorado Plateau. The first is water. Virtually any decision of political consequences has had to do with water. From Powell in the 1870's to Glen Canyon environmental impact in the 1990's water distribution has been the cornerstone of arguments for exploration, settlement, transportation and economy. However, concentrating on water's historical geography can not tell the whole story of politics for this region.

The other consideration is artificial divisions with remote control. The Plateau has been divided into four different political units; Arizona, Colorado, New Mexico and Utah; with total disregard for the people or landscape of the region. The consequence of this division, coupled with the fact at all four states have their respective capital far from the Plateau, create a situation of an absent landlord dictating the needs of the area. Also within this realm is the extensive ownership of lands by governmental agencies. They too make decisions from political centers as far as Washington DC. This control from afar can create problems for the researcher. To determine the impact and influence of an event that happened in the four corners region one must look in no less than five different sources for information.

Early political structure on the Plateau was virtually non-existent. That is not to say that the Native Americans had no

political system, it may have been structured and efficient. However, the scope of this paper is the history from Coronado's explorations to the present.

It was not long after Coronado entered the Plateau that the Spanish government included the region into New Mexico. The Spanish exerted their influence minimally. The only use for the area seemed to have been for the missionaries to convert the natives and perhaps to gain political clout in international circles.

The Mexican government was not much of a factor either. Between 1821 and 1848 they did little more than issue permits for trappers to hunt beaver in the basins. When the land was handed over to the Americans as part of the Treaty of Guadalupe Hidalgo which ended the Mexican-American War, the Mexican control had all but diminished anyway.

In 1847 the Mormons, who were trying to escape from American territories, established the empire of Deseret, which easily included the entire Colorado Plateau. While the Plateau was part of Deseret there was no political activity in the region unless one includes the conversion of Native Americans to the Mormon faith. By 1850 Deseret was only a memory when the federal government named the territories.

Soon the Plateau was cut in half horizontally by the United States government along the same line Arizona and Utah share. North of the line was Utah and south was New Mexico. During the Civil War what was then New Mexico was claimed by the Confederate

States of America. This arrangement lasted less than a year. In 1863 the Colorado Plateau was divided up for the last time, to create the four units that exist today. However, each political unit was merely a territory.

Becoming states was the regions next large obstacle. Colorado faced little difficulty when it applied for statehood in the 1870's. In 1876 Colorado became a state. The territory of Utah had only to denounce its affiliation with the polygamist Mormon Church, a virtually impossible task. Congress passed anti-polygamy bills of various types. It was not until the Poland Act of 1874 did the Mormons realize the fragile ground their institution of polygamy rested upon.¹⁸⁰ By 1888 most of the non-polygamist members of the church were pushing for statehood. In 1890 the Church forbade polygamy. General religious bigotry prevented Utah from becoming a state for the next six years.¹⁸¹

Arizona and New Mexico faced similar difficulty to Utah. In these states the issue was racial not religious discrimination.¹⁸² Many in the federal government may have felt that these two states were nothing but "Indians and Mexicans" who were incapable of running a state government. In 1905 there was a movement to introduce a bill of jointure to admit both Arizona and New Mexico

¹⁸⁰Howard Roberts Lamar, The Far Southwest, (New York: W.W. Norton and Co., 1970), p.370.

¹⁸¹Beck and Hasse, Historical Atlas of the American West, p.42.

¹⁸²Ibid., p.42.

as one large state. However, Arizonans were not interested with sharing their government with the strong "Hispano-Catholic" tradition in New Mexico.¹⁸³ In 1912 both states achieved statehood. But the effects were barely felt on the Colorado Plateau.

Although four different entities controlled different parts of the Plateau, none showed little more than economic interest in the region. That lack of interest began to change in 1879.

