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### Hunters of the Shining Mountains: The History of Hunting on the Western Slope of the Colorado Front Range

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By

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A. A. Oregon Institute of Technology, 1999

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Presented in partial fulfillment of the requirements

for the degree of

Master of Arts

The University of Montana

May 2003

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Hunters of the Shining Mountains: The History of Hunting on the Western Slope of the Colorado Front Range

Dan L. Flores DL7

The Western Slope of the Colorado Front Range has been the home of continuous human occupation for nearly 10,000 years. Paleoindian, Archaic, and Protohistoric occupants of this region developed a functional equilibrium with the environment. In nineteenth-century America, demands of resource use surpassed extant cultural and economic ethnic constraints. Hence, the elimination of large populations of charismatic big wildlife on the Western Slope during the latter decades was, in part, the result of an expanding and increasing human population leaning heavily on the region's limited resources. Moreover, the introduction of a global market economy brought new technological, social, and economic elements into the equation. New ideas about the land-who owned it, and how to use it-resulted in major racial and class conflicts pitting urban, wildlife officials and well-heeled sport hunters against Indians, settlers, and commercial hunters. What was once the commons, the place where people of all ethnic, social, and economic backgrounds hunted without restrictions, fell under federal jurisdiction, and became subject to federally mandated conservation methods and resource use. These changes helped conservationists and sport hunters redefine the land and the use of its plant and animal inhabitants.

Each chapter here differs with regard to methodology. Although secondary literature directs the construction of the theoretical framework, I approach each of these chapters from a historically-based interdisciplinary perspective using archeological, ethnographic, and historical sources. The archeological evidence I use represents the most current research in the field. Having discussed the quality and relevance of these sources with experts, I believe these sources represent the current state of knowledge and have enabled me to produce a *longue durée* study. The ethnographic studies I use are somewhat dated, yet some of the literature still stands, most specifically that regarding the social and political construction of Ute society. In the last chapter, set during the latter decades of nineteenth century, I examine primary sources from commercial hunters and government documents—both state and federal—under a critical lens to investigate and understand how human hunting practices altered the landscape of the Western Slope.

For Jill

#### Acknowledgements

I have accumulated more debts while working on this project than I can ever hope to repay, starting with those that I incurred at the University of Montana. This project stemmed from a research grant for a history of the fur trade in the Rocky Mountain National Park that Dan Flores offered to me during my first term here when I was taking his graduate seminar on Native American history. As a truly world-class mentor, Dan was there to guide and instruct me from the beginning and it is to him, more than anyone, else that I am indebted. Thank you Dan. I am also indebted to Rocky Mountain National park and the Cooperative Ecosystems Study Unit for providing the funding that enabled me to collect the evidence I needed for this project. I would also like to extend my thanks to the other members of my committee, Professor Richmond Clow, and Department Chair, Professor Harry Fritz. Thank you both for your guidance and support. I also owe a thank you to Professors Ken Lockridge and Jeff Wiltse. Ken, your insight and knowledge has consistently helped me strive for a fresh perspective on my work and where I want to take it in the future. Jeff, your eye for detail and willingness to ask the hard questions of me helped me to become a better historian. Thank you both. I also want to thank my colleagues in the history department, Nicolaas Mink, Alan Roe, Nathan McConnell, Ben Davison, Jon Wlasiuk and David Zierler, your friendship and support and most of all, your encouragement, helped me keep the fires lit, thanks guys. Finally, I would like to thank my wife Jill, without your support none of this would have been possible.

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#### Preface

Every time we go off into the wilderness, we are looking for that perfect primitive Eden ~Wallace Stegner

Perhaps there is something in the air; maybe it is the crispness, or perhaps the refreshing scent of spruce and pine from the high-altitude forests. Whatever it is, the northwestern slope of the Colorado Front Range is a place like no other. I remember visiting this region during my spring break of 2002. There was a feeling of immenseness to the region, a feeling that went beyond the sheer magnitude of the mountains; it was a sense of timelessness. How is it that the character of a region can set a person back so completely, striking them dumb in awe and wonder? The Great Plains holds some people's imaginations with visions of endless fields, golden crops gently swaying in the breeze. Others are smitten with the deserts and canyons of the Southwest, a region that while seemingly bereft of life, abounds with an amazing diversity of plants and animals. Still others find their cathedrals in the great swamps of the South, or the ancient stands of maple and pine in the New England woods. For some people though, the Rocky

The northern section of the western slope of the Front Range lies within the southern Rocky Mountain geographic province in northwest Colorado. I had been here before, when it was not possible to drive into the high country; that was when I first fell under its spell. Returning in August of 2002, I crossed the Continental Divide from east to west following Trail Ridge Road from Estes Park through Rocky Mountain National Park. I looked at the land in a way I had never imagined possible. This (brief but seemingly endless) sojourn from the high altitudes of Rocky Mountain National Park to

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Middle Park at the western foot of the Front Range left a deep and abiding impression on me.

At the crest of the Rocky Mountains on Trail Ridge Road, the alpine tundra stretches out in an undulating sea of green. On a clear day, at 13,000 feet above sea level, one can see for hundreds of miles. To the east, the Great Plains stretch out beneath the azure sky, while in the south, the mountains extend beyond the horizon. Looking northward, the mountains veer northwest creating the Continental Divide. North Park and the Wyoming basin rest in the distance. Back toward the west, in the unseen distance, past the White River Plateau, the Great Basin sprawls westward toward the Sierra Nevada Range. But closer, between the Continental Divide and the distant Uintah Basin, lies the northwestern slope of the Colorado Front Range.

Trail Ridge Road proceeds west according to the contours of the terrain. Like a child's scribble, it seems to wander, twisting and winding its way down the mountainside, a route mandated by topography. Driving down the West Slope, toward Middle Park, alpine meadows gradually blend into fellfields and islands of krummholz. The landscape at these altitudes is alien to lowlanders. At an elevation of just over 10,750 feet, the short twisted krummholz give way to stands of spruce and fir. Farther down the mountainside, the spruce and fir begin to diminish amidst the copious stands of pine and aspen. On what must have been a rare occasion, I saw a small herd of *Shiras* moose making their way back from the river, melting into the camouflage of the forest. The types and kinds of plant and animal life change yet again as pine and aspen devolve into sage and juniper foothills. This is where our story begins, on the northwestern slope of the Colorado Rocky Mountains.

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### Introduction

At the beginning of this project I set out to understand the history of hunting on the northern section of Colorado's storied Western Slope. My impression was always that hunters from across the nation, and even from around the world, came here to hunt wildlife. As I began to study this region's distant past, images of vast herds of antelope, deer, bighorn sheep, elk, and bison (much more bison than one might imagine) began to fill my mental canvas. The archeological and ethnographic record of this region told a story of humans who once implemented subsistence strategies that remained virtually unchanged for thousands of years. To be sure, some of their technology changed. The earliest people used first Clovis, then Folsorn, and eventually Plano projectile tips. And during the last 2,000 years, the humans who occupied the Western Slope used sidenotched projectile points affixed to arrows that they launched with sinew-backed bows. Finally, during the last two hundred years, local hunters started using firearms. Even with the power and range this new technology afforded them, however, some hunters continued to use the bow.

But learning about the people who lived here was not nearly as great a challenge as defining the parameters of the study region. The first question I had to address was whether I wanted to focus big or small. Should the focus area be small, perhaps just a portion of the Western Slope like Middle Park? A small region like Middle Park would certainly be easier than looking at the entire northern aspect of the Western Slope. But after careful consideration, I realized that the people I was interested in—going all the way back to the earliest human inhabitants 10,0000 years before present—never limited themselves to Middle Park. In fact, the first humans to enter the region and virtually all who followed used the numerous high-altitude hunting drives on the crest of the Front Range, and also hunted charismatic big wildlife in the mountain passes along the four major mountain ranges surrounding the park. More to the point, the idea that any people who lived in Middle Park would have limited their subsistence practices to such a small area seems highly unlikely.

Gradually, as I gathered more evidence about my subject, I began to perceive the natural geographical boundaries of my study region. One of the wonderful aspects about northwest Colorado is the diversity of the landscape. The entire region is composed of an alternating basin and range topography. The drastic changes in elevation mean that the diversity of plant and animal life make this region truly exceptional and worthy of a long look at how people and the land adapted to one another. Here on the Western Slope, as successive and overlapping cultures occupied this space, they made their choices about how to use the land informed in part by their needs, but also by their culture and their technological sophistication. Of course, as their technology got more sophisticated, the cultures that occupied this region began to enjoy a broader range of choices, but still, the cultural dictates of their societies continued to influence their ideas about the land and how to use the plant and animal resources available to them. But the way in which their needs influenced their choices underwent changes as well. And with their steadily increasing participation in the global market economy, through trade in slaves, furs, skins, and meat, the Western Slope people began to look at the land in new ways.

Today, historians refer to such a perspective as bioregional history.<sup>1</sup> Eschewing the rigid structure of political cartography, the exploration of local history is best served by looking at the evidence in the context of a region with a multiplicity of organic life forms and diverse topography bound together with a common historical thread. More specifically, the diversity of cultural subsistence methods that effloresced and faded in this subtly (and sometimes drastically) yet constantly changing environment of the Western Slope makes relevant the story of this region.

To tell such a story, we have to look at the *longue durée* history of the region. The first step properly begins with the geology of the area. The creation of the geographic province through tertiary uplift, cataclysm, and glacial retreat reveals the results of slow but unceasing change and transformation of the landscape. The next step requires a discussion of the climate. The long view of climate can reveal much about the diversity of vegetable and animal populations in the region. Finally, a thorough discussion of the different cultures that inhabited the region reveals the impact that the land may have had on developing subsistence methods and social patterns, and in turn, demonstrate, for better or worse, the results those methods and patterns had on the environment. In the end, we realize a sense of place, where, as geographer Yi-Fu Tuan proposed, space and culture become one, and cultures change spaces endlessly.

<sup>&</sup>lt;sup>1</sup> Dan Flores, *The Natural West: Environmental History in the Great Plains and Rocky Mountains* (Norman: University of Oklahoma Press, 2001), 91. In this prescient anthology of essays on western environmental history, Flores discusses the origins of "bioregional history." Borrowing the phrase from Canadian Allen Van Newkirk, Flores explains that the idea of bioregional history emanated from the work of Walter Prescott Webb, who ably demonstrated that "the West' was not a process, but was and is a *region* [italics in original] whose perimeter can be sensed on the ground and marked out on a map." The conjoining between "specific ecological realities and specific human adaptation. .that are the evolution of cultures in place" are essential to our ability to investigate and understand our historical past and, combined, make up what Flores calls "*bioregional* histories."

The northern section of the western slope of the Colorado Rocky Mountains-the primary focus region for this study—begins at the Continental Divide, the summit of the high peaks. At the crest of the Front Range, the Continental Divide runs north and south through the center of today's Indian Peaks Wilderness Area and the Rocky Mountain National Park. During the early Tertiary period, Laramide Orogeny began the violent process of giving birth to the southern Rocky Mountains. In this region, folding and faulting have acted independently and together, to create the landforms that exist there today.<sup>2</sup> The terrain of this high region, which combines razor sharp peaks and circue glaciers with unglaciated tundra uplands, creates an idyllic summer grazing environment for large ungulates such as elk, mule deer, and bighorn sheep. Spaced intermittently along the Continental Divide, low altitude passes provide migratory avenues for animals and humans to move between Middle Park and the higher elevations.<sup>3</sup> Farther west, beyond Middle Park, the Pliocene uplift of the Colorado Plateau massif created the White River Plateau, a basic dome shaped uplift with Laramide-age intrusive rocks at its core and Oligocene and Miocene volcanics on the surface. While limestones, shales, and volcanics such as granites and metamorphized granites appear in the mountains, sandstones that erosion has exposed over the millennia predominate.<sup>4</sup>

During the Eocene, approximately 40 million years ago, the Western Slope existed under warm-temperate to subtropical conditions. The fauna present during this age included a variety of reptiles—crocodiles, alligators, boa constrictors, soft-shelled

<sup>&</sup>lt;sup>2</sup> Audrey DeLella Benedict, A Sierra Club Naturalist's Guide: The Southern Rockies: The Rocky Mountain regions of Southern Wyoming, Colorado, and Northern New Mexico (San Francisco: Sierra Club Books, 1991), 90-92.

<sup>&</sup>lt;sup>3</sup> James B. Benedict, "Effects of Changing Climate on Game-animal and Human Use of Colorado High Country (U.S.A.) since 1000 BC." *Arctic, Antarctic, and Alpine Research*, 31:1 (1999): 1-2.

<sup>&</sup>lt;sup>4</sup> <u>http://herbarium.biology.colostate.edu/westecosystems.htm</u>. Benedict, *Sierra Club Naturalist's Guide*, 92.

turtles—and subtropical fish. In Middle Park, paleontologists have uncovered evidence of primitive mammals. During the Oligocene and Miocene—25 to 5 million years ago evidence of more familiar fauna such as saber-toothed cats and a variety of grazing mammals begin to appear in the archeological record. Some researchers have suggested that on the western slope, between 12,000 and 11,000 BP, three phenomena occurred simultaneously: the arrival of humans into the region, a thousand year drought, and the disappearance of the megafauna.<sup>5</sup>

How did the Megafauna go extinct? At present, there are only two theories that researchers accept: human induced overkill and climatic change and the resultant alteration in the environment. Although it is obvious that modern mankind has wrought significant changes in the environment, and is responsible for the wholesale destruction of a number of species, including the bison, some archeologists are not entirely convinced that humans of 12,000 B.P. could create the same kind of devastation that modern humans have produced, not even over a span of several hundred or thousands of years. Indeed, some researchers believe that the Paleo-Indians were simply not well armed enough nor dense enough in population to wipe-out North America's megafauna.<sup>6</sup> The controversy over the environmental and climatic impact on the megafauna, versus the human element has produced a number of potential models against which it may be possible to test other hypotheses. Perhaps at some time in the future researchers will have the opportunity to test a fusion theory model of extinction, one in which climate

<sup>&</sup>lt;sup>5</sup> William P. Eckerle, "Eolian Geoarchaeology of the Wyoming Basin: Changing Environments and Archaic Subsistence Strategies in the Holocene," in *Changing Perspectives of the Archaic on the Northwest Plains and Rocky Mountains*, edited by Mary Lou Larson and Julie E. Francis (Vermillion: University of South Dakota Press, 1997): 144.

<sup>&</sup>lt;sup>6</sup> Kurtén, Bjorn. *Before the Indians*. (New York: Columbia University Press, 1988), 136, 143.

began the process, but in which man arrived to deliver the telling blow. It is still necessary at this time, however, to acknowledge the limitations of each model.

Climate has an important impact on the way cultures develop that is second only to geography.<sup>7</sup> The Pacific air mass that flows over the Sierra Nevada and Cascade Mountains determines the climate of northwestern Colorado. As the Pacific air mass descends the Sierras and Cascades, it loses much of its moisture. However, as it flows across the intermountain region, the air mass acts like a sponge drawing most of the scant moisture from the air, thus producing the extremely arid environment of the Great Basin.

Unexpectedly, the reverse is true for the mountainous portions of the West Slope. The Western Slope receives much more precipitation than elsewhere in the state because once the Pacific air mass has reached the mountains it has once again become laden with moisture. Precipitation forms as the moist air rises over the mountains and cools, resulting in an aorographic climate that provides enough moisture to result in significant yearly snow falls.<sup>8</sup>

While some regions possess topography with minimal surface variation, allowing for a single or rather simplified analysis of weather patterns, here on the Western Slope, geography and climate come together to create a wonderfully diverse topography with one of the most diverse biomasses in North America.<sup>9</sup>

Below the subalpine zone, the vegetation fans out into a mosaic of types. Although many people associate this region with an arid climate and desert vegetation,

<sup>&</sup>lt;sup>7</sup> Dan Flores, *The Natural West: Environmental History in the Great Plains and Rocky Mountains* (Norman: University of Oklahoma Press, 2001), 100. James B. Benedict, "Footprints in the Snow: High-Altitude Cultural Ecology of the Colorado Front Range, U.S.A." *Arctic and Alpine Research* 24, no. 1 (1992): 1. Benedict maintains that the opposite is true and that climate has a more significant impact on the development of cultures than the geography.

<sup>&</sup>lt;sup>8</sup> http://herbarium.biology.colostate.edu/westecosystems.htm

<sup>&</sup>lt;sup>9</sup> Biomass refers organic matter that can be converted to fuel and is therefore regarded as a potential energy source. See Appendix 1a-e

lush riparian corridors and occasional wetlands serve to dissect this region. Such ecosystem diversity creates a patchwork of habitats and contributes to the overall richness and splendor of the Colorado landscape. Moreover, fire, both spontaneously occurring as in lightening strikes-and intentionally set helped modify vegetation patterns and animal populations.<sup>10</sup> In addition to the rich and varied vegetation, an abundance of wildlife populates the Western Slope inhabiting all life zones at virtually every elevation. Researchers have become increasingly aware of the liabilities in long-view studies of wildlife habitat and populations. Even after the advent of conservation in the late nineteenth century, researchers did not always take pains to count the individual animals in each herd. Moreover, much of the earlier evidence related to wildlife density and population often came from the "diaries, letters, and reports of mountain men, settlers, and explorers."<sup>11</sup> Although these types of primary sources often provide invaluable insights about the state of the land and indigenous cultures prior to or concurrent with the advent of market economics, they can also tend more toward the descriptive than quantitative, thus revealing little about animal populations in relation to the introduction of market hunting.<sup>12</sup> Yet even without head counts, impressionistic accounts may be of use in gaining a perspective on the richness and diversity of wildlife on the Western slope.

Throughout northwestern Colorado, two distinct types of shrublands predominate: sagebrush lands and saline shrublands. A sagebrush steppe community exists within the

<sup>&</sup>lt;sup>10</sup> Ora Brooks Peake, The Colorado Range Cattle Industry (Glendale, CA: The Arthur H. Clark Company, 1937), 50-51.

<sup>&</sup>lt;sup>11</sup> R. Bruce Gill Declining Mule Deer Populations in Colorado: reasons and responses (A report t o the Colorado Legislature, November 1999), Special Report No. 77 (Denver: Colorado Division of Wildlife, June 2001): 1.

<sup>&</sup>lt;sup>12</sup> Ibid.

Upper Sonoran life zone at the lowest altitude on the Western Slope between 3300 and 5500 feet. Although shrubs, forbs, and some riparian plant communities exist within this community, big sagebrush is the most plentiful plant and thickspike, wheatgrass, and Indian ricegrass are the most common grasses.<sup>13</sup> They tend to occur on well-drained coarse soils. Grazing and fire have an important influence on this vegetation type, with grazing favoring sagebrush and fire favoring a grassy understory. The saline shrublands also cover vast areas. These plants tend to grow well in areas where the soil is claylike and moderately to very saline. Widely spaced shrubs—three to ten feet apart—with little or no undergrowth between them tend to characterize this species and provide an ideal habitat for antelope and mule deer.