In 1879 John Wesley Powell wrote his Report on the Lands of the Arid Regions of the United States. The federal government published the report after Powell had surveyed most of the Plateau region. His conclusions were based on his evaluation of the resources on the Colorado Plateau as mentioned in an earlier chapter. He recommended that the United States government change many of their important policies toward distribution of land and management of water. As far as land was concerned Powell suggested that in the Arid West the 160 acre limit in use since the 1780's was not applicable. He suggested that the soil was so fertile that if properly irrigated that 80 acres would be more than enough.¹⁸⁴ But if the land were not irrigated and used for grazing he recommended 2,560 acres. He even believed in the unheard of concept of cooperative ownership of pasturage land.¹⁸⁵

¹⁸³D. W. Meinig, Southwest, (New York: Oxford University Press, 1971), p.90.

¹⁸⁴Powell, Lands of the Arid Regions, p.31.

¹⁸⁵Ibid., p.xvi.

He probably felt that if it works so well for the Mormons, cooperative grazing would be good for the whole arid west.

Since Powell recognized that water, not land, would determine ownership he also called for reforms in water policy. He suggested using the old metes and bounds survey instead of the systematic baseline and meridian because the old way meant streams could easily be divided. Most startling of all Powell felt that there should be cooperative control of the water and that the United States government would be best suited for the job.¹⁸⁶

Of the above propositions only government control of water ever came to fruition in the form of the Reclamation service. The Reclamation service, created in 1902, later changed its name to the Bureau of Reclamation. The bureau would distribute 160 acre parcels to farmers and oversee the projects that would bring water to these new farmlands in the arid west, including the Colorado Plateau.¹⁸⁷ The Bureau of Reclamation was also responsible for measuring the amount of water that flows down the Colorado River.

This seemingly unimportant job had great consequences in 1922 when the seven states who had claims to the Colorado River met in Santa Fe, New Mexico to determine who got how much of this muddy river. The Bureau had done their job of taking accurate measurements, however for the years that they had measured, the

¹⁸⁶Ibid., p.xvii.

¹⁸⁷Ibid., p.xix.

river had run in excess. The Bureau determined that the average flow was 16.8 million acre feet.¹⁸⁸ Since then the river has actually averaged a figure closer to 13.9 million acre feet. In addition, the states had divided up all 16.8 million acre feet, not by percentages, but by hard numbers. High flow or low flow each lower basin state was guaranteed a set amount. Therefore the shortage of water quickly became apparent. Rather than taking the blame for a small and inaccurate sample of stream flow, the Bureau of Reclamation labeled the Colorado River as a "deficit" river.¹⁸⁹

In 1956 President Eisenhower signed the Colorado River Storage Project Act in order to make it possible to build dams to store water to be released in deficit years. Two major consequences came from this Act. The first is the Glen Canyon Dam. This Dam site was chosen over the Echo Park dam site in Dinosaur National Park because conservationists felt that no dam should ever be built within the boundaries of a national park or monument.¹⁹⁰ The second consequence was the location of Glen Canyon Dam next to Lee's Ferry, the dividing point of the predetermined upper and lower basins of the Colorado River. This now meant that upper basin states could accurately deliver the exact amount of water that the lower basin states required. The

¹⁸⁸Philip L. Fradkin, A River No More, (Tucson: University of Arizona Press, 1981), p.188.

¹⁸⁹Ibid., p.188.

¹⁹⁰Ibid., p.192.

Act also permitted nine (of which only one other, the Navajo Dam, is on the Plateau) additional dam to be built by the Bureau of Reclamation.¹⁹¹

The Bureau of Reclamation had its eye on the Colorado River again in 1964.¹⁹² This time it promised to keep out of national parks. However, this did not keep them from proposing two dams which would come right up to the edges of Grand Canyon National Park. At this time the park was much smaller and one of the proposed dams, Bridge Canyon Dam, would create a reservoir that would flood the notorious rapids of Lava Falls and a little bit of Havasu Creek.¹⁹³ After an intensive media fight the Sierra Club won. David Brower, who had helped to stop the Echo Canyon Dam, led the fight. But the victory lasted only until the Colorado River Basin Project Act was signed in 1968.

One of the projects approved by the signing of the 1968 act was Uintah Unit of the Central Utah Project (CUP).¹⁹⁴ The CUP would be a series of five different projects that would eventually bring Colorado River water to the Salt Lake Valley. When first proposed in the 1950's the Bonneville unit of the CUP

¹⁹¹Marc Reisner, Cadillac Desert, (New York: Penguin Books, 1986), p.149.

¹⁹²Ibid., p.283.

¹⁹³Ibid.,p.283.

¹⁹⁴Ibid.,p.301.

was to cost 332 million dollars.¹⁹⁵ The entire project was to be on line by 1970. In 1990 the CUP was still not complete and the Bonneville phase of CUP is now estimated to cost in excess of 2.1 billion dollars.¹⁹⁶ The slow progress on the canals had prompted the Bureau of Reclamation to build a bowling alley in one of the towns along the route for 375,000 dollars.¹⁹⁷

In addition to building bowling alleys the Bureau of Reclamation had to deal with the sensitive issue of Native American water rights. The Ute tribe of the northern Colorado Plateau was considered a major obstacle to the CUP.¹⁹⁸ In order to fully develop the CUP the many water rights of the Ute had to be surrendered to the project. A compromise was struck and project managers agreed to help develop irrigation projects for the Ute as part of the CUP.¹⁹⁹ By 1980 all the projects for Ute were still last on the list and it seemed as if irrigation for the reservation was never going to happen.²⁰⁰

Native American water rights on the Plateau are problematic. The Winters Doctrine of 1908 governs the rights that Native

¹⁹⁵Jon Miller, "The Political Economy of Western Water Finance: Cost Allocation and the Bonneville Unit of the Central Utah Project," American Journal of Agricultural Economy 69 (May 1987) p.305.

¹⁹⁶Ibid., p.305.

¹⁹⁷Time Magazine, September 30, 1985, p.33.

¹⁹⁸Peter Wiley and Robert Gottlieb, Empires in the Sun, (New York: G.P. Putnam and Sons, 1982), p.236.

¹⁹⁹Ibid., p.236.

²⁰⁰Ibid., p.237.

Americans have concerning water supply. This doctrine basically gives indigenous tribes rights to future water use based on present and past use. In practice the indian rights for water were quite different.

The Navajo tribe provide yet another example of the abuses of Native American water rights. The Navajo Indian Irrigation Project (NIIP) was approved in 1962 in exchange for New Mexico's diversion of San Juan river water into the Rio Grande river system.²⁰¹ Although approved in 1962 the project was yet to send water to the tribe in the 1980's, even though the diversion was completed.²⁰² Trade-offs such as these involving the NIIP is tied into the complex network of government negotiated contracts for reservation resources.

Coal, the tribes' greatest natural asset is also caught in the web of government contracts. So much so that at one point anthropologist Richard Clemmer was unable to turn up the lease that the Peabody coal company had with the Hopi tribe.²⁰³ One can imagine that the Navajo also have had difficulty in determining exactly what their contracts mean to them, let alone whether or not they exist. This conflict that the Navajo and Hopi have had with the coal producing companies might have something to do with the political conflict that has developed between the two tribes.

The most significant recent story to involve the Colorado

²⁰¹Ibid., p.235.

²⁰²Ibid., p.235.

²⁰³Ibid., p.240.

Plateau's geography would be the Navajo-Hopi land dispute. This discord among the two tribes started with Chester Arthur in 1882. It was in this year that Arthur signed an executive order which established a reservation "for the use and occupancy of the Moqui and such other Indians as the Secretary may see fit to settle thereon." (emphasis added)²⁰⁴ This was not a problem when signed in 1882 because the Hopi reservation was not surrounded by the Navajo reservation. The complications began to grow in the 1940's when the Navajo reservation reached its physical outer limits. By this time the Navajo lands completely encircled their Hopi neighbors. In 1962 the Hopi reservation was redrawn to include an exclusive Hopi region and a "joint use" region to be shared with the Navajo.²⁰⁵ In 1974 the District Court of Arizona divided the joint use area to create two exclusive areas for Native American use - one for the Hopi and one for the Navajo.²⁰⁶ This led to the relocation of many people from the land they had lived upon for decades. Here is an example of remote control. The state government had decided for the Native Americans what was their ancestral home. This relocation affected principally the Navajo. The relocation process was to be complete by 1987. By 1988 over 1,000 Navajo families had been moved along with 14

²⁰⁴Chester Arthur, Presidential Executive Order 1882-33-9, December 16, 1882.