Pronghorns, because of their adaptation to arid conditions, found a welcome environment here and may have abounded in numbers as high as fifteen million throughout the entire intermountain West.<sup>14</sup> The former range of antelope in Colorado included the plains east of the Front Range and the numerous mountain parks and river valleys of the state's montane regions. In addition to their ranges in the eastern and western portion of the state, antelope also inhabited South, Middle and North Parks. Deriving their numbers from Seton's work, ecologists believe that about two million antelope populated Colorado at the beginning of the nineteenth century.<sup>15</sup> Early deer population estimates far exceeded actual numbers, which may be more in line with

<sup>&</sup>lt;sup>13</sup> Burney, Michael, Carol Coe, Collette Colle, and Thomas J. Lennon. An Archaeological Study Of Aboriginal Sites Within the Windy Gap Dam, Reservoir and Pipeline Project Near Granby, Grand County, Colorado (Boulder: Western Cultural Resource Management, Inc., 1979): 49. See appendix for a catalog of edible plant species at this elevation

<sup>&</sup>lt;sup>14</sup> Frederick H. Wagner, "Livestock Grazing and the Livestock Industry" in Wildlife and America: Contributions to and Understanding of American Wildlife and its Conservation, Howard P Brokaw, ed. (Washington: USGPO, 1978): 134.

<sup>&</sup>lt;sup>15</sup> Robert L. Hoover, C.E. Till, and Stanley Ogilvie, The Antelope of Colorado: a research and management study Technical Bulletin No. 4. (Denver: Department of Game and Fish, June, 1959): 9, 10.

today's deer populations. Despite these conditions, mule deer populations probably averaged about five million head throughout the greater intermountain West. Mule deer were distributed generally across Colorado anywhere "suitable habitat of forest-edge, woodland, or brush exists."<sup>16</sup> Mule deer were most populous in the foothill and mountain areas in the western half of the state during the Protohistoric era, and estimates suggest that their numbers exceeded 10,000 animals.<sup>17</sup>

Although a number of woodland types appear in the northern section of the western slope, the three most common are the riparian, the pinyon-juniper, and the oak brush. The pinyon-juniper woodland develops best between 6,000 - 8,500 feet. Piñon nuts were very popular amongst Native Americans throughout the West. In years that these nuts were available, Ute families in western Colorado worked collectively to maximize their harvest.<sup>18</sup> Typically, these woodland species appear where soils are thin, the plants rooting into crevices in the fractured bedrock. Accompanying understory usually consists of a sparse collection of big sagebrush, rabbitbrush, and mountain mahogany, among others. Grasses such as blue grama and western wheatgrass comprise the prairie layer. Again, deer were the most prevalent species in this zone.

The Transition life zone probably possesses the most diverse biomass in the region. This ecotone bridges the lower elevation sagebrush steppe and the Hudsonian forests. At this altitude, 5500 to 8000 feet, the mountain mahogany/scrub oaks dominate evergreen and deciduous tree species. While not as plentiful as the oak or mahogany,

 <sup>&</sup>lt;sup>16</sup> David M. Armstrong, Distribution of Mammals in Colorado, (Lawrence: University of Kansas, 1972):
 304.

<sup>&</sup>lt;sup>17</sup> Gill, Declining Mule Deer Populations, 3.

<sup>&</sup>lt;sup>18</sup> Audrey D. Benedict, A Sierra Club naturalist's guide to the Southern Rockies: the Rocky Mountain region of southern Wyoming, Colorado, and northern New Mexico (San Francisco: Sierra Club Books, 1991), 257 According to Benedict, Piñon nuts were only available every five years. Anne M. Smith, Ethnography of the Northern Utes, Paper in Anthropology No. 17 (Santa Fe: Museum of New Mexico Press, 1974), 66.

Saskatoon and Utah serviceberries, elk sedge, black and big sages abound. Understory vegetation within this community consists of a variety of grasses, forbs, and shrubs including Indian ricegrass, willowdock, and sticky currant.<sup>19</sup> Oak brush woodlands are found between 7,000 and 8,000 feet, and frequently mix with other vegetation types such as sagebrush and pinyon-juniper woodland. Gambel oak appears more frequently than other species in these woodlands and grows in distinct clumps or continuous thickets. Unlike their large eastern relatives, gambel oak only reaches about ten feet in height and about three inches around.<sup>20</sup> The Transition Life zone is, without a doubt, the riches in its faunal assemblage. Deer, elk-and in winter bighorn sheep-occupy these elevations.

The number of elk in America is, today, an extremely controversial topic.<sup>21</sup> Elk populations are tied to the marginal topography prevalent throughout the West. The environment of the intermountain region contains a significant amount of arid desert and open sage environment. Because wapiti tend to prefer the forest-grasslands ecotone, this species probably stayed close to the mountainous regions where they could access their preferred food sources. The limited space in this zone accounts, to some degree, for their substantial yet limited population, which probably ranged around two million.<sup>22</sup> Before White settlers arrived on the western slope of the Front Range in the 1870s, the region including Middle Park, Routt National Forest and White River National Forest was home

<sup>&</sup>lt;sup>19</sup> Ibid. For a more comprehensive list of edible vegetables in this the Transition lifezone, see appendix A. <sup>20</sup> http://herbarium.biology.colostate.edu/westecosystems.htm

<sup>&</sup>lt;sup>21</sup> Wilderness and Political Ecology Aboriginal Influences and the Original State of Nature ed. by Charles E. Kay and Randy T. Simmons (Salt Lake City: University of Utah Press, 2002), 244-5. According to Kay, the notion that Indians diet consisted primarily of meat is misguided. Anthropologists have argued rather convincingly that hunter-gatherers actually relied on "nonungulate foods, primarily vegetable resources. fish, and small animals" for sustenance. This suggests that "ungulate densities were significantly lower than presently found in National Parks and other areas." Moreover, just because Elk and other ungulates frequently appear in archeological sites does not mean that they were as numerous as they are currently and probably never existed in "unhunted...populations." <sup>22</sup> Wagner, "Livestock Grazing," 134.

to an elk herd that probably numbered about 20,000 head. The relative isolation of the region and the ideal forage created an idyllic range for these large ungulates, enabling them to develop into one of the largest herds in the region.<sup>23</sup>

At an elevation between 8,000 and 10,500 feet, Douglas fir represents the most abundant arboreal community in the Canadian Montane life zone. At the lower end of this zone, ponderosa pine grades into stands of Douglas fir. Douglas fir stands are too dense to allow herbs or shrubs to grow in notable quantities. Groves of quaking aspen grow amongst the Douglas fir as do elk sedge and mountain snowberry. Aspen groves receiving moderate amounts of moisture often produce a rich variety of understory. Although the lodgepole pines normally grow in groves too thick to support substantial undergrowth, some plants find room and nourishment to grow. These include some grasses, Wood's rose, holly, strawberries, and herbaceous plants.<sup>24</sup> Elk and Deer represent the most numerous species of charismatic big wildlife in this life zone.

Between 10,500 feet and timberline, the Subalpine life zone provides a home for the Engelmann spruce and alpine fir community. The understory in this life zone is rich and well adapted to conditions at this elevation. Mosses and lichens carpet the forest floors while sheep fescue, sticky currant, and mountain strawberry grow abundantly. In fire-ravaged areas, lodgepole pine, aspen, and Douglas fir take over.<sup>25</sup> Still, elk and deer predominate in this region.

<sup>&</sup>lt;sup>23</sup> Raymond J. Boyd, "Elk of the White River Plateau, Colorado" Technical Bulletin No. 25 (Denver: Dept of Game and Fish, August, 1970): 3.

<sup>&</sup>lt;sup>24</sup> Burney et al, *Archeological Study of Aborigian Sites*, 49, 51. In the post-fire montane life zones, lodgepole pine and aspen quickly take over. See appendix 1-c for a catalog of edible plant species at this elevation.

<sup>&</sup>lt;sup>25</sup> Ibid, 51. See appendix 1-d for a catalog of edible plant species at this elevation.

the krummholz zone seems almost primordial, a harsh landscape utterly unforgiving of hubris or folly. As the elevation increases to an altitude well above timberline, these twisted and gnarled arboreal dwarves give way to the alpine tundra. The topography of the Alpine life zone consists of rocky outcrops and soils that range in consistency from peat to gravel. Nearly all of the plant life in the alpine zone is perennial. Mosses, lichens, sedges, kobresia, and hair grass carpet the ground.<sup>26</sup> Elk, mule deer, and bighorn sheep share this life zone.

Observations from early explorers suggest that bighorn sheep were quite prevalent in many areas of the intermountain West; however, they probably never reached a density of more than one to two million animals across the entire region.<sup>27</sup> Bighorn sheep formerly appeared in the foothill elevations of the mountainous regions throughout the West. The arrival of European and Euroamerican settlers during the second half of the nineteenth century, however, drove these animals into the higher elevations so that during summer months, they had retreated to the most inaccessible parts of the mountains. Prior to 1859, the bighorn population of the area now known as Rocky Mountain National Park probably averaged around 4,000 head. While this estimate may seem high, it is important to note that it refers to a time before the arrival of domesticated sheep, purveyors of a plethora of diseases that would play havoc with bighorn populations.<sup>28</sup> Moreover, market and sport hunters killed numerous bighorn sheep before the state initiated legislation that outlawed the hunting of this species.

<sup>&</sup>lt;sup>26</sup> Ibid, 52. See appendix for a catalog of edible plant species at this elevation

<sup>&</sup>lt;sup>27</sup> Wagner, "Livestock Grazing," 134.

<sup>&</sup>lt;sup>28</sup> Keith G. Hay, Gilbert N. Hunter, and Larry Robbins, Big Game Management in Colorado, 1949-1958: a ten year survey of applied big game management Technical Bulletin No. 8 (Denver: Department of Game and Fish, December, 1961): 14

Moose, mountain goats, and white tail deer represent three other important species of charismatic big wildlife that lived in Colorado. Their importance to early hunters on the Western Slope, however, is questionable. From a historical perspective, moose have always been solitary roving individuals in the north-central area of the state. Wildlife biologists assert that there is no evidence that moose ever existed as a breeding population and it seems likely that their tendency to move with elk herds or even domestic cattle is the reason they are even in Colorado.<sup>29</sup> Moreover, the Utes had a taboo against hunting moose making their presence in the Western Slope something of a nonissue, at least for the Utes. While prevalent throughout the northern hemisphere in the Americas, the presence of white tail deer in Colorado has been restricted to the southeastern portion of the state near the Arkansas Valley. Although Protohistoric Ute hunters may have hunted the Arkansas Valley occasionally, it is more likely that the Comanches controlled access to the region, and after about 1705 severely limited the Utes' ability to hunt these animals. Prior to the beginning of the twentieth-century, mountain goats were a legal species to hunt and the Colorado General Assembly included them in their statutes concerning hunting regulations. The record is silent, however, about the population of this species.<sup>30</sup>

Spaced irregularly throughout Colorado and the northern section of the Western Slope, regions such as Middle Park represent a unique microenvironment within the larger picture. Moreover, since preponderance of evidence in this study originates from

<sup>&</sup>lt;sup>29</sup> On a research trip to the Front Range in August 2002, while driving east into Rocky Mountain National Park from the Western Slope at six AM, I sighted four moose entering the woods at a distance of approximately fifty yards.

<sup>&</sup>lt;sup>30</sup> Armstrong, Distribution of Mammals in Colorado, 305, 306, 314. Armstrong maintains that mountain goats are not native to Colorado and that wildlife biologists introduced this species on Mount Shavano in the Collegiate Range in the southern end of the Sawatch Mountains in 1949.

Prehistoric, Protohistoric, and historic sources, it serves the reader to understand some of the subtle differences (although admittedly, these are few) that exist from the north part of the Western Slope more generally to Middle Park specifically.

Although named for the park-like environment of the lower elevations, its mountains define Middle Park. Middle Park is a synclinal basin ringed by over a halfdozen mountain ranges in the west central aspect of the southern Rocky Mountain physiographic province. While the Rabbit Ears and Never Summer mountain ranges follow the Continental Divide, providing the northern boundary, the Williams Fork and Vasquez ranges demark the southern border. To the west, the Gore and Park Range mountains separate Middle Park from the Uintah Plateau while the Front Range borders on the east.<sup>31</sup> Even though Middle Park peaks are not among the highest in Colorado, they nonetheless dominate the landscape in this basin and range environment where the elevation undulates between 7,000 and 13,550 feet.<sup>32</sup>

While the mountains tend to dominate the vision, they also influence a less visible, yet dangerously imminent element in the region—the climate. During the Late Pleistocene, between 14000-11000 BP, mountain glaciers receded and effective precipitation dropped. A period of relatively low seasonality occurred simultaneously with the creation of a "mosaic of pine and steppe vegetation."<sup>33</sup> Some researchers have suggested that, between 12,000 and 11,000 BP, three phenomena occurred simultaneously: the arrival of humans into the region, a thousand year drought, and the

<sup>&</sup>lt;sup>31</sup> Wheeler, Charles W. and Gary L. Martin, *Windy Gap: aboriginal adaptation to Middle Park, Grand County,* 

Colorado. (Boulder: Western Cultural Resource Management, Inc., 1984), 20.

<sup>&</sup>lt;sup>32</sup> Robert C. Black, *Island in the Rockies: the pioneer era of Grand Country, Colorado* (Granby, CO: Grand County Printer, 1969), 13.

<sup>&</sup>lt;sup>33</sup> Sally Thompson-Greiser, "Predictive Models of Hunter-Gatherer Subsistence and Settlement Strategies on the Central High Plains" *Plains Anthropologist* Memoir 20, no. 110, part 2 (1985): 18. See appendix 1.

thousand year drought, and the disappearance of the megafauna.<sup>33</sup> Evidence of a shortlived but significant rise in precipitation and lowering of temperatures took place between 11,000 and 10,000 BP.<sup>34</sup>

The mountains bordering Middle Park on all sides create a geographical pocket that produces today what is probably the "most continental of American climates."<sup>35</sup> Inducing precipitation and imposing drought, the mountains create an environment with a broad spectrum of temperatures. Western and southern slopes are warmer than eastern and northern slopes while plateaus are warmer than hills, and hills are warmer than mountains. The temperature can change as much as fifty degrees or more in a twelvehour period or in ten miles of travel. As on all of the West Slope, weather and air masses come mostly from the Pacific, and arrive on the westerly jet stream helping to create a cool, arid climate in the region. Precipitation tends to fall in a prescribed seasonality with the majority during the mid to late summer months of July through September, October being the driest month. <sup>36</sup>

Winter snowfalls and mid-summer showers drain into a proliferation of streams, creeks, and rivers throughout the northern part of the Western Slope. The north and eastern portion of Middle Park drain into the Colorado River, which flows in a southwesterly direction from its headwaters at Grand Lake to its exit in Gore Canyon.

<sup>&</sup>lt;sup>33</sup> William P. Eckerle, "Eolian Geoarchaeology of the Wyoming Basin: Changing Environments and Archaic Subsistence Strategies in the Holocene," in *Changing Perspectives of the Archaic on the Northwest Plains and Rocky Mountains*, edited by Mary Lou Larson and Julie E. Francis (Vermillion: University of South Dakota Press, 1997): 144.

<sup>&</sup>lt;sup>34</sup> Eckerle, "Eolian Geoarchaeology," 144.

<sup>&</sup>lt;sup>35</sup>Black, Island in the Rockies, 14.

<sup>&</sup>lt;sup>36</sup> Wheeler and Martin, *Windy Gap*, 14, 22. Hot Sulphur Springs, one of the oldest Euroamerican settlements in Middle Park, records a scant 12.7 inches of precipitation annually. Two gauging stations located diagonally from each other across Grand Lake on a west-north-west by south south-west axis register annual precipitation with a difference of as much as six inches. Grand Lake 1WNW records 20.2 inches of precipitation annually, while Grand Lake 6 SSW records a yearly average of 14.2 inches of precipitation. It is important to note, that higher wind speeds and a quicker rate of evaporation may play a role in these readings.

The southwestern areas of the park drain into the Fraser, Blue, and Williams Fork rivers and the north, the Willow, Troublesome, and Big Muddy creeks provide drainage. Apart from Tenmile creek, which empties into the Colorado River, most streams on the eastern end of Middle Park drain into Lake Granby and Grand Lake. In the end, however, all of them contribute to the volume of the Colorado River.<sup>37</sup>

Antelope, mule deer, elk, bighorn sheep, and bison all occupied the mountain grasslands environment of Middle Park. Pre-European contact bison populations for the intermountain West probably averaged around five to ten million animals. These numbers would have included regions in "the plains of Montana, Wyoming, and Colorado, although Bison appeared throughout the intermountain valleys and were surprisingly numerous in the mountains themselves."<sup>38</sup> According to Carron A. Meaney. bison "seem to have been relatively abundant throughout northwestern Colorado, the Front Range, and South, Middle, and North Parks," and "were particularly abundant in the northwest from the valley of the Colorado River north to the Wyoming border."<sup>39</sup> Bison appeared on the West Slope because of the ability of the source population to cross the low-altitude passes bridging the southern Wyoming plains, the Laramie Basin, and North Park with Middle Park and the rest of the Western Slope on a seasonal basis. Much like deer, bison probably adapted readily to "novel areas...[of] new forage made available as a consequence of fire." Moreover, bison are known to traverse expanses of boreal forest parkland as broad as 150 miles to reach new forage. Because of the

<sup>&</sup>lt;sup>37</sup> Wheeler and Martin, *Windy Gap*, 20.

<sup>&</sup>lt;sup>38</sup> Wagner, "Livestock Grazing," 134.

<sup>&</sup>lt;sup>39</sup> Carron A. Meaney and Dirk Van Vuren, "Recent Distribution of Bison in Colorado West of the Great Plains" (Denver: Proceedings of the Denver Museum of Natural History, Series 3, No. 4, December 15, 1993): 1, 6.

openness of the terrain, bison "probably roamed the entire region in search of forage, with a seasonal, altitudinal migration." <sup>43</sup>

Fire, disease, and climatic change all contributed to the variations in population density amongst all of these species. Although these population estimates are speculative, they suggest that the prior to sustained contact with European and Euroamerican traders, and the advent of market economics and sport hunting in the nineteenth century. The native inhabitants' highly-efficient subsistence methods enabled herds of charismatic big wildlife species to reproduce at rates capable of sustaining healthy populations.