²⁰⁵Peter Iverson, "Historical Commentary: Knowing the Land, Leaving the Land: Navajos, Hopis, and Relocation in the American West," Montana Western History 38 (Winter 1988), p.69.

²⁰⁶Ibid., p.69.

Hopi families, but the processes was not yet complete.²⁰⁷ The resolution of this dispute still lies in the future.

This sort of forced relocation is not new to the Navajo. In the 1860's they were marched to the Pecos River in New Mexico and were asked to farm. When the U.S. Government realized the mistake they had made in moving an entire culture to an alien landscape they marched the Navajo back to their homeland.

The establishment of a homeland in the form of a reservation for the Native Americans on the Colorado Plateau has not been a simple process. Most of the reservations were created in the late 1800's. Many other tribes besides the Navajo and Hopi have had problems of their own. In 1879 the Hualapai requested that the entire Hualapai Plateau south of the Grand Canyon be included in their reservation. The request was approved in 1883 because the US government decided that much of the region was worthless.²⁰⁸ Therefore, the Havasupai ended up with a smaller region than their traditional roaming area because the Hualapai had been granted so much of their area.²⁰⁹ In Colorado, the Meeker massacre motivated the state government to chase virtually every Native American out of the state.²¹⁰ Today, only a very small portion of the southwest corner of Colorado is reservation land.

²⁰⁷Ibid., p.69.

²⁰⁸Crampton, Land of Living Rock, p.161.

²⁰⁹Ibid.,p.161.

²¹⁰Greer, Atlas of Utah, p.105.

The establishment of reservations on the northern Plateau region has also been troublesome. The Uintah, the Uncompahgre (who were chased out of Colorado), and the Ouray have all tried to get reservations in this area since the original reservation had been established in 1861.²¹¹ Similarly, the United States government, urged by local ranchers and farmers, has been trying to reduce the size of the reservation.²¹² In 1905 they were successful in reducing the size. Recently it has been rumored that there is a movement to increase the area to its original 1861 size.

This struggle for land could be attributed to the different owners of Plateau land. Robert Durrenberger states in his article that "...the Colorado Plateau is a crazy-quilt of private, Indian, state, and federal holdings, with each individual and each agency having management philosophies, policies, and practices at variance with those of adjacent landholders."²¹³ The federal government owns most of the land through different agencies. Unfortunately, the variety of policies can create severe change to the ground and the plants that grow on it.²¹⁴ Overgrazing is usually at the root of these problems.

²¹¹Ibid., p.105.

²¹²Ibid., p.105.

²¹³Durrenberger, "Colorado Plateau," p.231.

²¹⁴Ibid., p.233.

As early as the 1880's vegetative cover has changed.²¹⁵ Sheep and cattle on to the Colorado Plateau overgraze, which increases arroyo cutting, which lowers the water table, which brings a change in the vegetative cover.²¹⁶ In 1934 the US government decided to do something about the worsening conditions of overgrazed land by passing the Taylor Grazing Act.

The Taylor Grazing Act began to "regulate rangeland use on national resource lands."²¹⁷ The consequences of this act were never significant because the livestock industry basically controlled the Grazing Service.²¹⁸ In 1946 the Bureau of Land Management (BLM) was create to strengthen the existing laws. The BLM grew to become one of the more powerful government agencies on the Colorado Plateau. However, its strengths were still limited by the livestock industry.

The Sagebrush Rebellion has been the most recent chapter to land controversies on the Plateau concerning rangeland. The rebellion began during the turbulent years of the Carter administration when Nevada stock growers felt that the federal government should turn their Forest Service and BLM lands over to the states.²¹⁹ The movement eventually spread across the West and

²¹⁵Ibid., p.233.

²¹⁶Ibid., p.233.

²¹⁷Fradkin, A River No More, p.81.

²¹⁸Ibid., p.81.

²¹⁹John Francis, "Environmental Values, Intergovernmental Politics, and the Sagebrush Rebellion," Western Public Lands, (Totowa, New Jersey: Rowman and Allenheld, 1984), p.29.

the Plateau. The environmentalists fought the western economies of stockgrowing, lumbering and mining for the resources of the west.²²⁰ The rebellion virtually ended with the election of Ronald Reagan. His less than environmentally friendly secretary of the interior James Watt supported making it possible for states to buy more government land.²²¹

Did the people of the Colorado Plateau support the likes of Watt and the philosophies of the Republican Party? The trend toward republicanism is growing in the American West in general and it could be said that the Colorado Plateau is no exception.²²² The Western Slope of Colorado has traditionally been a conservative stronghold run by the likes of Bureau of Reclamation supporter, Wayne Aspinall.²²³

Aspinall probably spent most of his time in Washington making decisions that would effect the Colorado Plateau. Of coarse this is not unusual, since so much of the Plateau's land is controlled by agencies that have their main offices no where near the region.

Political history of the Colorado Plateau usually takes place far off the Plateau. The fighting that occurs in the

²²⁰Ibid.,p.34.

²²¹Ibid., p.44.

²²²Paul Bruce and John Straeyer, "Colorado: PACs, Political Candidates, and Conservatism," Interest Group Politics in the American West, (Salt Lake City: University of Utah Press, 1987), p.25.

²²³Ibid.,p.49.

region are more reactive to the policies set down by absentee landlords. The reactions tend to be of the radical nature that Edward Abbey advocated in his book, The Monkey Wench Gang, where the Gang travels throughout the Plateau region and sabotage construction sites and bridges. The most recent example is the 1991 conviction of EarthFirst! members responsible for the sabotage of a ski lift on the San Francisco Peaks.²²⁴ However it is yet to be determined whether or not this form of "Ecoterrorism" is effective.

Governmental agencies make many other historic decisions that have had an outcome on Plateau geography. In 1921 the Colorado legislature managed to get the Grand River renamed the Colorado River. In the following year when negotiations of who gets how much of Colorado River water, the state of Colorado could claim to have the headwaters and therefore deserve a bigger share of the river.²²⁵

At least two towns on the Plateau could claim that history created their geographic location. Colorado City (formally Short Creek) is situated on the Arizona-Utah border because the Mormons who settled this town wanted to be able to cross into Utah when Arizona agents were after them, or vice versa when Utah agents were chasing them down.²²⁶ Although neither state condones

²²⁴Arizona Daily Sun, September 20, 1991, p.3.

²²⁵Fradkin, A River No More, p.35.

²²⁶Paul Brinkely-Rogers, "Mormon Fundamentalists Making Comeback as They Fight for Courts to Sanction Lifestyle," Arizona Republic, 29 December 1991, p.6.

polygamy the residents of Colorado City have continued to practice polygamy with little harassment since the 1950's.

The other city is Page, Arizona. Page was created with the building of Glen Canyon Dam. There was some debate as to which state would get the town, and the voters that went with it. Page ended up in Arizona due to the political maneuvering on behalf of Arizona politicians for the Central Arizona Project.²²⁷

Edward Abbey has virtually recommended in his writings that large water projects such as the CAP or Glen Canyon Dam be blown up. An action such as this would have both severe political and environmental consequences to the Colorado Plateau. The sensitivity of the topic signifies how important water is to the Colorado Plateau and how the political future of the region may turn out. In the future we can only hope that the fragile issues discussed in this section can be decided by the people of the Colorado Plateau and not by the governmental bureaucrats who may have never enjoyed the true beauty of this region.

²²⁷Russell Martin, The Story that Stands Like a Dam, (New York: Holt, 1989), p.92.

CONCLUSION

The close bond between history and geography on the Colorado Plateau cannot be ignored. To understand the history of the Plateau the researcher must consider geography and conversely when researching the human geography of the Plateau the researcher must pay close attention to history. Neither phenomenon occurs in a vacuum. Exploration and settlement here was principally controlled by the factors of geography. The transportation epoch showed a growth of historical factors and a waning if geographical influences. And lastly, economics and politics on the Colorado Plateau have mostly demonstrated how history can affect the geography of the region.