Bioregional studies like this one, while not exactly rare, do not exist in copious quantities. Yet, there are more than a few that represent the cutting edge of this field. The currency of environmental history has increased as the question of sustainable resource development becomes more urgent. Until recently, the majority of environmental histories focus primarily on the eastern United States and Great Plains. But in recent years, environmental interpretations of western regions have become more important than ever. A few studies exist on the environmental history of western mountainous regions that bare some relevance to this study.

Two studies have helped me shape the narrative arc of this study, William DeBuys' Enchantment and Exploitation: The Life and Hard Times of a New Mexico Mountain Range, and Dan Flores' The Natural West: Environmental History in the Great

<sup>43</sup> Ibid, 4.

*Plains and Rocky Mountains.*<sup>44</sup> In *Enchantment and Exploitation*, DeBuys maintains that "society's relationship to the environment is reciprocal: it both changes the physical world and is changed by it." DeBuys maintains that "competition among the region's diverse cultures for limited resources ... is virtually as intense today as it was two thousand years ago." In learning to adapt to the environment, DeBuys claims,

Societies change it both purposefully and by accident, and in turn adapt to the changes they have wrought—sometimes by changing the environment still further... At every step in the process of adaptation and change there are opportunities for choosing between alternatives, and the choice by a people of one alternative over another depends in large measure upon their outlook and priorities—in a word, upon their culture.<sup>45</sup>

In a similar vein to DeBuys' argument, I suggest that although culture had a profound impact on the precise way people harvested animal resources—what kinds of tools they used and which animals they killed—all people took their share (and some more than their share) from the land. The result being that with a drastic increase in population during the latter decades of the nineteenth-century the environment simply could not keep pace with demand.

In The Natural West: Environmental History in the Great Plains and Rocky

Mountains," Flores discusses some of the most relevant aspects of environmental history.

Tipping his hat to the early leaders in environmental history, Walter Prescott Webb,

James Malin, Flores discusses the idea of "possiblism." Possibilism, as an interpretive

model, Flores suggests, is where

"a given bioregion and its resources offer a range of possibilities, from which a given human culture makes economic and lifeway choices based

<sup>&</sup>lt;sup>44</sup> William Eno DeBuys, Enchantment and Exploitation: the Life and Hard Times of a New Mexico Mountain Range (Albuquerque: University of New Mexico Press, 1985). Dan Flores, The Natural West: Environmental History in the Great Plains and Rocky Mountains (Norman: University of Oklahoma Press, 2001).

<sup>&</sup>lt;sup>45</sup> DeBuys, Enchantment and Exploitation, 8, 9.

upon the culture's technological ability plus its ideological vision...of how the landscape is seen and ought to be shaped and used to meet that society's definition of a good life.<sup>46</sup>

Once we recognize the range of "economic and lifeway" choices that succeeding and overlapping cultures in a specific region have to choose from—narrowed or broadened by their technological capabilities, and guided by their cultural institutions—we may begin to understand their values and ideas about the land and the use of its plant and animal inhabitants. This type of lens is ideal for looking at the *longue durée* history the Western Slope.

In Chapter One, I contend with the history of the Paleo-Archaic occupation of the Continental Divide and the northern aspect of the Western Slope of the Colorado Rocky Mountains. While there is a dearth of secondary literature on the history of this region, there is a wealth of published reports on the archeology in the Front Range. The titles of these reports are too numerous to mention here, but these works originate primarily from two long-time archeologists in the region, James Benedict and Kevin Black. Benedict has been researching and writing on the Paleoindian and Archaic era archeology of the Colorado Front Range for over thirty years. He has developed a reputation for exacting methods and controversial interpretations of the numerous archeological sites in the higher elevations of the Front Range. Particularly useful is Benedict's analysis of the Altithermal Refugium that drew people who were seeking relief from an extended dry period (that lasted nearly 2,000 years) into the high-altitudes of the Front Range.<sup>47</sup> Kevin Black is the assistant state archaeologist of Colorado and has worked extensively on the

<sup>&</sup>lt;sup>46</sup> Flores, The Natural West, 99.

<sup>&</sup>lt;sup>47</sup> James B. Benedict, "Getting Away From It All: A Study of Man, Mountains, and the Two Drought Altithermal" *Southwestern Lore* 45:3 (September 1979): 1-12.

western slope of the Front Range. Black's analysis of a long-term subsistence practice he calls the Mountain Tradition provides an exacting study of pre-Shoshonean subsistence practices in western Colorado.<sup>48</sup> While Benedict's Altithermal Refugium and Black's Mountain Tradition occurred simultaneously, as yet no one has published a scholarly treatment that links these two theories. In this chapter, I discuss each author's interpretation for human occupation and subsistence strategies and suggest that taken together, both studies combine to reveal a broader, more inclusive picture of how the Paleoindian and Archaic hunter-gatherers shared the commons as they existed on the Continental Divide in the several millennia prior to European contact.

In Chapter Two the story of human adaptation to a changing environment takes on increasing relevance for our understanding of the longue durée history of the region as the Western Slope occupants acquired horses in the late seventeenth-century. I continue the discussion of human hunting practices on the Western Slope in the context of the Protohistoric Utes who occupied this territory on the cusp of the arrival of European explorers, and traders into this region. In this chapter, I build on Richard White's *Roots of Dependency: Subsistence, Environment, and Social Change among the Choctaws, Pawnees, and Navajos,* by testing a thesis from another discipline.<sup>49</sup> Whereas White tested a sociology model in *Roots of Dependency*, for this chapter I have adapted Eugene S. Hunn's, "Mobility as a Factor Limiting Resource Use in the Columbia Plateau of North America."<sup>50</sup> Hunn's an anthropological paradigm provides an ideal model to test

<sup>&</sup>lt;sup>48</sup> Kevin D. Black, "Archaic Continuity in the Colorado Rockies: The Mountain Tradition," *Plains Anthropologist* 36 (February 1991)

<sup>&</sup>lt;sup>49</sup> The Roots of Dependency: Subsistence, Environment, and Social Change among the Choctaws, Pawnees, and Navajos. By Richard White. (Lincoln: University of Nebraska Press, 1983).

<sup>&</sup>lt;sup>50</sup> Eugene S. Hunn, "Mobility as a Factor Limiting Resource Use in the Columbia Plateau of North America." In *Resource Managers: North American and Australian Hunter-Gatherers*, ed. Nancy M. Williams and Eugene S. Hunn, 17-44 (Boulder: Westview Press, 1982),

the changes in Ute subsistence practices once they acquired horses. In addition, I use John W. Bennett's, "Human Adaptations to the North American Great Plains and Similar Environments,"<sup>51</sup> to contextualize the Utes' unique hunter-gatherer pastoral society, demonstrating the ways in which they differed from peripheral horse-cultures. Most of the truly informative works pertaining specifically to the Utes stem from ethnographic accounts of authors such as Omer Call Stewart and Julian Steward, two ethnologists who wrote a number of works for the Smithsonian Institution.<sup>52</sup> Although their works are somewhat dated (1930s and 1940s), these authors interviewed tribal members who were alive prior to the reservation era and were thus able to provide some insight into Ute culture as it existed in that late nineteenth century. I rely substantially on the works of both authors to illuminate the finer details of the Northern Utes' subsistence practices during this era.

From a historical perspective, the majority of works written on the Utes consists of a number of conflicting and contradictory accounts of Ute history. Books such as *People of the Shining Mountains*, and *Utes: The Mountain People* are more narrative history than scholarly investigations.<sup>53</sup> While they tell us a little about Ute hunting methods, they reveal almost nothing of the Utes' impact on the non-human environment. There are two books, however, that deal more substantively with Ute subsistence practices. Virginia McConnell Simmons' *The Ute Indians of Utah, Colorado and New* 

<sup>&</sup>lt;sup>51</sup> John W. Bennett, "Human Adaptations to the North American Great Plains and Similar Environments." In *Struggle for the Land: Indigenous Insight and Industrial Empire in the Semiarid World*, ed. Paul A. Olsen, 41-80 (Lincoln: University of Nebraska Press, 1990).

<sup>&</sup>lt;sup>52</sup> Julian H. Steward, *Basin-Plateau Aboriginal Sociopolitical Groups*. Smithsonian Institution Bureau of American Ethnology, Bulletin 120. (Washington: U.S.G.P.O., 1938). Omer C. Stewart, "Culture Element Distributions: XVIII Ute-Southern Paiute" *Anthropological Records*, vol.6, No.4. (Berkeley: University of California Press, 1942).

<sup>&</sup>lt;sup>53</sup> Charles S. Marsh, *People of the Shining Mountains: The Utes of Colorado* (Boulder: Pruett Publishing Company, 1982). Jan Pettit, *Utes, the Mountain People* (Colorado Springs: Century One Press, 1982).

*Mexico* discusses in some depth the impact of the horse on Ute culture. <sup>54</sup> She also deals with Ute trade practices with groups such as the Apaches, Comanches, Navajos, and Spanish. In another recent study, *Neither Wolf Nor Dog: American Indians, Environment, and Agrarian Change*, David Rich Lewis discusses the United States government's failed attempt to make the Utes adapt to an agrarian subsistence economy.<sup>55</sup> While Simmons' discussion of the conflict with white immigrants over limited resources is informative, this study focuses on a very broad range, leaving plenty of room for a more detailed focus on Northern Ute hunting practices the Western Slope. Additionally, Lewis' portrayal of a somewhat detailed picture of Ute subsistence practices provides some relevant information on the effects Ute hunters had on the land, including fire use.

Where fire is concerned, the single most important work that will guide my own investigation is Richmond Clow's "Colorado Game Laws and the Dispossession of the Inherent Hunting Right of the White River and Uncompany Utes."<sup>56</sup> Clow's discussion of Ute hunting practices has led me to investigate the rich field of government documents related to the Northern Utes, which I use to discuss the multiplicity of methods that the Utes used fire to alter the landscape.

Perhaps most importantly, Dan Flores' *Caprock Canyonlands: journeys into the Heart of the Southern Plains* will enable me to compare and contrast Ute hunting practices with a linguistically related people who once shared similar subsistence

<sup>&</sup>lt;sup>54</sup> Virginia McConnell Simmons, *The Ute Indians of Utah, Colorado, and New Mexico* (Niwot: University of Colorado Press, 2000).

<sup>&</sup>lt;sup>55</sup> David Rich Lewis, *Neither Wolf Nor Dog: American Indians, Environment, and Agrarian Change.* (New York: Oxford University Press, 1994).

<sup>&</sup>lt;sup>56</sup> Richmond L. Clow, "Colorado Game Laws and the Dispossession of the Inherent Hunting Right of the White River and Uncompany Utes," in *Trusteeship in change: Toward Tribal Autonomy in Resource Management*, 1-28 (Boulder: University Press of Colorado, 2001).

methods, yet broke away from their old ways once they acquired horses. While both Utes and Comanches adapted horses into their cultures, they chose differently from the many possible choices they had. In this instance, the Comanches drastically altered the hunter-gather subsistence methods they formerly employed when they occupied the region just north of the Continental Divide in present Wyoming. Meanwhile, the Utes continued to employ their highly diversified hunter-gather strategy, modifying it to include an annual bison hunt on the Plains east of their traditional range.

The combination of ethnographic, secondary and primary sources provide the evidence and structural framework to reveal the ways in which the West Slope people adapted to changes in their environment. More to the point, while the horse enabled them to modify their subsistence practices, the Utes also began to trade with the Spanish at Taos New Mexico, a development that encouraged them to look at the plant and animal resources on the Western Slope as applicable to more than just subsistence, but also as a means of modifying their definition of the good life.

If possiblism offers the best lens through which we are able to analyze and understand the history of the West, then how are we to define that history? In his piercing study of hunting in the early twentieth century, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America*, Louis Warren argues that "the story at the heart of America's western past [is one of] the local commons giving way to the extra-local, the community surrendering authority in resource allocation to state or national agents."<sup>57</sup> Warren maintains that for those who supported the democratization of resources, federal oversight and control was the only way to ensure that the public, that is

<sup>&</sup>lt;sup>57</sup> Louis Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997).

to say, the citizenry of the United States, had fair access to those resources. In this light, "the wildlife of the local commons became a kind of 'public goods."<sup>58</sup> In my third and final chapter, I illustrate the story of how "local" control of the "commons," on the Western Slope surrendered to the "extra-local." More to the point, this chapter will reveal the struggle between the locals—Indians , settlers, commercial hide and meat hunters, and ranchers—and "extra-local" authorities—conservationists, sport hunters, and state and federal bureaucrats—as the "locals" lost control over their ability to use the wildlife resources in the local commons on the northwestern slope of the Colorado Front Range.

According to Warren, supporters of the nationalization of the "local commons" did not always agree on all of the details. In fact, in the face of condemnation from "locals" who resented some of the side effects of conservation, such as restricted hunting seasons, bag limits, and moratoriums against hunting certain species, conservationists fell back on the need for "extra-local" administration of "local" wildlife "as the necessary intervention of the state in management of public goods." Instead of privatizing wildlife, the public held the animals in common; wildlife officials were "merely agents." The inference of wildlife as "another form of state property" resulted in conflicts over access to the wildlife between "local rights and public claims."<sup>59</sup>

Warren explains that these conflicts were not isolated incidences, but occurred across the country around the turn of the century. Beginning with the story of Ben Senowin and his Bannock hunting companions in 1896, white settlers, conservationists, and sport hunters, often with the aid of "extra-local" authorities that included, state

<sup>&</sup>lt;sup>58</sup> Ibid, 11.

<sup>&</sup>lt;sup>59</sup> Ibid, 12-13.

wildlife officials, and federal bureaucrats—who sometimes collaborated with wealthy land and stock owners and even settlers—began the long and arduous process of wresting the "local commons" from the "local" populace and asserting "extra-local authority" over the welfare and administration of them.<sup>60</sup>

Warren asserts that "western struggles" to redefine the commons as a public resource base were essentially 'federalized'---in that they often involved conflicts between local hunters and national authorities. Indeed, Warren's reading of two western regions (three if we count the Senowin hunting party incident in Wyoming) New Mexico. and Montana, support his assertions. My own study of the history of hunting on the northern aspect of Colorado's Western Slope is different than Warren's in that: 1) Warren's study take place in the early decades of the twentieth century. My own begins in the early nineteenth-century, but also runs concurrently to the Senowin hunting party incident that occurred in 1896. 2) While Warren's focuses on three geographical dissimilar environments, mine is a bioregional history of a specific, highly defined place. Moreover, whereas Warren's approach is to dive in at the beginning of the action, I have developed a longue durée perspective of northwest Colorado tracing changes in the land and in the cultures that occupied this region over the long view. In most other respect, however, it is quite similar to Warren's in that I examine the conflict between "local" and "extra-local" groups over their rights to access the "commons." Much like Warren's study, this one includes an ethnically, economically, and socially diverse group of actors. The struggle involved a cast of "locals" including Indians, subsistence hunters, commercial hide and meat hunters, settlers, and ranchers, and a cast of "extra-locals" such as state wildlife officials, conservationists, and federal bureaucrats, who often

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collaborated in their conservation efforts. In most respects, then, this study is a reaffirmation of Warren's analysis, and in any event, the results were quite similar in that "extra-local" authorities successfully removed control of the commons from the hands of the local populace.

Enough analogies exist between Warren's study and my own to warrant a brief discussion of some important terms. In this study, I borrow from Warren's use of the terms "local" and "extra-local" in reference to the how people identified themselves in relation to "the place the call home." In this regard, the "terms local and extra-local [emphasis in original] are at opposite ends of a scale of relation to place and community, along which a person can move back and forth many times during a lifetime."<sup>61</sup> I also draw from Warren's interpretation of what he calls the "commons." Warren explains that, "local commons...denote local systems for apportioning resources that are not privately owned." In essence, these systems consist of an informal definition of "common property" such as wildlife. Limitations to accessing these resources may not be visible to outsiders, particularly those prescribed by cultural institutions and "social constraints." In contrast to extra-local control, locals may impose few laws, and may even tolerate non-locals occasional access of the commons. Warren adds that "in extreme cases the difference between local commons and an open-access regime can become blurry."62

<sup>&</sup>lt;sup>61</sup> Ibid, 16.

<sup>&</sup>lt;sup>62</sup> Ibid, 16.

## Appendix 1: Edible Plants native to Middle Park region of the Western Slope<sup>63</sup>

#### Appendix 1-a

Upper Sonoran life zone: 3300-5500 ft.

Common Name	Туре	
Showy Milkweed	Forb	
Thistle	Forb	
Nuttall Monolepis	Forb	
Viviparous Bistort	Forb	
Leafy Pondweed	Forb	
Fennel Leaf	Forb	
Silver Cinquefoil	Forb	
Black Common	Shrub/Tree	
Wax Currant	Shrub	
Woods Rose	Shrub	
Tule Bulrush	Grasslike	
Cutleaf Nightshade	Forb	
Nuttall Violet	Forb	
Western Wintergreen	Shrub	

## Appendix 1-b

Transition life zone: 5500-8000 ft.

Common Name	Туре	
Saskatoon Serviceberry	Shrub/tree	
Bearberry	Shrub	
Gunnison Mariposa	Forb	
Blite Goosefoot	Forb	
Thistle	Forb	
Pinnate Tansy Mustard	Forb	
Fireweed	Forb	
Western Wintergreen	Forb	
Common Cowparsnip	Forb	
Marestail	Forb	
Creeping Mahonia	Shrub	
Plains Prickley Pear	Forb	
Roughleaf Ricegrass	Grasslike	
Indian Ricegrass	Grasslike	
Floatingleaf	Forb	
Baby Pondweed	Forb	
Whitestem Gooseberry	Shrub	
Sticky Currant	Shrub	
American Red Raspberry	Shrub	
Western Thimbleberry	Shrub	
Willow Dock	Forb	
Tule Bulrush	Grasslike	
Stonecrop	Forb	
Feather Solomon Plume	Forb	
Starry Solomon Plume	Forb	

<sup>&</sup>lt;sup>63</sup> These appendices are based on the study conducted by Burney *et al*, in, Michael S. Burney, Carol Coe, Collette, Colle, and Thomas J. Lennon, *An archaeological Study of Aboriginal Sites Within the Windy Gap Dam, Reservoir and Pipeline Project Near Granby, Grand County, Colorado*, (Boulder: Western Cultural Resource Management, Inc., 1979), appendix C.