Lately geography has attempted a comeback against the tight politics that have recently been determining Colorado Plateau history. In 1983 poor planning by the Bureau of Reclamation almost led to the washing out of Glen Canyon Dam.²²⁸ An "unexpected" spring runoff from the Rockies filled the reservoir beyond capacity. At one point plywood gates were installed over the spillways to avert disastrous flooding further down stream. The water was finally allowed to run through the spillways virtually destroying them. It was rumored that a small group of people were trying to stir the Water God spirit's by enacting a "damn the dam" dance in hopes that the dam would break.

In 1991 the Glen Canyon Dam again became significant environmental news. The Bureau of Reclamation was in the middle

²²⁸Ibid., p.316.

of determining a compromise of regulating stream flow out of the Dam. Since the Dam has been built flow regimes from it have caused severe changes in the flora and fauna of the Grand Canyon immediately down stream.²²⁹ A group named the Glen Canyon Environmental Studies has been researching the effect of rapid fluctuations on beach erosion throughout the canyon among other environmentally sensitive consequences of the dam.

The environmental concerns raised by groups such as the above signify a new emphasis on geography on the Colorado Plateau. Although coal is still strip mined on the reservations there is a new interest on land. Many people are now choosing locations on the Plateau for the beauty or solitude that is virtually omnipresent here. Rather than determining how much coal can be mined from a mesa, or how much water a canyon can hold, humans are beginning to recognize that these mesas and canyons hold magnificent scenery and solitude of great value that costs nothing to extract except perhaps a long drive and a short hike. The challenge of the future will be to preserve the land. And along with preservation man must properly manage what resources there are on the Colorado Plateau or they may face the inevitable doom of unexpected geographic change much like the drought that chased the Anasazi from their homes 700 years ago.

²²⁹"Glen Canyon Dam Flow Regime to Affect Life in Grand Canyon," U.S. Water News, p.19.

BIBLIOGRAPHY

Abbey, Edward. The Journey Home: Some Words in the Defense of the American West. New York: E P Dutton, 1977.

--The Monkey Wrench Gang. Philadelphia: Lippincott, 1975.

Ambler, Richard. The Anasazi: Prehistoric People of the Four-Corners Region. Flagstaff: Museum of Northern Arizona, 1977.

"American Notes: Utah: Uncle Sam's Bowling Alley," Time Magazine (September 30, 1985) p.33.

Arthur, Chester. Presidential Executive Order 1882-33-9 of December 16, 1882.

Athearn, Robert G. Rebel of the Rockies: A History of the Denver and Rio Grande Western Railroad. New Haven, Connecticut: Yale University Press, 1962.

Avery, Valeen Tippetts. Free Running: Charlie Spencer and His Most Remarkable Water Project. No.2 in Series published by Flagstaff Corral of Westerners International, 1981.

Bartlett, Richard A. Great Surveys of the American West. Norman, Oklahoma: University of Oklahoma Press, 1985.

Beck, Warren A. and Yves D. Hasse. Historical Atlas of New Mexico. Norman, Oklahoma: University of Oklahoma Press, 1969.

Beck, Warren A. and Yves D. Hasse. Historical Atlas of the American West. Norman, Oklahoma: University of Oklahoma Press, 1989.

Bolton, Herbert E. Coronado: Knight of Pueblos and Plains. Albuquerque: University of New Mexico Press, 1949.

-- Pageant in the Wilderness: The Story of the Escalante Expedition to the Interior Basin 1776. Salt Lake City: Utah Historical Society, 1950.

Briggs, Walter. Without Noise of Arms: The 1776 Dominguez and Escalante Search for a Route from Santa Fe to Monterey. Flagstaff: Northland Press, 1976.

Brinkley-Rogers, Paul. "Mormon Fundamentalists Making Comeback as They Fight for Courts to Sanction Lifestyle." The Arizona Republic. 29 December 1991, p.1.

- Bruce, Paul and John Straeyer. "Colorado: PACs, Political Candidates, and Conservatism," In Interest Group Politics in the American West. Edited by Robert J. Hrebenar and Clive S. Thomas. Salt Lake City: University of Utah Press, 1987.
- Byrkit, James. "The Palatkwapi Trail." Plateau Magazine 59 (Fall 1988) 4-32.
- Cleland, Robert Glass. This Reckless Breed of Men: The Trappers and Fur Traders of the Southwest. New York: Alfred A. Knopf, 1952.
- Cline, Gloria Griffen. Exploring the Great Basin. Norman, Oklahoma: University of Oklahoma Press, 1962.
- Crampton, C. Gregory. Land of Living Rock: The Grand Canyon and the High Plateaus: Arizona, Utah, Nevada. New York: Alfred A. Knopf, 1972.
- Crampton, C. Gregory. Standing Up Country: The Canyonlands of Utah and Arizona. New York: Alfred A. Knopf, 1964.
- Coues, Elliott. On The Trail of a Spanish Pioneer: The Diary and Itinerary of Francisco Garces. 2 vol. New York: Francis P. Harper, 1900.
- Davis, Charles. National Old Trails Road. Washington D.C., 1914.
- DeRoss, Rose Marie. Adventures of Georgie White: TV's Woman of the Rivers. Palm Desert CA: Desert Magazine, 1958.
- Durrenberger, Robert. "The Colorado Plateau." Association of American Geographers Annals 62 (June 1972) 211-236
- Dutton, Clarence. Tertiary History of the Grand Canyon District. 1882. Reprinted by Salt Lake City: Peregrine Smith Inc., 1977.
- "Earthfirst! Defendants Sentenced," Arizona Daily Sun (September 30, 1991) p.3.
- Fifer, J. Valerie. American Progress: The Growth of the Transport, Tourism, and Information Industries in Nineteenth Century West. Chester, Connecticut: Globe Pequot Press, 1988.
- Fradkin, Philip L. A River No More: The Colorado River and the West. Tucson: University of Arizona Press, 1981.

- Francis, John. "Environmental Values, Intergovernmental Politics, and the Sagebrush Rebellion," In Western Public Lands: The Management of Natural Resources on a Time of Declining Federalism. Edited by John G. Francis and Richard Gonzel. Totowa, New Jersey: Rowman and Allenheld, 1984.
- Francaviglia, Richard V. The Mormon Landscape: Existence, Creation, and Perception of a Unique Image on the American West. New York: AMS Press, 1978.
- Frey, Wilma. Map entitled Federal Lands of the Colorado Plateau Region. Alexandria VA: Global Printing Inc., 1987.
- "Glen Canyon Dam Flow Regime to Affect Life in Grand Canyon." U.S. Water News. September 1991, p.19.
- Greer, Dean C. Project Director. Atlas of Utah. Provo, Utah: Brigham Young University Press, 1981.
- Greever, William S. Arid Domain: The Santa Fe Railway and its Western Land Grant. Stanford, California: Stanford University Press, 1954.
- Hallerbeck, Cleve. The Journey of Fray Marco de Niza. Dallas: Southern Methodist University Press, 1987.
- Hammond, George P. "The Search for the Fabulous in the Settlement of the Southwest," Utah Historical Quarterly 24 (1956) 1-19.
- Heap, Gwinn Harris. Central Route to the Pacific from the Valley of the Mississippi to California. Philadelphia: Lippincott, Grumbo and Co., 1854.
- Iverson, Peter. "Historical Commentary: Knowing the Land, Leaving the Land: Navajos, Hopis, and Relocation in the American West," Montana Western History 38 (Winter 1988) 67-70.
- Ives, Joseph C. Reports upon the Colorado River of the West. Washington DC: Government Publishing Office, 1861.
- Lamar, Howard Roberts. The Far Southwest: 1846-1912. New York: W.W. Norton and Company Inc, 1970.
- Lavender, David. Colorado River Country. New York: E.P. Dutton, 1982.
- Martin, Russell. A Story that Stands Like a Dam: Glen Canyon and the Struggle for the Soul of the West. New York: Holt, 1989.
- Meinig, D.W. Southwest: Three Peoples in Geographic Change, 1600-1970. New York: Oxford University Press, 1971.