# Appendix 1-c

Common Name	Туре		
Saskatoon Serviceberry	Shrub/tree		
Bearberry	Shrub		
Gunnison Mariposa	Forb		
Blite Goosefoot	Forb		
Thistle	Forb		
Pinnate Tansy Mustard	Forb		
Fireweed	Forb		
Red Willowweed	Forb		
Lambstongue Fawnlilly	Forb		
Western Wintergreen	Forb		
Common Cowparsnip	Forb		
Marestail	Forb		
Bitterroot Lewisia	Forb		
Creeping Mahonia	Forb		
Rocky Mountain Cowlily	Forb		
Roughleaf Ricegrass	Grasslike		
Indian Ricegrass	Grasslike		
Sweet Cicely	Forb		
Alpine Sorrel	Forb		
American Bistort	Forb		
Viviparous Bistort	Forb		
Floatingleaf	Forb		
Baby Pondweed	Forb		
Colorado Currant	Shrub		
Whitestem Gooseberry	Shrub		
Prickley Currant	Shrub		
Gooseberry Currant	Shrub		
Arctic Bramble	Forb		
American Red Raspberry	Shrub		
Western Thimbleberry	Shrub		
Stonecrop	Forb		
Rose Crown	Forb		
Selaginella	Forb		
Cutleaf Nightshade	Forb		
Alps Pennycress	Forb		
Dwarf Blueberry	Shrub		
Myrtle Whortleberry	Shrub		
Grouse Whortleberry	Shrub		
Edible Valerian	Forb		
American Speedwell	Forb		
Mooseberry Viburnum	Shrub		
Hook Violet	Forb		

Canadian Montane life zone: 8000-10,000 ft.

Appendix 1-d Subalpine life zone: 10,500 ft to timberline.

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Common Name	Туре				
Saskatoon Serviceberry	Shrub/tree				
Gunnison Mariposa	Forb				
Elkslip Marshmarigold	Forb				
Blite Goosefoot	Forb				
Thistle	Forb				
Thistle	Forb				
Pinnate Tansy Mustard	Forb				
Fireweed	Forb				
Red Willowweed	Forb				
Field Horsetail	Forb				
Lambstongue Fawnlilly	Forb				
Western Wintergreen	Forb				
Common Cowparsnip	Forb				
Rocky Mountain Cowlily	Forb				
Alpine Sorrel	Forb				
American Bistort	Forb				
Viviparous Bistort	Forb				
Gooseberry Currant	Shrub				
Stonecrop	Forb				
Rose Crown	Forb				
Selaginella	Forb				
Alps Pennycress	Forb				
Dwarf Blueberry	Shrub				
Myrtle Whortleberry	Shrub				
Grouse Whortleberry	Shrub				
Edible Valerian	Forb				
Hook Violet	Forb				

Appendix 1-e Alpine life zone, (approximately 12,000-13,000 ft.):

me, (approximately 12,000-15,000 ft.).					
Туре					
Forb					
Shrub					
Forb					

#### Chapter 1

### Paleoindian and Archaic Era Hunter-Gatherers on the western slope of the Colorado Front Range

The western slope of the Colorado Front Range has been the home to continuous human occupation for nearly 10,000 years. Prior to sustained contact with Euroamerican settlers, the Paleoindian, Archaic, and Protohistoric occupants of the Front Range developed a functional equilibrium with the environment. Archeological and ethnological evidence suggests that their optimal foraging strategy combined with their high mobility and low human population to make it possible for them to extract resources without seriously overexploiting them. This is not to suggest that the environmentincluding the human, animal, and plant communities—existed in stasis. Far from it. For instance, Native Americans used fire in a variety of ways to alter the environment, and later, when the Euroamericans entered the region they introduced new methods of resource use that drastically altered the environment, particularly where wildlife populations were concerned. The meetings between Indians and Euroamericans that took place in the West between the middle of the seventeenth-century and the end of the nineteenth-century were a development of the cross-cultural and ecological exchanges that altered the interactions between nature, people, and the land.

In nineteenth-century America, demands of resource use surpassed extant cultural and economic ethnic constraints. Hence, the elimination of the large populations of ungulates on the western slope of the Colorado Front Range during the latter decades of the nineteenth-century was less the result of greedy market-hunters or rapacious Indians than the result of an expanding and increasing human population leaning heavily on the region's limited resources. Moreover, the introduction of a global market economy brought new technological, social, and economic elements into the equation. With the expanding population, new ideas about the commons—who owned them, and how to harvest them—resulted in racial and class conflicts that put the blame for the extirpation of charismatic big wildlife on Indians, settlers, and commercial hunters. The process these changes entailed had a dramatic impact on the evolving economy, culture, and ecology of the western slope, where the complexity of the environment matched the diversity of human subsistence methods. By examining the hunting practices of Indians and whites on the western slope of the Front Range from the Continental Divide to the White River Plateau, before the beginning of the twentieth century we may understand the myriad physical and ideological changes that reshaped the northwestern slope of the Front Range prior to the twentieth-century.

Colorado has enough archeological sites to keep a researcher or virtually any number of researchers busy for a lifetime.<sup>1</sup> In the Front Range of the Rocky Mountains, particularly along the Continental Divide and in Middle Park, there is a proliferation of game-drives, processing centers, and campsites that hold an unrealized wealth of information about the human occupants of this region, including their subsistence methods, technology, and even something about their social divisions and cultural institutions.<sup>2</sup>

A discussion of all of the sites and subjects related to human subsistence patterns in this region is well beyond the scope of this chapter. In addition to a discussion of

<sup>&</sup>lt;sup>1</sup> Benedict, James B. Interview by Mark S. Anderson, 27 April 2002. Notes in author's possession. <sup>2</sup> In using the term "culture," I am referring to the material culture such as stone tools and pottery shards that archeologists use to develop their theories of human subsistence models for ancient civilizations. I am *not* referring to culture in the anthropological sense of the word.

Paleoindian and Archaic subsistence methods, one controversial topic merits a detailed examination. In 1979, Jim Benedict published an article titled, "Getting Away From It All: A Study of Man, Mountains, and the Two Drought Altithermal."<sup>3</sup> In this article, Benedict posited that during and extended period of intense drought—widely known as the Altithermal—that lasted from *ca*. 7000 – 5500 BP, the Front Range and Middle Park, served as a refuge for those cultures unable to develop a sustainable subsistence in the lower elevations around the southern Rockies. Benedict's theory generated some controversy and in 1991, Kevin Black published an article titled "Archaic Continuity in the Colorado Rockies: The Mountain Tradition," in which he challenges Benedict's "Refugia" model, as a strict interpretation of the cultural materials found in the high-altitude sits along the Continental Divide. Rather, Black posits that the Western Slope served as the base for a long-lived cultural adaptation he calls the Mountain Tradition.<sup>4</sup>

The evidence related to long term human adaptation to the mountain environment, combined with the proliferation of cultural materials concomitant to the shorter interval of the Altithermal, suggests that the this region—including both Middle Park and the higher elevations along the continental divide—functioned as a locus for human occupation in western North America for nearly 10,000 years. More to the point, these areas served double duty during the Altithermal drought, simultaneously serving as the home of an ancient, well adapted mountain subsistence culture, and providing

<sup>&</sup>lt;sup>3</sup> James B. Benedict, "Getting Away From It All: A Study of Man, Mountains, and the Two Drought Altithermal" *Southwestern Lore* 45:3 (September 1979). Benedict laid the groundwork for his Altithermal Refugium model in James B. Benedict, and Byron Olsen, "The Mount Albion Complex: A study of Prehistoric Man and the Altithermal." Research Report No. 1, Center for Mountain Archeology, Ward, CO., 1978.

<sup>&</sup>lt;sup>4</sup> Kevin D. Black, "Archaic Continuity in the Colorado Rockies: The Mountain Tradition," *Plains Anthropologist* 36 (February 1991).

(temporary) refuge for those people unable to derive their subsistence in the arid plains, plateaus, and prairies in the surrounding region.

### *The Early and Middle Holocene* 10000-3300 BP *Late Paleo-Indian-Early and Middle Archaic* 85000-3300 BP<sup>5</sup>

The Early and Middle Holocene witnessed the advent of a new climatic regime that would have a drastic impact on the topography and human subsistence patterns across the continent. Although some researchers suggest that the moist conditions prevalent during the Late Pleistocene lasted until about 9000 B.P., the evidence suggest that a drying trend followed a short-lived recovery in effective precipitation around 10000 B.P.<sup>6</sup> Around 8000 B.P., powerful desiccating winds out of the west accompanied glacial melt when it resumed, culminating in the period known as the Altithermal, which lasted from approximately 7000-5500 B.P.<sup>7</sup> Beginning with the Altithermal, the Middle Holocene proved to be the driest period of the last 12,000 years. As dry conditions lasted until *ca* 3300 B.P., the prolonged drought conditions produced a decrease in hillslope vegetation, in turn causing slopewash, debris flow, and wind-borne dust storms.<sup>8</sup>

Archeologists have disagreed over whether or not the Altithermal drought resulted in massive human movement from one region to another, population decline, adjustments in survival methods and settlement patterns, or if the Altithermal had any impact at all.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> I have listed the geological and cultural ages of each era under discussion with corresponding chronologies. The titles in bold print are the geological eras; those listed immediately below are cultural ages. Based on the Guthrie model in Mark Stiger's *Hunter-Gatherer Archaeology of the Colorado High Country*. (Boulder: University Press of Colorado, 2001), 26-29. See appendix 2b-e for food resource availability and subsistence and settlement patterns for this era.

<sup>&</sup>lt;sup>6</sup> William P. Eckerle, "Eolian Geoarchaeology of the Wyoming Basin: Changing Environments and Archaic Subsistence Strategies in the Holocene," in *Changing Perspectives of the Archaic on the Northwest Plains and Rocky Mountains* edited by Mary Lou Larson and Julie E. Francis, 139-167. (Vermillion: University of South Dakota Press, 1997), 145.

<sup>&</sup>lt;sup>7</sup> Eckerle, "Eolian Geoarchaeology," 145. Benedict, "Getting Away," 1.

<sup>&</sup>lt;sup>8</sup> Eckerle, "Eolian Archaeology," 146.

<sup>&</sup>lt;sup>9</sup> Benedict, "Getting Away," 3.

Recent studies in western North America indicate that regional differences in moisture levels during the Altithermal played a significant role in the variability of human population levels.<sup>10</sup>

The Altithermal was not a "Long Drought" as the name implies but really consisted of "two short severe droughts" occurring back to back with a short (500 years) respite between them. The first drought occurred between 7000-6500 BP, while the second lasted between 6000-5500 BP. Of the two, the latter drought impacted the widest region, hindering occupation of the "Colorado and Columbia Plateaus, Great Basin, Great Plains, and [the] Prairie Peninsula."<sup>11</sup> During the Altithermal human occupation in the Rocky Mountains increased dramatically while human presence around the Rockies declined precipitously. These changes in population density corresponded to adjustments in "*effective moisture*" (emphasis in original). In effect, humans moved from drought stricken areas into the mountains in order to access the water still available in the high altitudes in the spring and at lower altitudes throughout the rest of the year.<sup>12</sup>

One of the most important Altithermal sanctuaries was in the Indian Peaks region of the Rocky Mountains, located in north-central Colorado. At a distance, the Indian Peaks appear to be an enormous range of jagged peaks and stark geological formations. Closer examination, however, reveals that the region consists of a variety of ecological environments including "high summits, broad tundra uplands, cirque glaciers, and deep glaciated valleys."<sup>13</sup> The prevailing temperatures, which are significantly colder than in the plains to the east, combine with powerful winds out of the west to accumulate and

<sup>12</sup> Ibid, 4.

<sup>&</sup>lt;sup>10</sup> Ibid, 1.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> Ibid.

then move snow to sheltered snow banks, which served as water reserves during dry years. If conditions in the Indian Peaks were similar during the Altithermal, it is likely that this region provided a prime sanctuary for humans unable to conduct their hunting and gathering in the drought stricken regions farther east and west.<sup>14</sup>

Research has revealed the location of "at least three cultural complexes [in operation] at timberline in the Indian Peaks between 6000-5500." Of these three sites, Albion Boardinghouse, Fourth of July Valley, and Mount Albion, the two former complexes produced projectile points linked to later designs found on the Great Plains, while the points found at Mount Albion have not been positively associated with any local forerunners. Benedict maintains that these points are comparable to points found in the northeastern United States and Alaska.<sup>15</sup>

The Mount Albion Complex is home to the "oldest known stone game-drive structures in the Front Range."<sup>16</sup> Evidence, which includes scrapers, backed knives, irregular flake knives and scrapers, ovoid bifaces, micro-tools and bifacial sandstone milling slabs, suggests that the Mount Albion people did not hunt bison, but other ungulates such as mountain sheep, elk and deer. Some archeologists posit that the "Mount Albion corner-notched projectile point style has no known predecessors in the western United States."<sup>17</sup> Research conducted in the Northern Archaic, Shield Archaic, and the northeastern United States reveals that a comparable projectile point style

<sup>&</sup>lt;sup>14</sup> Ibid, 5. See appendix 2f-i for a model on food resource availability and subsistence and settlement patterns.

<sup>&</sup>lt;sup>15</sup> Ibid, 1. As mentioned previously, Benedict has recalibrated the <sup>14</sup>Carbon dating for the Fourth of July Valley site placing humans here at a much earlier time than previously thought. According to Benedict, this development does not create any problems for his Mountain Refugia model. (Benedict interview, 4/27/02).

<sup>&</sup>lt;sup>16</sup> Ibid, 8.

<sup>&</sup>lt;sup>17</sup> Ibid, 9. As will be discussed further on in this paper, Kevin Black posits that the cultural material from Mount Albion seems to bear some similarities to the Desert Archaic tradition.

appeared in each of these regions suddenly without any evidence of a past history, with remarkably similar weather conditions to the Altithermal. James Benedict interprets this development as evidence that a new group of people immigrated to the Front Range, bringing their technology with them, rather than an "in-situ cultural development or the diffusion of new concepts of projectile point design from distant sources to a resident population."<sup>18</sup> In this case, it appears possible that those groups unable to implement a sustainable subsistence pattern in regions hardest hit by the Altithermal, moved to the Front Range in an effort to recreate themselves and implement their own vision of life and subsistence, one that included at least two unique patterns of transhumance, and a new style of projectile point design in the high-altitude southern Rockies.<sup>19</sup>

Over the last few decades, scholars have debated the merits of the Mountain Refugia model that Benedict published in late 1979. Benedict's article, like any good scholarship, provided a testable model, and it has generated an extended dialogue over the nature of transhumance, diversification in foraging strategies, and technological adaptations in the Southern Rocky Mountains. Perhaps one of the most interesting articles to come out of this debate is Kevin Black's "Archaic Continuity in the Colorado Rockies: The Mountain Tradition." In this article, Black posits that Benedict's interpretation of the cultural materials found at various sites along the Colorado Divide is subject to revision and that while it seems certain that some groups may have emigrated

<sup>&</sup>lt;sup>18</sup> Ibid, 9.

<sup>&</sup>lt;sup>19</sup> James B. Benedict, "Effects of Changing Climate on Game-animal and Human Use of Colorado High Country (U.S.A.) since 1000 BC." *Arctic, Antarctic, and Alpine Research*, 31.1 (1999), 3. Benedict describes two transhumance patterns for the Refugia population: one is a simple up-down seasonal migration pattern from the base of the eastern slope to the Continental Divide, the other involved a counter-clockwise "grand circuit" wherein the population began their seasonal round by moving north from the hogbacks on the eastern slope to the Cache la Poudre valley, into North Park, south to Middle Park and up into the high altitudes where the used the game drives to harvest meat before descending again to winter in the hogbacks.

to the mountains during the Altithermal, there is sufficient evidence to suggest that "prehistoric adaptations in the Southern Rockies were sufficiently distinctive and longlived to define a synthetic construct termed the Mountain Tradition."<sup>20</sup>

According to Black, the Mountain Tradition exists as a discrete ecological adaptation to higher elevations over a long period and covering a wide geographical range. In chronological terms, the Mountain Tradition survived as a distinct entity for at least 5000 years—ca 9500 B.P. to 4500 B.P.—and continuing in certain parts of the Southern Rockies until ca 700 B.P.<sup>21</sup> In this light, the Mountain Tradition pre-dates the arrival of the refugium people by 1,500 - 2,000 years. Black includes a number of archaeological developments, also called complexes, in his model including Mount Albion. According to Black's interpretation, hunter-gatherer groups from the Great Basin migrated to the Middle Park region bringing their highly diversified subsistence patterns with them. At this new location, these former desert dwellers began to implement their vision of life in the mountain elevations and were successful enough to have created what Black describes as the Mountain Tradition. Black states that while other complexes, such as the Fourth of July Valley, and Albion Boardinghouse, among others, may fit the Mountain Tradition model, "their possible relationships with lowlandbased cultures cast[s] some doubt on the issue."<sup>22</sup> Thus, it is probable that the older Mount Albion complex belongs to the Mountain Tradition, while both Mountain

<sup>&</sup>lt;sup>20</sup> Black, "Mountain Tradition," 2. Black's Mountain Tradition includes an extremely large geographic region, stretching from the Northern Rockies in southern Montana through western Wyoming and Colorado, eastern Utah, and northeast Arizona and northwest New Mexico, this paper will focus on Black's interpretation of evidence form the Yarmony site just south of the Middle Park region on the western slope, and his reinterpretation of Benedict's findings at sights in the Indian Peaks Wilderness Area.

<sup>&</sup>lt;sup>21</sup> Black, "Mountain Tradition," 4.

<sup>&</sup>lt;sup>22</sup> Ibid.

Tradition and Refugium people used the Fourth of July Valley and Albion Boardinghouse complexes.

Black has identified six characteristics unique to the Mountain Tradition: wattle and daub pithouse structures associated with upland settings and settlement patterns, stone tools derived from split cobbles, microtools, rock imagery, and projectile points of different styles bearing strong similarities to technology from the Great Basin.<sup>23</sup>

Until recently, researchers never suspected that the Archaic people inhabiting the western slope had included semi-permanent structures in their subsistence patterns. The wattle and daub pithouses discovered at the Yarmony site provide an important glimpse into the highly diversified subsistence patterns of the Mountain Tradition. Located in Middle Park, close to the Colorado River at a little over 7100 feet in elevation. Yarmony sits amidst a juniper and sagebrush environment, but is close to the conifer ecotone that ascends to heights well over 11,000 feet. In comparison to the eastern parts of Middle Park, the winters at Yarmony, while occasionally quite cold, are moderately warmer and drier. Evidence from two rooms at the site has been dated at 6320 and 6290 BP. The structure shows signs of interior hearths, and slab-lined storage cists. Artifacts include the full spectrum of lithic tools, bone and antler objects, and evidence of processed fauna, flora, and avian and riverine food sources. Labor-intensive construction methods, evidence of long-term storage facilities, winter-ripe plant remains, implications for dietary stress in the remains of processed bones and antlers, idyllic wintering ground for elk and deer, and finally evidence of recycled lithic materials regardless of nearby sources, all add up to a proliferation of evidence that supports the interpretation of

Yarmony as a perennial upland habitat for people of the Mountain Tradition.<sup>24</sup> This interpretation establishes human occupation in Middle Park well within the Early Archaic era.