- Miller, Jon. "The Political Economy of Western Water Finance: Cost Allocation and the Bonneville Unit of the Central Utah Project," American Journal of Agricultural Economy 69 (May 1987) 303-310.
- Newberry, J.S. Reports of the Exploring Expedition from Santa Fe, New Mexico to the Junction of the Grand and Green Rivers of the Great Colorado of the West in 1859. Washington DC: Government Publishing Office, 1876.
- Pattie, James Ohio. The Personal Narrative of James O. Pattie of Kentucky. Edited by Timothy Flint. Cincinnati: John H. Wood, 1831.
- Peattie, Roderick, ed. The Inverted Mountains: Canyons of the West. New York: The Vanguard Press, Inc, 1948.
- Perrigo, Lynn I. The American Southwest. New York: Holt. Rinehart and Winston, 1971.
- Peterson, Charles S. Take Up Your Mission: Mormon Colonization Along the Little Colorado, 1820-1900. Tucson: University of Arizona Press, 1973.
- Powell, John W. Explorations of the Colorado River of the West and its Tributaries. Washington DC: Government Publishing Office, 1875.
- Lands of the Arid Region of the United States. New introduction by T.H. Watkins. Washington DC: General Printing Office, 1879. reprint ed., Boston: Harvard Common Press, 1983.
- Reisner, Marc. Cadillac Desert: The American West and Its Disappearing Water. New York: Penguin Books, 1986.
- Ricks, Joel Edward. Forms and Methods of Early Mormon Settlement in Utah and Surrounding Regions 1847 to 1877. Logan, Utah: Utah State University Press, 1964.
- Ringholz, Raye C. Uranium Frenzy: Boom and Bust on the Colorado Plateau. New York: W.W. Norton Company, 1989.
- Rusho, W.L. and C. Gregory Crampton. Desert River Crossing: Historic Lee's Ferry on the Colorado River. Salt Lake City: Pergrine Smith Inc., 1981.
- Simmons, Marc The Last Conquistador: Juan de Onate and the Settling of the Far Southwest. Norman: University of Oklahoma Press, 1991.

- Simpson, James H. Navaho Expedition: Journal of a Military Reconnaissance from Santa Fe, New Mexico to the Navaho Country made in 1849. Edited and Noted by Frank McNitt. Norman: University of Oklahoma Press, 1964.
- Sitgreaves, Lorenzo. Reports of an Expedition Down the Zuni and Colorado Rivers. Edited by Robert Armstrong. 32nd Cong., 2nd sess., 1853, Exec. Doc. 59.
- Smith, Watson. "Seventeenth-Century Spanish Missions of the Western Pueblo Area," The Smoke Signal 21 (Spring 1970) 1-22.
- Smythe, William E. The Conquest of Arid America. New introduction by Lawrence B. Lee. Macmillan Press, 1905. reprint ed., University of Washington Press, 1970.
- Spicer, Edward. Cycles of Conquest: The impact of Spain, Mexico, and the United States on the Indians of the Southwest, 1533-1960. Tucson: University of Arizona Press, 1962.
- Stanton, Robert Brewster. Colorado River Controversies. New York: Dodd, Mead and Co., 1932.
- Stegner, Wallace. Beyond the 100th Meridian: John Wesley Powell and the Second Opening of the West. Boston: Houghton Mifflin Co., 1962.
- Walker, Henry P. and Donald H Bufkin. Historical Atlas of Arizona. revised edition. Norman, Oklahoma: University of Oklahoma Press, 1986.
- Wallace, Andrew. "Across Arizona to the Big Colorado: The Sitgreaves Expedition, 1851," Arizona and the West. 26 (1984) p.325-361.
- Weber, David J. The Taos Trapper: Fur trade in the Far Southwest 1540-1846. Norman, Oklahoma: University of Oklahoma Press, 1971.
- Wheeler, George M. U.S. Geographical Surveys West of the 100th Meridian: Vol 1, Geographical Reports. Washington DC: Government Publishing Office, 1889.
- Wiley, Peter and Gottlieb, Robert. Empires in the Sun: The Rise of the New American West. New York: G.P. Putnam and Sons, 1982.
- Vandenbusche, Duane and Smith, Duane A. A Land Alone: Colorado's Western Slope. Boulder, Colorado: Pruett Publishing Company, 1981.