Researchers have had some difficulty verifying that early Mountain Tradition people established seasonal settlement patterns in the various foothill, montane, subalpine, and alpine regions. The Mountain Tradition's perennial high-altitude settlement system, however, separates it from those groups that wintered at lower elevations, ascending into the higher altitudes on a seasonal basis, only to retreat to the valleys with the return of colder weather. While Black includes some lower elevation sites such as the Magic Mountain site in the Indian Peaks within the Mountain Tradition. the majority of sites that best characterize this highly diversified subsistence culture are at high altitudes and include the Hungry Whistler site on the crest of the Front Range and the Yarmony site in Middle Park. According to Black, the primary differences between other culture groups and the Mountain Tradition lay "in the cool and cold season portions of the annual round (late fall, winter and early spring), when snows have closed access to the subalpine and alpines zones."<sup>25</sup> During these times, the inhabitants probably retreated to lower elevations within the mountains as opposed to those groups that left the mountains for the foothill regions and points beyond.<sup>26</sup> The difference between these two models is essentially in the elevation; the lower elevations within the mountain zone were at an elevation probably no more than 1,000-1,500 feet above the foothill regions.

<sup>&</sup>lt;sup>24</sup> Black, "Mountain Tradition," 12-14.
<sup>25</sup> Black, "Mountain Tradition," 6.

<sup>&</sup>lt;sup>26</sup> Ibid.

This settlement pattern appears to be the primary element separating the Mountain Tradition from the short term Mountain Refugia model. There seems, however, to be no reason why these two modes of subsistence could not have operated simultaneously using nearly identical subsistence methods. In fact, while Benedict and Black differ in their interpretations of the cultural material from sites such as Mount Albion, neither argues against the Refugium or Mountain peoples' use of nearly identical subsistence methods. If this is the case, the Rocky Mountains, particularly in the Indian Peaks Wilderness area and Middle Park, did double duty during the Altithermal, concurrently supporting an older Mountain Tradition, and short-term Mountain Refugia groups, while serving as a meeting ground for two alien cultures with highly similar projectile point technologies and subsistence methods. Many models are still possible for the evidence available. There is no evidence of fortification, and a model in which Altithermal invaders exterminated the indigenous Mountain peoples seems unlikely, but in the absence of conclusive evidence, we cannot rule out the possibility that the refugium population borrowed projectile point technology from the indigenous Mountain Peoples.

While the rock imagery, split cobble technology, microtools, and wattle and daub architecture are important aspects of the Mountain Tradition, projectile points and perennial upland settlement systems provide the key elements of this culture. According to Black's model, projectile points of the Mountain Tradition usually come in large unstemmed, stemmed, serrated, and side-notched varieties. Most of the points are manufactured from materials found in regions associated with sites from the Mountain Tradition. According to Black, the Hungry Whistler site produced a proliferation of Mount Albion side notched points, one of which archeologists dated at "ca. 5800-5500 B.P.<sup>27</sup> Despite the fact that Benedict claims these distinctive points have no known local antecedents, Black argues that evidence recently excavated at Runberg, Fremont Pass, and Piedra Pass, and dated to c.a. 8800-8200 B.P. provides enough material to support the inclusion of the Mount Albion Complex within the Mountain Tradition.<sup>28</sup>

The solution to the problem of whether Black or Benedict's interpretation is more accurate seems to lay in the diagnoses of projectile point styles. At this point, there does not seem to be enough clear-cut evidence to support the existence of one tradition at the exclusion of the other. This may be because it is simply not possible to exclude either model. Based on the available research, I believe that both the Mountain Tradition and Mount Albion Complex inherited long-lived projectile-point technologies that possessed characteristics enabling them to survive the rigors of migration, diffusion, and environmental variations for several thousand years. Thus, the higher-elevations along the crest of the Front Range provided the locus for an overlap of cultural technologies that defies interpretations based solely on diffusion or immigration and is inclusive of both. In short, the these groups shared access to the commons.

In fact, a multiple occupation model seems best to fit the archeological evidence. Moreover, the absence of defensive fortifications or structures in any of the sites on the Front Range seems to suggest that the occupants may have had a schedule for using the high-altitudes game-drive systems successively. It is impossible to know whether the hunting groups made arrangements spontaneously, had a standing arrangement—one based on rank or some form of hierarchy—or if the various groups that wanted to use the

<sup>&</sup>lt;sup>27</sup> Ibid, 11.

<sup>&</sup>lt;sup>28</sup> Ibid, 18.

game drives worked cooperatively.<sup>29</sup> It is possible, however, to understand how these groups drew their living from the land.

Over the years, researchers such as Jim Benedict, Byron Olsen, and E. Steve Cassells, amongst others, have recorded over 50 game-drive sites along the Continental Divide. The ages of these sites extends from approximately 9300 B.P., to as recent as 1000 B.P. The evidence of projectile points from the early sites seems to belong to the older Plano technology, while the projectile points from some of the newer sites, tend to belong to a number of later appearing Archaic cultures. In the majority of drive systems hunters drove the quarry "with the prevailing wind or across the wind at an oblique angle" which in most cases was from the west.<sup>30</sup> Evidence shows that hunters drove their prey downhill as often as up, thus wind direction seems to have been more important than slope direction, as demonstrated at the Devil's Thumb valley site where high-altitude hunting groups took advantage of a "rotor effect' that causes a reversal in wind direction on the floors of Eastern Slope cirques."<sup>31</sup> While the prevailing wind at most of the highaltitude sites on the Front Range blows from a westerly direction, the winds are subject to "daily rhythms," that probably required the hunters to modify their actions in concert with the animals' behavior and the changing wind conditions.<sup>32</sup> In most cases, it is likely that the hunters preferred to hunt in the morning when the wind patterns were more predictable.<sup>33</sup> Such a site demonstrates the hunters' empirical knowledge of their quarry

<sup>&</sup>lt;sup>29</sup> James B. Benedict, interview by Mark Anderson, 8 May 2002. Notes in Author's possession.

<sup>&</sup>lt;sup>30</sup> James B. Benedict, "Footprints in the Snow: High-Altitude Cultural Ecology of the Colorado Front Range, U.S.A." *Arctic and Alpine Research* 24:1, (1992), 4.

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> Benedict, interview 5/8/02.

<sup>&</sup>lt;sup>33</sup> Ibid.

and the environment and suggests that their vision for optimal foraging was not limited by their imagination.

Most of the game drives in the Indian Peaks and Rocky Mountain National Park, are U-shaped or V-shaped, and consist of cairn lines and winding, low-standing stone fences up to six tenths of a mile in length. Benedict suggests that "perishable materials such as blocks of turf or tufts of grass, or sticks to which fluttering pieces of hide, birds' wings, or animal scapulae were attached could have been used to make the drive lines appear more formidable."<sup>34</sup> These obstacles would have worked in conjunction with naturally occurring barriers including cliffs, lakes, or tangled krummholz allowing hunters "to funnel animals from a *collection area*, where they could predictably be found grazing, to a more confined kill area (emphasis in original)," where hunters hidden in cairns, krummholz thickets, or other natural cover would dispatch the animals from ambush.<sup>35</sup> The absolute dearth of cliff jumps, similar to those systems used for bison hunting on the High Plains, suggests that hunters designed the high-altitude systems to keep the quarry from the sanctuary that the steep cliffs promised to the more agile ungulates such as mountain sheep. There seems to be reason to believe that hunting nets may have been used in the high-altitude sites, particularly where mountain sheep were the primary prey species.<sup>36</sup>

Although there is a proliferation of evidence regarding the nature and function of game drives in areas of the Rocky Mountains above timberline, "[e]very high-altitude

<sup>&</sup>lt;sup>34</sup> Benedict, "Footprints in the Snow," 5.

<sup>&</sup>lt;sup>35</sup> Ibid, 4. Krummholz trees that have managed to develop some resistance to the harsh elements of the higher elevations and as a result, are short and twisted. These trees often grow in small islands near the alpine-tundra ecotone, and often served as hides or places of ambush hunters used in the high-altitude game-drives.

<sup>&</sup>lt;sup>36</sup> Ibid, 5. Evidence from sites in the Sawatch Range to the south exists in the form of "sticks or posts," dispersed at distances of 4.5-6.5 feet, an ideal design for using nets.

line of stones- and cairnlike structures should not be interpreted as evidence of mountain sheep hunting and trapping.<sup>37</sup> Nevertheless, drive lines, a large number of which exist at high-elevation sites along the Front Range in Colorado, may be the remnants of "sheep fences.<sup>38</sup> In most cases, older structures employing wooden implements are, by and large, gone forever, the wood crumbling beneath the relentless onslaught of time and decay.<sup>39</sup>

While most of the cairns in these game-drives served as hunting blinds, archeologist George Frison suggests that it is possible some of them may have served as structures from which shaman or spiritual leaders invoked "hunting magic"<sup>40</sup> in an effort to call the quarry to the drive.<sup>41</sup> At various sheep traps in Wyoming, researchers have found structures that bear no apparent relation to the traps' effectiveness; apparent relationship, however, may be just the point. These seemingly irregular structures usually appear at timberline sites as semi-upright collections of flat stones. Ethnographic evidence of "shaman activity in communal bison hunting and in communal antelope hunting by Shoshoneans" seems to provide enough evidence for us to "generalize the same kind of activity to communal mountain sheep hunting."<sup>42</sup>

The paucity of faunal remains at the high-altitude game drives makes it difficult to determine the type of animals hunted at these sites. The use of "off-site butchering sites" works in conjunction with other factors such as "long exposure prior to burial, gnawing by small mammals, and low soil pH" to drastically reduce the potential for

<sup>&</sup>lt;sup>37</sup> George C. Frison, Prehistoric Hunters of the High Plains. (San Diego: Academic Press, inc., 1991), 248.

<sup>&</sup>lt;sup>38</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Ibid, 252.

<sup>&</sup>lt;sup>40</sup> Benedict, interview 4/27/02.

<sup>&</sup>lt;sup>41</sup> Frison, *Prehistoric Hunters*, 254.

<sup>&</sup>lt;sup>42</sup> Frison, Prehistoric Hunters, 253-4.

finding bone remnants, or other ephemeral evidence such as nets and clubs.<sup>43</sup> In those instances where archeologists have found faunal remains, generally in the "youngest drive systems," it is just as likely that hunters brought the evidence to the site in the form of "tools" or pre-hunt "marrow snacks."<sup>44</sup>

One of the most important game-drives in the region is the Fourth of July Valley site in the Indian Peaks Wilderness Area. Benedict originally analyzed cultural material from this site and interpreted it as belonging to the "McKean lanceolate and Duncan point styles," giving this site a <sup>14</sup>Carbon date of "5960  $\pm$  85 BP."<sup>45</sup> Recently however Benedict has prepared a report for the Forest Service that revises the earlier <sup>14</sup>Carbon date, making the site "substantially older than previously determined," extending the human occupation of the Colorado Front Range back nearly 9,000 years B.P., to the Plano culture, a people normally associated with bison hunting.<sup>46</sup>

Butchering stations, and campsites are two more important sites that can tell us something of the mountain peoples' subsistence patterns during the Archaic era, *ca.* 8000 -.2000 BP One of the key elements of butchering sites is the proliferation of tools, most commonly represented in the form of "projectile points that had been used to kill the animals [and] served secondarily as knives and scrapers, probably still hafted in wooden or bone foreshafts.<sup>47</sup>" Benedict suggests that "[c]ycles of breakage and repair, edge damage and resharpening, result[ing] in marked size reduction, exaggerated asymmetry, and irregular blade-edge configuration" combine to characterize the nature of butchering

<sup>46</sup> Benedict, interview 5/8/02. In this interview, Benedict stated that he had recently tested some evidence gleaned from a concentration of microflakes found in relation to charcoal, (probably from a forest fire). The new date for human occupation of this site is approximately 8900 B.P.

<sup>&</sup>lt;sup>43</sup> Benedict, "Footprints in the Snow," 6.

<sup>&</sup>lt;sup>44</sup> Ibid, 7.

<sup>&</sup>lt;sup>45</sup> E. Steve Cassells, *The Archaeology of Colorado*, (Boulder: Johnson Books, rev.ed., 1997), 87.

<sup>&</sup>lt;sup>47</sup> Benedict, "Footprints in the Snow," 7.

tools found at sites such as the Hungry Whistler site on Mount Albion. Although manos and metates have been identified at this site, the dearth of vegetal resources in the area suggests that these tools were likely used "for hide preparation, breaking bones to extract marrow, or pounding and pulverizing dried meat."<sup>48</sup> Hence we have hunters, not gatherers.

One of the most important aspects of a campsite is its location. In the highaltitudes, many campsites are in the timberline ecotone. The Mountain Tradition people preferred this environment in great part because it provided more shelter and fuel than the higher elevations. In addition, the timberline ecotone afforded better visibility than lower elevation sites, and lay midway between the forest and alpine-tundra, providing access to the resources of both environments and helping minimize the problem of insects. Strategy also played an important role in the selection of campsites. Access to gamedrive systems, fresh water, and mountain travel routes combined with accessibility to the site (i.e. when the snow had melted and the ground was not saturated with melt water), all of which contributed to the determination of which sites were best suited for seasonal dwellings.<sup>49</sup>

The wide variety of tools and implements found at Front Range campsites help determine what kinds of activities took place at these sites. The proliferation of cultural materials such as knives, scrapers, gravers, perforators, spokeshaves, "shallow-basin hearths and stone-filled roasting pits...domestic artifacts such as grinding tools, hideworking tools, woodworking tools, and pottery" combine to suggest that tool

<sup>&</sup>lt;sup>48</sup> Ibid.

<sup>&</sup>lt;sup>49</sup> Benedict, "Footprints in the Snow," 8.

replacement and repair, and meat and hide processing, were typical procedures at campsites.<sup>50</sup>

Late Holocene 3300-Present Late Archaic-Prehistoric eras 2950-1450 BP

Between 3300-1800 B.P., effective precipitation began to rise and there appears to be some indication that circue glaciers attained their widest post-Altithermal boundaries during a period termed the Middle Neoglacial.<sup>51</sup> By this time the topography and animal morphology in the region was probably quite similar to today's conditions. There is some indication, however, that Altithermal-like conditions returned to the western slope from about 1800-500 B.P.<sup>52</sup>

Because of the migratory habits of big animals and the seasonal and altitudinal variation in herbaceous sources, people who lived during the Holocene were never able to settle into a stationary life. During the Holocene, it was important for people to maximize their efficiency in the hunting of migratory charismatic big wildlife and harvesting of plant resources in an effort to adapt to the changes in climate and environment. Subsistence patterns of this nature are called optimal foraging. Limited technology seems to have reinforced the dependency on the natural cycles of both animal and vegetal sources.

To maximize their efficiency, the Mountain Tradition people developed a unique pattern of "seasonal transhumance."<sup>53</sup> Their seasonal round originated in Middle Park.

<sup>&</sup>lt;sup>50</sup> Ibid.

 <sup>&</sup>lt;sup>51</sup> Eckerle, "Eolian Geoarchaeology," 147.
 <sup>52</sup> Eckerle, "Eolian Geoarchaeology," 148-9.

<sup>&</sup>lt;sup>53</sup> Benedict, "Effects of Changing Climate," 3. The refugium people also developed their own transhumance patterns. See appendix 1j-k for food resource availability and subsistence and settlement patterns. It should be noted that "[d]uring climatic intervals such as the Altithermal, when culturally diverse groups shared the high mountains, the need to minimize competition and avoid conflict may have encouraged the simultaneous operation of all three transhumance systems."

where they wintered in the pinyon-juniper eco-systems at locations such as Yarmony. Starting at lower elevations, they moved through Middle Park, harvesting various vegetable resources as they ripened, gradually climbing towards the Continental Divide where they utilized the plethora of game drive systems. Here at the crest of the mountains, they hunted deer, mountain sheep, elk, and (possibly) mountain bison, accumulating massive stores of meat that they would dry for winter use. <sup>54</sup> As autumn descended, they moved back down into Middle Park, again harvesting ripened vegetable resources that they added to their winter stores.

The main allure of the alpine regions was the animals, not vegetal sources. Fewer than 10% of the 253 plant species that grow at alpine levels in the Indian Peaks wilderness region served as food sources for the regions' inhabitants. Among those limited numbers of consumable species, bistort, pygmy bitterroot, and avalanche lily supply enough calories and appear in numbers adequate to qualify for essential food sources.<sup>55</sup> Research has shown that the level of a hunter-gatherer society's reliance on plant foods is closely associated with the "biologically effective temperature of their environment, as expressed by its 'ET value,' an index of overall warmth and of seasonal temperature extremes."<sup>56</sup> As indicated by the various migrations patterns discussed earlier, early Middle Park occupants traversed a variety of environments on their yearly rounds, each with divergent ET values. In areas like Middle Park, plant resources may have provided as much as "30 to 50%" of the occupants caloric intake.<sup>57</sup>

<sup>&</sup>lt;sup>54</sup> In August 2002, Ed Knapp, a local contractor and amateur archeologist was hiking along the Continental Divide trail at 13,000 feet when he discovered the horned skull of a bison. Daily Camera *Boulder* 22 August 2002.

<sup>&</sup>lt;sup>55</sup> Benedict, "Effects of Changing Climate," 6,7.

<sup>&</sup>lt;sup>56</sup> Ibid, 7

<sup>&</sup>lt;sup>57</sup> Ibid. By comparison, vegetation on the eastern slope in the hogback region of the Front Range may have comprised as much as "50 to 60%", of the caloric needs. For the Subalpine forest and alpine tundra,

While there is little doubt that small wildlife such as blue grouse, white-tailed ptarmigan and yellow-bellied marmot provided some of the animal based food sources, the profusion, character and regularity in the reemployment of high-altitude game drives implies that the high-elevation environment at the crest of the Continental Divide drew hunters into the region with the promise of substantial yields of meat. The attraction to this region, however, depended in great part upon the availability of large animals, a situation in which the weather played no small part, particularly where snowfall limited animal populations and the their access to the higher elevations.<sup>58</sup>

The little remaining evidence from the 19<sup>th</sup> century suggests that deer, elk, and bighorn sheep removed to both Middle Park and the lower foothills of the Front Range. Because these animals did not move to a single wintering region, there was little likelihood of a severe winter storm eliminating the whole assemblage of ungulates that congregated in the high elevations during summer.<sup>59</sup> The store of protein was probably steady.

The recent climatic history is extremely varied. From 1,000 years BC until the beginning of the new millennium, temperatures seem to have been cold enough and snowy enough to dissuade significant or prolonged occupation of regions above timberline. Lichenometric<sup>60</sup> evidence suggests that temperatures rose during the end of

dietary reliance on vegetal resources was probably as low as "20 to 30%" and "10 to 20%" respectively. There is no evidence that occupants gathered and stored vegetal resources in areas where ET values were as low as those in the last two regions.

<sup>&</sup>lt;sup>58</sup> Ibid.

<sup>&</sup>lt;sup>59</sup> Ibid, 7-8. Current animal-tracking methods including aerial surveys and radio-monitoring tell us about the animals' habits today but nothing about their behavior in times before the arrival of Anglo-Europeans into the region.

<sup>&</sup>lt;sup>60</sup> Ibid. Lichenometry is the study of lichen growth. This method can reveal some important information about weather patterns.

the Late Archaic era, *ca.* 3000 - 2000 BP, and stayed that way well into the Late Prehistoric Period, *ca.* 2000 - 1000 BP.<sup>61</sup>

Between "AD 990 and 1230," humans used Middle Park with ever increasing frequency, and the evidence becomes increasingly richer. While today's climate White River Plateau is unsuitable for dry farming, a result of too much cold or aridity, or a combination of both, the growing season that developed between AD 990 and 1230 was longer than today and had an established summer rain cycle that enabled inhabitants to cultivate squash, corn, and beans in these locations.<sup>62</sup>

The advent of the Horticulture era in North American began in central and upper Meso-America sometime between 5,000-4,000 BC. Over the next four millennia, horticulture technology slowly emerged from central Mexico into the lower plains taking divergent paths, finally entering Colorado around AD O. Having overcome the difficulties of integrating into stubborn cultures, particularly the hunter-gatherer societies where there was no tolerance for miscalculation, the technology of horticulture slowly ascended, usually following drainages on the Western Slope to their sources at the Yampa, and White Rivers.

The arrival of horticulture on the Western Slope branched into two distinct groups, the Anasazi, and the Fremont. In northwest Colorado, the Fremont people developed as two groups, the Uinta and San Rafael. Although the Fremont culture did not exist on the scale of the Anasazi, those who know insist that it "is properly regarded as a distinct, centrifugal system of adaptation—the eastern margin of which can be seen

<sup>&</sup>lt;sup>61</sup> Ibid.

<sup>&</sup>lt;sup>62</sup> Ibid. Benedict maintains that horticulturalists were able to grow these vegetal sources, (corn, beans, and squash) on parts of the Plains and Colorado Plateau during this era.

in Colorado.<sup>63</sup> Fremont rock art, highly evolved basketry, and extraordinary architectural variety combine to help characterize the technological accomplishments of this group. The Fremont relied on corn, beans, and squash for their subsistence, which they usually stored in "specialized masonry units" that bore a remarkable similarity to granaries.<sup>64</sup>

The arrival of a new drought cycle in the thirteenth or fourteenth-century augured the decline of the Fremont culture, resulting in the failure of their horticultural foundation. Archeologists are not sure what happened to the Fremont, some speculate that they returned to the hunter-gatherer subsistence from which they had emerged. Others posit that they may have simply have faded away.<sup>65</sup>

The Little Ice Age began around AD 1230 and immediately altered snow accretion patterns in various areas of North America. While the change in weather did not affect accumulations of springtime snow at the crest of the Front Range, cool summers and additional winter snowfall resulted in the expansion of snowbanks and cirque glaciers. By contrast, dry conditions and diminution of the summer monsoon resulted in the elimination of conditions that promoted more extensive agriculture on the Western Slope in the preceding 240 years.<sup>66</sup>

Throughout the West, the return of drought conditions resulted in the great Numic migration into Utah, Colorado, and Wyoming. And while most of the agrarian groups mentioned above faded from existence, the hunter-gatherer Utes and Comanches found the arid conditions of the western slope much to their liking. These two groups adapted

<sup>64</sup> Ibid, 32.

<sup>&</sup>lt;sup>63</sup> Bruce E. Rippeteau, "A Colorado Book of the Dead" Southwestern Lore, 55:4, (1980), 32-39.

<sup>&</sup>lt;sup>65</sup> Rippeteau, "Colorado Book of the Dead," 32-39.

<sup>66</sup> Ibid.

to the exigencies of the arid environment and were present in the region when a brief recovery occurred between AD 1415 and AD 1645 allowing them to access the higher elevations, and enabling them to develop a highly diversified and mobile subsistence strategy that would sustain them during the coming centuries. The eventual introduction of European diseases and the rise of the horse-culture ensured alterations in migration patterns and the utter abandonment of "traditional game-drive hunting techniques," even at high altitudes.<sup>67</sup> Thus, the arrival of the horse and the adoption of the teepee as a mobile dwelling provided the Protohistoric Utes with more choices about how to use the plant and animal resources at hand.

In sum, although early arrivals appear to have settled into the western slope bringing their complex subsistence patterns with them from the Great Basin and perhaps other western locals, these groups, which Black refers to as the Mountain Tradition, were not the only ones to inhabit the high country. The dry conditions that began at the start of the Holocene gradually worsened, eventually resulting in the Altithermal, making it extremely difficult to maintain a living in the lower elevations around the Front Range. The availability of water in the high-altitude regions rendered the southern Rockies virtually drought resistant and created an ideal habitat for ungulate populations and recurrent vegetable growth. The ample wildlife reserves, vegetal resources and perennial water supply found in the upper elevations provided a haven for those people in the lower elevations unable to cope with the drought. As a result, it appears that the Front Range served as the locus for an overlap of at least two distinct yet similar cultural technologies and transhumance subsistence patterns over the last 10,000 years. Despite the apparent differences in projectile point technology, both Mountain Tradition peoples and

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Refugium peoples implemented subsistence methods that were so similar as to render them virtually identical. In this light, although the Mountain Tradition preceded the entrance of the Refugium population into the high-altitudes of the Continental Divide, they employed virtually identical subsistence methods, used the land and resources concurrently for the better part of 2,000 years, until the Altithermal warming trend subsided and the newer arrivals were able to disperse back onto the Plains and other regions from whence they came. It was not until the latter decades of the nineteenth century, that the Utes—the last remnant of a long line of indigenous people to make their home along the Front Range—fell before the relentless onslaught of a people that brought with them a whole new set of exigencies.

Appendix 2-a

Time [BP]	Climatic	Flora	Fauna	Climatic
	Episodes	FIOLA	raulia	Characteristics
1.000	Thrandes			
1,000 2,000		Short-grass Plains (similar to modern distribution) 1	Essentially modern fauna. Diversity and abundance similar to early historic times	Essentially modern cooling trend and trend toward moister climate
3,000		Reestablishment of short-grass vegetation	Continued diminution of mammalian species	$\uparrow$
4,000	[Medithermal]			
5,000	^	Woody shrub vegetation replacing short-grass throughout much of the area	Generally less abundant fauna, encroachment by desert fauna	Spring dominant storms Maximal warm temperatures and aridity. Significantly reduced carrying capacity
6,000		$\uparrow$	Diminution of	
7,000	[Altithermal]			Warming trend Continued Drying Trend
8,000	^	$\uparrow$	$\wedge$	General drying trend ↑ Increasing seasonality
9,000		Recession of woodlands-leaving	Less diversity of large mammalian species due to	↑ Winter dominant storms Cooler and moister than
10,000	[Anathermal]	short-grass plains	extinction	present
11,000	$\uparrow$	$\bigwedge$	Large mammals more varied than today.	$\bigwedge$
12,000		Short-grass Plains and pine savanna surrounded	Fauna generally diverse and	Relatively low seasonality Warming trend-
13,000	Late-Glacial	by forests	abundant	Glacial melt

Summary chart of environmental data for the Western United States.<sup>68</sup>

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<sup>&</sup>lt;sup>68</sup> Benedict, interview 5/8/02. Cassells, Archaeology of Colorado, 118.

## Appendix 2-b

<u>rippenam 2 e</u>	······			
Seasons	Late-Spring	Late	Late Fall	Late Winter
	Early Autumn	Summer	Early Winter	Early Spring
Habitat	-	Early Fall		
<sup>fauna</sup> Moist Woodland and	<i>Bison, Elk, Deer,</i> Moose, Grouse, Porcupine, Various Rodents			
Parkland Environments flora	Greens Shoots Roots/Bulbs	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots

Food resource availability data Late Paleoindian era hunter-gatherers, c.a. 10550-8550 BP.

## Appendix 2-c

Settlement Patterns					
Economic	General	Estimated	Local	Associated	Activities
Seasons	Settlement	Number of	Determinants		
	Туре	Occupants	Immediate General	Base Camp	Catchment Area
Late Spring Early Summer	Dispersed	25±	Water View Fuel Shelter Vegetal food	Daily Maintenance Tasks	Gathering greens and shoots Hunting smalt animals Snaring grouse and waterfowl Gathering eggs & young animals Hunting big-wildlife
Late Summer- Early Fall	Dispersed	25±	Water View Fuel Shelter Small animals Vegetal food	Daily Maintenance Tasks	Gathering greens, nuts fruits, roots, tubers, & seeds Hunting small-wildlife Hunting big-wildlife
Late Fall Early Winter	Congregated	100-200±	Water View Fuel Shelter Large Ungulates Vegetal food	Daily Maintenance Tasks Preparing & caching storable food resources Making and repairing winter gear & clothing	Gathering berries, nuts, and seeds Hunting small-aninals Hunting large-ungulates Including cooperative hunts Trapping fur-bearers
Late Winter Early Spring	Congregated	25-100±	Water View Fuel Shelter Large Animals	Daily Maintenance Tasks Preparing storable Food resources	Hunting large herbivores Trapping fur-bearers

Subsistence and settlement patterns of Late Paleoindian era hunter-gatherers, c.a. 10550-8550 BP

#### Appendix 2-d

Seasons	Late-Spring	Late Summer	Late Fall	Late Winter
Habitat	Early Autumn	Early Fall	Early Winter	Early Spring
		_		
fauna Montane	<i>Bison, Elk, Deer,</i> Moose, Bighorn sheep, Grouse, Ptarmigan, Porcupine, Various Rodents			
Woodlands	Greens Shoots Roots/Bulbs	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots

Food resource availability data for the Early Archaic era hunter-gatherers, c.a. 8550-7780 BP. Studies involving hunting on the Continental Drive suggest that Bighorn Sheep were a primary quarry as well. The inclusion of bighorn sheep and ptarmigan is in reference to areas within the range of these animals along the Continental Divide and Western Slope.<sup>69</sup>

#### Appendix 2-e

Settlement Patterns					
Economic	General	Estimated	Local	Associated	Activities
Seasons	Settlement	Number	Determinants		
	Туре	of	Immediate General	Base Camp	Catchment
		Occupants			Area
Late Spring Early Summer	Dispersed	25±	Water View Fuel Shelter Small animals Vegetal Resources	Daily Maintenance Tasks	Gathering greens and shoots Hunting small herbivores Snaring grouse and waterfowl Gathering eggs & young animals Hunting large animals
Late Summer- Early Fall	Dispersed	25±	Water View Fuel Shelter Small animals Vegetal Resources	Daily Maintenance Tasks	Gathering fruits, roots, tubers, berries, seeds, & nuts Hunting small-animals Hunting large animals
Late Fall Early Winter	Congregated	75±	Water View Fuel Shelter Big Animals Vegetal Resources	Daily Maintenance Tasks Preparing & caching storable food resources Making and repairing winter gear & clothing	Gathering berries, nuts, and seeds Hunting small-animals Hunting large animals [Including cooperative hunts] Trapping fur-bearers
Late Winter Early Spring	Dispersed	25±	Water View Fuel Shelter Large Animals Vegetal Resources	Daily Maintenance Tasks Preparing storable Food resources	Collecting firewood Hunting large herbivores Hunting large Ungulates Trapping fur-bearers

Subsistence and settlement patterns of Early Archaic era hunter-gatherers, c.a. 8550-7780 BP

<sup>&</sup>lt;sup>69</sup> James B. Benedict, "Effects of Changing Climate on Game-animal and Human Use of Colorado High Country (U.S.A.) since 1000 BC." *Arctic, Antarctic, and Alpine Research*, 31:1 (1999): 7.

## Appendix 2-f

Seasons	Late-Spring	Late Summer	Late Fall	Late Winter
Habitat	Early Autumn	Early Fall	Early Winter	Early Spring
fauna	<i>Bison, Elk, Deer,</i> Moose, Bighorn sheep, Grouse, Ptarmigan, Porcupine, Various Rodents			
Montane				
Woodlands				
flora	Greens Shoots Roots/Bulbs	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots

Food resource availability for the Middle-Archaic Era hunter-gatherers, c.a. 7780-4730 BP

Appendix 2-g

Settlement Patterns					
Economic	General	Estimated	Local	Associated	Activities
Seasons	Settlement	Number of	Determinants		
	Туре	Occupants	Immediate	Base Camp	Catchment Area
			General		
Late Spring Early Summer	Dispersed	25±	Water View Fuel Shelter Big and Small animals Vegetal Foods	Daily Maintenance Tasks	Gathering berries and shoots Hunting small animals Snaring grouse Gathering eggs & young Hunting large and small animals
Late Summer- Early Fall	Dispersed	25±	Water View Fuel Shelter Large animals Vegetal Foods	Daily Maintenance Tasks	Gathering fruits, nuts, roots, tubers, seeds, & berries Hunting small-animals Hunting large animals
Late Fall Early Winter	Congregated	75±	Water View Fuel Shelter Large Animals Vegetal Foods	Daily Maintenance Tasks Preparing & caching storable food resources Making and repairing winter gear & clothing	Gathering berries, nuts, and seeds Hunting small-animals Hunting big-animals [Including cooperative hunts] Trapping fur-bearers
Late Winter Early Spring	Dispersed	25±	Water View Fuel Shelter Large Animals Small Animals	Daily Maintenance Tasks Preparing storable Food resources	Collecting firewood Hunting large herbivores Hunting Large animals Trapping fur-bearers

Subsistence and settlement patterns of Middle-Archaic hunter-gatherers, c.a. 7780-4730 BP.

## Appendix 2-h

Seasons	Late-Spring	Late Summer	Late Fall	Late Winter
Habitat	Early Autumn	Early Fall	Early Winter	Early Spring
fauna	<i>Elk, Deer,</i> [Bighorn sheep], Grouse, [Ptarmigan], Porcupine, Various Rodents			
Montane Woodlands flora	Greens Shoots Roots/Bulbs	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots/Bulbs Fruits/Berries Grass Seeds Nuts	Roots

Food resource availability data for the Late-Archaic Prehistoric Era, c.a. 4730-1150 BP. Studies involving hunting on the Continental Drive suggest that bighorn sheep were a primary quarry as well. The inclusion of bighorn sheep and ptarmigan is in reference to areas within the range of these animals in the Front Range.<sup>70</sup>

Appendix 2-i

Settlement Patterns								
Economic	General	Estimated	Local	Associated	Activities			
Seasons	Settlement	Number of	Determinants					
	Туре	Occupants	Immediate General	Base Camp	Catchment Area			
Late Spring Early Summer	Dispersed	25±	Water View Fuel Shelter Big and small animals Vegetal Foods	Daily Maintenance Tasks	Gathering greens, and shoots Hunting big and mall animals Snaring grouse & waterfowl Gathering eggs& young animals Hunting big-animals			
Late Summer- Early Fall	Dispersed	25±	Water View Fuel Shelter Big animals Vegetal Foods	Daily Maintenance Tasks	Gathering greens, nuts, fruits, roots, tubers, & seeds Hunting small-animals Hunting big-animals			
Late Fall Early Winter	Congregated	100-200±	Water View Fuel Shelter Big animals Vegetal Foods	Daily Maintenance Tasks Preparing & caching storable food resources Making and repairing winter gear & clothing	Gathering berries, nuts, and seeds Hunting small-animals Hunting big-animals Including cooperative hunts Trapping fur-bearers			
Late Winter Early Spring	Dispersed	25-100±	Water View Fuel Shelter Small animals	Daily Maintenance Tasks Preparing storable Food resources	Hunting small animals Trapping fur-bearers			

Subsistence and settlement patterns of Late Archaic-historic hunter-gatherers, c.a. 4750-1150 BP.

<sup>&</sup>lt;sup>70</sup> Benedict, "Effects of Changing Climate," 7.

#### Chapter 2

#### Protohistoric Ute Hunters of the northwestern slope of the Colorado Front Range

The White River Utes were a Shoshonean speaking people who arrived in western Colorado around 800 years ago. These hunter-gatherer people practiced what is perhaps the oldest known native subsistence method in what are now called arid/semiarid variable lands. This subsistence method is also probably the one of the oldest human adaptations to environments of virtually any type. Because hunter-gatherers relied predominantly upon resources harvested directly from the environment, analogous groups like the Utes and Comanches most likely evolved simultaneously, developing similar economic patterns, yet diverging in their cosmology and social organization.<sup>1</sup>

Like most hunter-gatherer societies, the Utes required large tracts of land to survive. While these groups did not develop permanent residences, or possess any idea of land ownership other than a mobile sort of usufruct land tenure, they developed a keen sense of place, becoming intimate with the natural boundaries of their home range. So many trails and watering holes criss-crossed most territories, that only rarely did a foraging individual or band become lost. In all events, the Utes' social organization, as with most hunter-gatherers, was decentralized and usually resulted in the proliferation of related kin across vast areas. Although the distances that separated these related groups were probably quite substantial for a pedestrian people, the Utes' acquisition of the horse

<sup>&</sup>lt;sup>1</sup> John W. Bennett, "Human Adaptations to the North American Great Plains and Similar Environments," in Paul A. Olsen, ed. Struggle for the Land: Indigenous Insight and Industrial Empire in the Semiarid World, (Lincoln: University of Nebraska Press, 1990), 56. These differences were evident in the division of labor along gender line, the employment of a seasonal round, and the use of a diverse and utilitarian lithic tool kit.

in the mid seventeenth century led to some substantial changes in Ute society, including denser population clusters, increased mobility, and expanded territorial range.<sup>2</sup>

Many Utes who owned horses abandoned their territories, often joining up with other bands, which gave their former boundaries an ephemeral quality. Moreover, the Utes, now on horseback began trading with distant cultures such as the Navajos and Spanish traders at Taos. The Utes' integration into the global market economy created new choices for them about how to use the resources in their home range and elsewhere. Although the Utes continued to use their traditional hunter-gatherer subsistence strategy—and incorporated the horse into their established foraging patterns, creating their own unique brand of pastoralism—they also began to use the animals that they hunted to increase their material wealth and introduce new technologies into their culture including steal knives and guns.<sup>3</sup>

The White River Utes adopted equestrian technology around the middle of the seventeenth century—somewhat earlier than the major plains tribes—and possessed many of the characteristics associated with pastoralism. Unlike the plains pastoralists, however, the Utes never adopted the rigid military or fraternal societies or the complex social relationships so characteristic of plains groups. Neither did they develop the "technical dependence" on bison products that typifies plains pastoralists. The Utes did, however, possess many of the other attributes associated with pastoralism, including a high degree of mobility, portable lodges, furniture, and clothing and their own version of the annual renewal ritual that they called the Bear Dance.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Omer C. Stewart, "Culture Element Distributions: XVIII Ute-Southern Paiute" Anthropological Records, vol.6, No.4. (Berkeley: University of California Press, 1942), 236.

<sup>&</sup>lt;sup>4</sup> Bennett, "Human Adaptations," 58.

Mounted on horses, Ute bands strengthened their already efficient subsistence strategy, increasing their range and their ability to gather resources that were once unavailable because of the limits that distance and weather had placed on accessing certain resources. Generally, where groups of the same population differ in their level of mobility, those people possessing the ability to move over greater territory will not only possess a lower concentration in numbers, but will also harvest local resources with less intensity than groups with lower mobility. This is a result of "not being able to be in more than one place at a time."<sup>5</sup> Historical evidence, which confirms the presence of healthy wildlife populations on the Western Slope well into the nineteenth century, supports the notion that the Utes' high degree of mobility and low human population combined with their highly diversified subsistence strategy, enabling them to expand the limitations of geography and seasonality, efficiently utilizing resources without overexploiting them.

Yet even with the horse, variable geography and seasonality imposed some limits on the band's ability to harvest resources.<sup>6</sup> Little is known about the diversity of vegetable and charismatic big wildlife resources in the region and what role, if any, resource variation played in the Utes' ability to reach a state of equilibrium with the environment. Did the horse mean that the Utes shared their enlarged territory with other groups? While increased mobility and low population suggest that the horse borne Utes did not overtax the resources in their home range, was this because they employed an

<sup>&</sup>lt;sup>5</sup> Eugene S. Hunn, "Mobility as a Factor Limiting Resource Use in the Columbia Plateau of North America," in Nancy M. Williams and Eugene S. Hunn, eds. Resource Managers: North American and Australian Hunter-Gatherers, (Boulder: Westview Press, 1982), 37.

<sup>&</sup>lt;sup>6</sup> Although the hunter-gatherer technology and subsistence methods were usually sufficient to sustain large populations, there were risks involved. Drastic changes in the weather and eventually the "undeveloped agricultural or ranching modes of production used by the earliest European-derived settlers in ASAV lands" were capable of precipitating "starvation or severe privation." Bennett, "Human Adaptations," 56.

active conservation ethic—such as placing taboos on primary prey species? Or did their mobility, range, and low population provide a resource management strategy that made such an ethic irrelevant? For that matter, did the population increase once they were mounted? We are asking here what, from the seventeenth century on, their adaptation to this vast environment looked like.

As discussed in the previous chapter, archeologists believe humans have occupied the Front Range for at least 10,000 years. Recent studies confirm this assertion.<sup>7</sup> In the ebb and flow of climatic change, many subsistence technologies developed and disappeared in northwestern Colorado. The long-lived Archaic-era Mountain Tradition gave way to the more mobile forager strategy. Later the agrarian-based Fremont Tradition fell prey to a climatic change that caused cooler temperatures and a shortened growing season.

On the heels of the Fremont people, there came a new and more adaptable culture into the region: the Numic-speaking Shoshonean people. The Utes were part of this Shoshonean efflorescence and while other Shoshone groups, such as the Comanche, eventually moved to the Southern Plains, the Utes, much like the Mountain Tradition people, adopted a highly diversified subsistence technology that allowed them to occupy the western slope of the Front Range until the latter years of the nineteenth century.<sup>8</sup>

The Utes thought of themselves as descendents of "mythological ancestors" who were responsible for the creation of humans and their moral education.<sup>9</sup> They were one of the smaller tribes in the American West; nearly three-quarters of all other western

<sup>&</sup>lt;sup>7</sup> Martin F Curry, "Mystery at Barger Gulch" Alpenglow Vol. 18, No. 1 (Winter Park, CO: 2003 Edition): 18-25, B-11.

<sup>&</sup>lt;sup>8</sup> Wheeler and Martin, Windy Gap, 38, 48.

<sup>&</sup>lt;sup>9</sup> Margaret M. Arnold, "Ute Trade, 1750-1821: At the Core of Economic, Political, and Cultural Change" (M.A. Thesis, University of Wyoming, 1995): 8.

tribes had a higher population than the Utes.<sup>10</sup> The Utes often limited their community numbers to somewhere between four and eight-dozen people; the typical Ute band consisted of a kinship group: husband and wife, their offspring, and relatives from both sides of the family. These economic, social, and political institutions probably go back three million years in human evolution.<sup>11</sup>

Archaic-era subsistence methods practiced in northwest Colorado centered on a ""collector' strategy," wherein groups constructed permanent dwellings from which they would deploy on forays to collect resources that they would bring back to process, preserve, and use.<sup>12</sup> The Yarmony Pithouse discussed in the previous chapter is an example of just such a setting. The White River Utes, along with several other bands, occupied roughly the same commons as the Archaic-era Yarmony people in northwest Colorado for at least five centuries before the Reservation era, during which time they underwent significant cultural transitions. Archeologist Alan Reed has proposed a cultural sequence consisting of three periods. The Chipeta phase, began with the Utes' arrival in the study region around AD 1100, and continued through the Canalla and Antero Protohistoric eras, which were marked by the Utes' transition from pedestrian to equestrian mobility, prior to the beginning of the Reservation era, which began in the 1880s.<sup>13</sup>

Over the years, archeologists, anthropologists, and historians have debated the time that the Numic speaking people arrived in eastern Utah, Idaho, Colorado, and Wyoming. The Numic expansion seems to have been carried out aggressively. And

<sup>&</sup>lt;sup>10</sup> Ibid, 10.

<sup>&</sup>lt;sup>11</sup> Ibid.

 <sup>&</sup>lt;sup>12</sup> Alan Reed, "Ute Cultural Chronology," in Archaeology of the Eastern Ute: A Symposium (CCPA Occasional Papers No. 1) ed. Paul R. Nickens (Colorado Council of Professional Archaeologists, 1988): 88.
 <sup>13</sup> Ibid.

many scholars attribute the rapidity of the Numic advance to a "broad-based subsistence" strategy and sociopolitical pattern that emphasized strong military organization." Whether this interpretation is true or not, academics agree that the Numic-speaking peoples originated in the southwestern part of the Great Basin and moved northeast prior to the arrival of Euroamericans. Scholars are pushing the arrival of the Numic-speakers closer to the contact era, yet most believe that the Numic-speaking peoples were in place by at least AD 1500.<sup>14</sup>

Perhaps the most questionable of these proposed phases is the Chipeta phase, primarily because of the lack of cultural material related to Ute technology. Although the distribution of "chronometric dates" supports the presence of a significant population for this era, there is a dearth of cultural material related to a distinct Ute identity for this time. Nevertheless, archeologists believe that societal structures and cultural materials consisting primarily of small, closely related kin who lived in temporary non-portable brush shelters—probably resembled those of other Numic speaking groups in the region.15

The Canalla phase bridged the eras between the appearance of confirmed Ute artifacts around AD 1400, and the Utes' acquisition of horses at approximately AD 1680.<sup>16</sup> The ambulatory Canalla-phase people lived in wickiups and employed what archeologists call a "forager strategy."<sup>17</sup> The highly mobile forager strategy does bear some resemblance to the more stationary collector strategy. Archeologists believe that, in

<sup>&</sup>lt;sup>14</sup> Theodore Binnema, Common and Contested Ground: A Human and Environmental History of the Northwestern Plains (Norman: University of Oklahoma Press, 2001), 83-84. <sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Alan D. Reed, and Michael D. Metcalf, Colorado Prehistory: a context for the Northern Colorado River Basin. (Denver: Colorado Council of Professional Archaeologists, 1999), 153.

<sup>&</sup>lt;sup>17</sup> Ibid.

consideration of the topography of western Colorado, it seems likely that the Protohistoric forager people's seasonal round had its roots in the Archaic-era collector strategy. The Utes harvested a broad variety of vegetal resources as part of their economy, including American bistort, wild strawberries, camas root, Indian ricegrass seeds, and piñon nuts, all of which contributed to their diversified nutritional resources. These "serial specialists" employed a system of transhumance, relocating as vegetable food resources ripened during the annual cycle, hunting available wildlife along the way.<sup>18</sup>

Much like the rest of the Western Slope, winters in Middle Park are long and extremely cold. The January temperature of Middle Park averages about 11° Fahrenheit, occasionally dipping to a bitter -50° Fahrenheit, while winds can reach speeds up to 100 miles per hour.<sup>19</sup> These groups, probably divided into extended family units of five to ten households, most likely spent winters in the piñon and juniper woodlands of the lower altitudes. In this wintering environment, where wood for shelter and fuel was more easily acquired, the people relied on the stores of vegetable resources they had processed during the harvest and continued to supplement their winter caches with meat from wintering deer and elk.<sup>20</sup>

In the late fall and early winter after an annual bison hunt during which Ute hunters often traveled over the low-elevation passes in the Park and Rabbit Ears ranges on the northeast border of their territory, the Utes returned to their home on the Western Slope where they hunted antelope fattened from a summer of feeding. The Utes often

<sup>&</sup>lt;sup>18</sup> Ibid, 153, 161. Transhumance refers to the seasonal migration of people between lowlands and mountains.

<sup>&</sup>lt;sup>19</sup> Ibid, 22.

<sup>&</sup>lt;sup>20</sup> Ibid, 153, 161.

conducted communal antelope hunts, normally led by a special "antelope-hunt chief."<sup>21</sup> The hunt-chief usually sent out scouts to locate the herds; once sighted, the band dispersed across the terrain in the direction of the antelope. Then, forming a loose circle, the band slowly enclosed their quarry in a "back and forth surround." The hunters then dispatched the animals with arrows.<sup>22</sup> On a good day, the hunters would drive 200 antelope over a concealed cliff into a corral where those that had not broken their necks in the fall met their fate with clubs, spears, or arrows. At other times, the hunters simply drove the antelope past an ambush near well-worn trails and springs, where a hunter or hunters disguised in antelope skins could shoot for the hunting party.<sup>23</sup>

As winter passed and favored plants began to emerge in early spring, the disparate familial units coalesced into their distinct bands to join in the annual bear dance. While the original purpose of the dance has become distorted, the contemporary Utes say that the Bear dance, held every spring, was a time of renewal, when the people emerged from winter to begin the annual cycle anew. These reunions probably resulted in the gathering of twenty or more households, numbering upward of 100 people.<sup>24</sup> Following the bear dance, they dispersed in family units, traveling to favored vegetable gathering sites. Growing season on the Western Slope is extremely short. On the eastern edge of Middle Park, Grand Lake receives an average of forty-one frost-free days each year, while Fraser, located on the Western Slope just north of present Idlewild Ski Area near Winter Park, averages a scant four frost-free days annually.<sup>25</sup> These weather conditions probably

<sup>&</sup>lt;sup>21</sup> Stewart, "Culture Element Distributions," 241.

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Anne M. Smith Ethnography of the Northern Utes, Papers in Anthropology No. 17 (Santa Fe: Museum of New Mexico Press, 1974): 55-56. I was unable to pinpoint any antelope kill sites.

<sup>&</sup>lt;sup>24</sup> Reed and Metcalf, Windy Gap, 161.

<sup>&</sup>lt;sup>25</sup> Ibid, 21.

compelled the Utes to move rapidly into regions producing their favored vegetable resources, hunting the available game, and then moving on to more favorable environments.

Moving across the ripening grasses toward the mountains, the Utes harvested a variety of seeds including Roughleaf ricegrass and Indian Ricegrass. The variations in ripening times meant that the people had access to diverse ripening seeds in the months between May and October.<sup>26</sup> Utes promoted the further growth of favored species by selecting certain plants for harvest, broadcast sowing, and burning. These methods also fostered the reproduction of some animals. Because grass grows primarily in the basins and plains in northwest Colorado, the Utes probably tended to hunt the animals that shared the same topography, including bison, antelope, deer, and possibly some elk and bighorn.<sup>27</sup>

The Utes employed fire, drives, ambushes, and decoys as important tools in their hunting arsenal. Ute hunters often traveled considerable distances through dense forests to reach their favorite hunting grounds and used fire to clear forests. Once they arrived at their destinations, they then used fire to drive deer from one place to another where they were easier to ill.<sup>28</sup> In the cases of drives and ambushes, Ute hunters normally drove their quarry past other hunters waiting in ambush. In some instances—probably those relating to fawns and calves—Ute hunters ran down their quarry on foot. However, they also ambushed elk and deer utilizing a number of different scenarios according to the topography and season. Pits located along trails, beside springs and often enclosed or

<sup>&</sup>lt;sup>26</sup> Smith, Ethnography of the Northern Ute, 272.

<sup>&</sup>lt;sup>27</sup> David Rich Lewis, *Neither Wolf Nor Dog: American Indians, Environment, and Agrarian Change* (Oxford: Oxford University Press, 1994), 28.

<sup>&</sup>lt;sup>28</sup> Congress, Ute Indians in Colorado, 46<sup>th</sup> Cong., 2<sup>nd</sup> sess, 1880, S. Doc. 31, serial 1882, pp. 67, 149

concealed by brush fences provided the basic characteristic of these traps. When practical, they employed decoys, blowing on an aspen leaf cupped in their hands to mimic a fawn or calf in distress to lure unsuspecting does and cows into an ambush. In cold weather, hunters often built small fires in a depression below their hiding place to help keep their hands supple and warm so that they could more easily fire on their quarry when it appeared.<sup>29</sup>

High annual precipitation, glacial melt, and cool temperatures in the summer combined with numerous large animals and abundant vegetal resources to lure the Utes into the high-altitudes for summer hunting and foraging activities.<sup>30</sup> Utes gathered vegetables and nuts, and tied small strips of the inner bark of pine trees into bundles. which they later ate with salt. During those years that the piñon nuts were available, Ute families harvested them collectively. Utes also enjoyed wild strawberries, raspberries, blackberries, buffalo berries, chokecherries, currants, juniper berries, serviceberries, squaw berries, wild rose hips (harvested in the mountains), and wintergreen berries.<sup>31</sup>

In the summer months when the mountains became more accessible due to the annual thaw, Ute women harvested berries and nuts in the fir/spruce zone and the men hunted the charismatic big wildlife that favored the higher altitudes. Although bison are known to have ventured as high as 13,000 feet, the primary ungulates for the high altitudes consisted primarily of deer, elk, and bighorn sheep.<sup>32</sup> Because the preferred terrain of bighorn differed so drastically from the traditional topography favored by Antelope and bison, the Utes developed and employed different strategies for harvesting

<sup>&</sup>lt;sup>29</sup> Stewart, Cultural Element Distribution, 240.

<sup>&</sup>lt;sup>30</sup> Arnold, "Ute Trade," 16.

<sup>&</sup>lt;sup>31</sup> Smith, Ethnography of the Northern Ute, 64-66, 269-70.

<sup>&</sup>lt;sup>32</sup> Rocky Mountain News, Denver 20 August 2002. Armstrong, Distribution of Mammals, 304.

these animals. Ute hunters often used back and forth drives to push the animals past hunters waiting to ambush them near mountain peaks. On occasion, however, solitary hunters simply stalked their quarry alone. Because the Utes considered sheep hunting to be a dangerous occupation—apparently they feared ram attacks—they refrained from using decoys or disguises while hunting bighorns.<sup>33</sup>

In the late summer and fall, as berries, grasses, and nuts continued to ripen, other important vegetables came into season. Roots such as garlic, wild onion, Indian potatoes, sego lily, and yampa or wild carrot constituted one of the most important ingredients in Ute cuisine.<sup>34</sup>

Like summer, fall was typically brief and characterized by a short Indian summer.<sup>35</sup> This season probably represented the time of year with the greatest return on their foraging efforts. In the basins and plains, grasses provided humans and animals with a veritable treasure in sun-ripened carbohydrates. Moreover, the summer thaw made it possible to access the greatest diversity of altitudes from the sage-steppe environment to the Alpine tundra thus providing hunters with a supermarket of protein sources. During the fall, the disparate groups would reconvene for the annual trip across the Continental Divide onto the Plains where they would spend several weeks harvesting the summer-fattened bison before returning west of the Divide for another winter.<sup>36</sup>

The Utes relied upon bison from the time they entered the region around AD 1100. The sheer volume of meat and large hide that a single bison provides indicates its importance to these people. The "comparative value" of bison in contrast to other

<sup>&</sup>lt;sup>33</sup> Stewart, Cultural Element Distribution, 242.

<sup>&</sup>lt;sup>34</sup> Smith, Ethnography of the Northern Ute, 271.

<sup>&</sup>lt;sup>35</sup> Wheeler and Martin, Windy Gap, 21.

<sup>&</sup>lt;sup>36</sup> Reed and Metcalf, Colorado Prehistory, 154.

ungulate resources is astonishing.<sup>37</sup> Ranging from 800 to 3,000 pounds, and generating between 225 to 550 pounds of meat, the bison produced a quantity of protein "18 times that of the antelope, 9 times that of the deer...6 times that of the mountain sheep," and 3 times that of the elk."<sup>38</sup>

Ethnologist formerly claimed that mounted Utes hunted bison primarily on the Great Plains, which suggests that bison may have been less commonly procured in preequestrian cultures.<sup>39</sup> Recent studies, however, suggest otherwise. Archeologists have recovered bison bones in early as well as late Protohistoric-era contexts in northwest Colorado.<sup>40</sup> A recent study published by the Denver Museum of Nature and Science suggests that bison were once quite prominent in northwest Colorado and remained so well into the nineteenth century. Bison migrated from source herds in southern Wyoming on the Laramie Plains and the region west of the Medicine Bow Mountains as a result, their population density on the Western Slope was much greater than previously documented.<sup>41</sup>

There is little evidence to suggest that the White River Utes had any taboos on big animals with the possible exception of moose. The appearance of this animal caused a near-panic level of fear in the White River Utes. They believed that "a moose standing in the water could trap an Indian walking along the shore by causing waves to come up and draw him into the water to drown." There is, however, some evidence that the Utes had

1999), 132. These weights refer to the difference between cows and bulls, with the latter being larger. <sup>39</sup> Omer Call Stewart and Julian H. Steward are two of the leading Ute ethnologists. Both argued that the

<sup>&</sup>lt;sup>37</sup> Julian H. Steward, Basin-Plateau Aboriginal Sociopolitical Groups. Smithsonian Institution Bureau of American Ethnology, Bulletin 120 (Washington: U.S.G.P.O., 1938): 37. <sup>38</sup> Shepard Krech, The Ecological Indian: myth and history, (New York: W.W. Norton and Company,

Ute only came to rely more heavily on bison after their acquisition of horses. <sup>40</sup> Reed and Metcalf, Colorado Prehistory, 154.

<sup>&</sup>lt;sup>41</sup> Carron A. Meaney and Dirk Van Vuren "Recent Distribution of Bison in Colorado West of the Great Plains," Proceedings of the Denver Museum of Natural History, Series 3, No. 4 (Denver: Denver Museum of Natural History. December 15, 1993).

taboos against eating some foods. For the most part, these restrictions were highly specified along gender and age lines and were often temporary. For example, boys and women were forbidden to eat the hearts of large animals. If a boy ate the heart of a large animal, his heart would beat so fast he wouldn't be able to shoot straight. Rabbit heart was taboo to young children, as were lungs for the Utes believed this was similar to eating one's own heart. In addition, boys were not to eat their first kill, but give it instead to an elder male in the village. The boy's second kill went to a relative and the third to his parents. The Utes also imposed various taboos on pregnant women. For example, pregnant White River women were forbidden from eating internal organs or eating eat two pieces of meat stuck together.<sup>42</sup>

Although the Utes did restrict certain community members from eating some animals for short periods, these prohibitions were probably aimed at maintaining the physical and metaphysical health of the group. Moreover, the taboos were geared more toward nutritional consumption rather than general economic functions. For instance, the White River Utes believed that wildcats, weasels, wolverines, wolves, foxes, and coyotes possessed characteristics or qualities that made eating them restricted or prohibited. It is unclear whether or not the Utes hunted these animals before the advent of the market economy. Pelts from these animals were probably prized for their value as blankets and luxury clothing accessories. The Utes had a market for the pelts from these animals even if they did not eat them.<sup>43</sup>

While many Plains tribes traded their hides, pelts, and furs at posts along the Arkansas, Missouri, and North Platte Rivers, the Utes, much like the Comanche and

<sup>&</sup>lt;sup>42</sup> Smith, Ethnography of the Northern Ute, 51, 245, 311.

<sup>&</sup>lt;sup>43</sup> Smith, Ethnography of the Northern Ute, 58.

Apache were drawn to the Taos Valley in New Mexico.<sup>44</sup> Here, particularly during the last half of the eighteenth century, Utes, Apaches, and Comanches attended the annual trade fair, usually held in July or August. Indians brought a wealth of merchandise for trade, including "pelts, buffalo skins, chamois [(tanned deer skins)], and plunder (especially captives whom they had kidnapped from other tribes...)." Indians attending the fairs usually sought "horses, trinkets, knives, and other metal objects."<sup>45</sup>

It seems that at least since 1765, the Spanish, unwilling to wait for Ute hunters to bring their hides to market in Taos began to make *entradas* into Colorado Ute territory traveling as far north as the Dolores and Uncompany Rivers. By the middle of the eighteenth-century the Taoseños began to rely on Utes for pelts more than ever. New Mexico Governor Tomás Vélez Gachupín informed his successor that it was important that New Mexico continue to foster good relations with the Utes as this meant a steady supply of deerskins, without which, New Mexicans would be unable to clothe themselves. The Utes continued to participate in the fur trade and in 1842, when Rufus B. Sage arrived at Antoine Robidoux's Fort trading post near the confluence of the Uintah and White Rocks Rivers in eastern Utah, the Utes were engaged in "a small business" trading pelts and skins for guns, ammunition, and sundry items.<sup>46</sup> Local populations often resort to extreme measures to defend their territories, but occasionally, they open the commons to outsiders. In instances where the locals open the commons to

<sup>&</sup>lt;sup>44</sup> David Lavender, Bent's Fort (New York: Doubleday and Company, 1954), 56.

<sup>&</sup>lt;sup>45</sup> David J. Weber, The Taos Trappers: the fur trade in the Far Southwest, 1540-1846 (Norman: University of Oklahoma Press, 1971), 10. For a more thorough list of Ute trade items, see appendix 3.

<sup>&</sup>lt;sup>46</sup> Ibid, 23, 214.

outsiders, much as the Utes did for the Spanish, the commons can appear more like "open-access" regimes than a locally controlled resource base.<sup>47</sup>

It is difficult to determine the population density for the White River Utes prior to sustained White contact. However, ethnologists estimate that during the Paleoindian and Archaic era, human population groups probably never surpassed more than one to three persons per ten square miles.<sup>48</sup> And historian David Rich Lewis puts the population for the entire Ute tribe at 8,000 in 1800.<sup>49</sup> Archeologists assert that there is "no firm evidence of an epidemic [in the region]."<sup>50</sup> While researchers have found "no Protohistoric-era burials with multiple individuals in the [Colorado Plateau]," epidemics from intermittent contact with the Spanish may have reduced the indigenous populations toward the end of the Canalla phase.<sup>51</sup> It seems likely that the lack of evidence related to a disease-induced Ute die-off is probably just a result of the wide-expanse of Ute territory and the few studies directed at this subject.

Contraception as a means of population control among the Utes was either "magical; or rhythmical,"<sup>52</sup> although some might say that any success with the rhythm method would be nothing short of magical! Ute ethnographies suggest that infanticide was quite rare and among the White River band, the only condition allowing for infanticide seems to have been the birth of a deformed child.<sup>53</sup> Despite the paucity of

<sup>&</sup>lt;sup>47</sup> Louis Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997), 16.

 <sup>&</sup>lt;sup>48</sup> Donald Callaway, Joel Janetski, and Omer C. Stewart, "Ute," ed. By Warren L. D'Azevedo, *Great Basin*, vol. 11, *Handbook of North American Indians* (Washington, D. C.: Smithsonian Institution, 1986): 352.
 <sup>49</sup> Lewis, Neither Wolf nor Dog, 32.

<sup>&</sup>lt;sup>50</sup> Reed and Metcalf, Colorado Prehistory, 162.

<sup>&</sup>lt;sup>51</sup> Ibid, 163. Reed, "Ute Cultural Chronology," 88.

<sup>&</sup>lt;sup>52</sup> Stewart, Cultural Element Distribution, 332.

<sup>&</sup>lt;sup>53</sup> Ibid, 308. Stewart notes that the witness may be unreliable in this particular instance, but does not indicate why. It seems likely that the witness would probably have known that whites would have been horrified by this practice.

substantial evidence related to either disease or infanticide, it seems likely that the Utes probably employed a number of strategies to control their population including herbalbased contraceptives and prolonging the nursing stage, or, like many other Indian people such as the Comanche, used infanticide as a means of population control.<sup>54</sup> Whatever the method, the Utes were efficient at keeping their populations at a level that did not overtax the resources in their traditional home range. In 1871, a census taken at the White River Agency in Colorado revealed that the White River band numbered around 635 people.<sup>55</sup>

Around 1680, the switch to an equestrian lifestyle and the incorporation of Euroamerican trade goods ushered in the Antero phase. Popular perception of Ute culture stems largely from this era and the proliferation of documents that exist on United States government-Ute relations. In most respects, Ute culture from the Antero phase differs from related Shoshone and Southern Paiute cultures. The Pueblo Revolt of 1680 gave the eastern Utes an opportunity to acquire more horses and trade goods than ever before. The Utes' new horse herds were so numerous that they were able to engage in raids on the Pueblos and Spanish villages to the south and cross the Continental Divide in the north and east to hunt bison. Not only did Euroamerican trade goods take on greater importance for the Antero phase Utes, but they also acquired new cultural items from the Plains tribes including elements of clothing such as stylistic decorations and the tipi.<sup>56</sup>

In 1776, Fray Silvestre Vélez Escalante left New Mexico on an expedition through the Great Basin. On 1 September, the expedition started north from their overnight stay at San Ramón in western Colorado, They ascended Hubbard Creek into a

<sup>&</sup>lt;sup>54</sup> Dan Flores, Caprock Canyonlands: Journeys into the Heart of the Southern Plains (Austin: University of Texas Press, 1990): 81

<sup>&</sup>lt;sup>55</sup> John C. Ewers, The Horse in Blackfoot Indian Culture: With Comparative Material from Other Western Tribes, (Washington: Smithsonian Institution Press, 1985, 1955): 27 table 2.

<sup>&</sup>lt;sup>56</sup> Reed and Metcalf, Colorado Prehistory, 160.

mountain basin called Hubbard Park. Here, the expedition encountered eighty Utes, probably from the Yampa or White River band, all riding horses. According to Escalante, all of the Utes were mounted "on good horses." By 1776, the Utes had possessed horses for nearly a century and it was probably no surprise that in an area of "abundant pastures," they had managed to produce herds large enough to stay well mounted.<sup>57</sup>

The White River Utes, like most Ute bands in Colorado, possessed horses. Large groups of these people, aided in their ability to travel by the horse, coalesced into larger groups. This change in the dispersal of individual Ute villages and bands does not mean that the there was a spike in Ute population density, but rather that families that once lived farther apart were able to spend more time together or to visit friends and distant relatives with greater ease.<sup>58</sup> Once the Utes had acquired them, horses became increasingly important and by the beginning of the twentieth century, the Utes were still struggling to retain their ever-dwindling land holdings that had once enabled them to maintain their horse herds.<sup>59</sup>

Clearly, the Utes developed ingenious methods for dealing with the climatic and topographical limitations of the Western Slope. Their high mobility and low population combined with a highly efficient foraging strategy—a strategy considerably strengthened by their acquisition of the horse—to enable them to adapt to their environment in a way that did not overexploit the resources in the region. What methods did the Utes employ

<sup>&</sup>lt;sup>57</sup> Fray Silvestre Vélez de Escalante, The Domínguez-Escalante Journal: their expedition through Colorado, Utah, Arizona, and New Mexico in 1776, trans. Fray Angelico Chavez. ed., Ted J. Warner (Provo: Brigham Young University Press, 1976), 29.

<sup>&</sup>lt;sup>58</sup> Reed and Metcalf, Colorado Prehistory, 160.

<sup>&</sup>lt;sup>78</sup> Uintah Reservation Allotment Council Proceedings, 1903. National Archives, Record Group 75, Bureau of Indian Affairs, Uintah Reservation, Special Case 147, in Major Problems in the History of the American West edited by Clyde A. Milner II, Anne M. Butler, and David Rich Lewis (Boston: Houghton Mifflin Company, 1997), 342-348.

in their diversified hunting tactics and how did they compare with groups like the Comanche, who once shared not only the same language, but cultural and subsistence traits as well?

Prior to their acquisition of horses, the Comanche, much like their linguistically related cousins the Utes, were hunter-gatherers that relied more on the harvesting of natural vegetable resources, such as grasses, berries, and yampa than on protein resources such as bison. Although they did operate jackrabbit drives, hunted deer, antelope, elk, mountain sheep and occasionally bison, they never concentrated on a single source of food as they did with bison once they had adapted to the equestrian way of life.

Originally acquiring horses from the White River Utes of Colorado, the Comanche soon developed a new vision for their own future. Seeing the potential for wealth in horses and the ability to boost their own resource harvesting capabilities by utilizing the virtually unlimited bison herds on the Plains, the Comanches began to sweep southward, "like Blue Northers," toward New Mexico and the plains of west Texas intent on commandeering the burgeoning horse trade and the immense herds of bison from the weaker Apache people in the region. The Comanches, well adapted to the equestrian life, began their new life with a profound "confidence, swagger, [and] a certain insensitivity" as they sought to establish dominion in the southern plains.

For the Comanches, the horse meant a total transformation of their diversified subsistence practices. Once they acquired horses, "these formerly generalist huntergatherers learned to specialize and thus dramatically simplify their economy." The Comanche's adaptation to the horse culture gave them a grand sense of vision and purpose that would impel them toward a new way of life, one that, despite its ephemeral destiny, would crush less powerful visions under its weight and velocity.<sup>60</sup>

If the Comanche did stride confidently onto the Southern Plains as it appears, exactly how strong were they? Early (and probably exaggerated) population estimates from the seventeenth and early eighteenth centuries suggest that the population of bison people on the Staked Plains was close to that of the pueblo dwellers of the upper Rio Grande with estimates ranging from 15,000 to 30,000. Later estimates from the late eighteenth and middle nineteenth centuries propose a human population of 19,000 to 22,000 Comanche. Alliances with other Plains groups including first, the Kiowa and Kiowa-Apache and later the Southern Cheyenne and Arapaho augmented the population with an additional 8,000 to 11,000 people. The devastating effects of disease took their toll on the Comanche throughout the first half of the nineteenth century, however, resulting in a significant population decline.<sup>61</sup> But for the equestrian era Comanches of the eighteenth and early nineteenth centuries, it seems safe to go with a population of about 30,000 people.

So, what kind of impact did the Comanche have on the bison herds of the Southern Plains? Flores estimates that a population of 30,000 bison Indians satisfying their domestic and caloric needs with 6.5 bison per person and participating in a robe trade that required an additional 50,000 hides per year probably harvested about 260,000 bison per year. Disease, animal, and non-Indian predators took their own separate tolls on the bison populations. The Comanches' reliance on bison for their primary domestic and caloric needs helped insure the rapid rise of one of the strongest Indian groups on the

<sup>&</sup>lt;sup>60</sup> Flores, Caprock Canyonlands, 83.

<sup>&</sup>lt;sup>61</sup> Ibid, 90.

Plains. And while their hunting methods played a prominent role in the development of healthy bison herds, it seems that the Comanche could not have foreseen the imminent desolation of the bison herds and the resultant end of their own way of life. For when first the droughts came in the early-middle decades of the nineteenth century, followed by white market hunters and bison runners, the Comanche way of life ended with a bang and whimper.<sup>62</sup>

Although the Utes would witness a decimation of their own primary hunting herds, the process was slower and had somewhat different results. In time, however, they would experience a fate similar in many respects to their linguistically related cousins on the southern Plains. Contrary to the dramatic changes the Comanches experienced on the southern Plains, the Utes continued to encounter relatively little interference from whites, at least until the latter decades of the nineteenth century. After the Comanche abandoned their homes in southwestern Wyoming, Ute hunting parties began to venture over the Continental Divide with increased frequency, following the bison herds back and forth across the low-altitude passes as they made their seasonal migrations. This practice of traveling long distances to hunt bison reinforced the Utes' cooperative hunting strategy, which they also implemented in their antelope and bison hunts west of the Divide. The Utes hunted cooperatively in order to increase efficiency. By the time the Utes arrived on the plains in autumn, the great bison herds had become fat on the wealth of grasses in the open plains and were numerous enough to allow the Utes to travel and hunt in groups often several hundred in strength. Large hunting parties made it possible for the Utes to procure and process enough meat to last them throughout most of the year.<sup>63</sup> In contrast

<sup>&</sup>lt;sup>62</sup> Ibid, 92.

<sup>&</sup>lt;sup>63</sup> Steward, Basin Plateau Groups, 235.

to the Comanches, who engaged in bison ecology without restraint, the Utes returned to their diversified subsistence economy on the Western Slope after their annual hunts. The primary reason for this seems to be related to the presence of strong Plains groups near the northern end of the Front Range. Large aggressive groups of Arapaho, Cheyenne, and Sioux helped ensure that any Ute forays onto the Wyoming Plains would be limited to seasonal bison hunts and occasional raids for horses and plunder.

In a manner similar to their deer and elk hunting practices, the Utes relied on a hunt leader, although it was not usually the same individual who led other hunts. Whereas band chiefs normally distributed the proceeds from deer and elk hunting, bison hunt leaders divided the meat from the bison hunts amongst the band members.<sup>64</sup> The men normally began the hunt simultaneously. The Utes "did not surround, impound, or drive them over cliffs" as they had done in their pre-equestrian days, but took swift mounts with them on which they ran down their quarry.<sup>65</sup> By late autumn, the hunters returned to their home range in Colorado, horses laden with dried meat and hides.<sup>66</sup>

Although the Utes engaged in cooperative bison hunts, the social organization under which they operated during the hunt disintegrated once the group returned home, allowing nuclear family units to determine their own course. Here, west of the Divide, Ute subsistence activities after deer, sheep, elk, and even antelope and bison hunting, (practices largely dictated by the annual round of vegetable resource gathering) resumed their character as solitary or family oriented pursuits.<sup>67</sup>

<sup>&</sup>lt;sup>64</sup> Stewart, Cultural Element Distribution, 241.

<sup>&</sup>lt;sup>65</sup> Steward, Basing Plateau Groups, 191.

<sup>66</sup> Ibid.

<sup>&</sup>lt;sup>67</sup> Ibid, 235.

Basing his research on a model created to study the effects of human predation on caribou "in the Far North and based on caloric needs of a hunting population, plus the number of hides or robes needed for domestic use," Flores suggest that the average Indian required approximately six and one-half bison annually.<sup>68</sup> If we accept John Ewers' population estimates for the White River Utes at face value and assume a constant population of approximately 600 members, the yearly bison harvest was probably about 3,900 bison. This number, however, refers to a group that relies almost completely on bison for their dietary and domestic requirements, disregarding the diversity of species the Utes actually harvested. Moreover, this estimate says nothing about the Utes' participation in the robe trade.

It is extremely difficult to estimate how many more bison the Utes took for the trade value of their meat and hides. For the most part, the Utes preferred to raid weaker people in order to acquire the things they desired.<sup>69</sup> There seems to be some indication, however, that they traded hides to the Navajos in exchange for woolen blankets at an exchange rate of "five tanned buckskins or one well-dressed buffalo robe or one good mare" per blanket.<sup>70</sup> Moreover, the bison robe trade with the Taoseños continued to grow. While initially the Utes took their hides to the Taos trade fairs, in time, Spanish traders began to make "*entradas*" into Ute territory, and from about 1765 on, Spanish traders exacted a regular trade with the Utes in Ute territory.<sup>71</sup> Clearly, the introduction of the horse, which increased their mobility, and their introduction into the global market place changed the way the Utes looked at the land. No longer did the Utes view the

<sup>&</sup>lt;sup>68</sup> Flores, Caprock Canyonlands, 92.

<sup>&</sup>lt;sup>69</sup> Arnold, "Ute Trade," 24.

<sup>&</sup>lt;sup>70</sup> Jan Pettit, Utes: the mountain people. (Boulder: Johnson Book Company, 1990): 100.

<sup>&</sup>lt;sup>71</sup> Weber, *The Taos Trappers*, 24-5.

plant—and more importantly, animals—in their home range as necessary for just subsistence. Trade with first, the Taoseños and Navajos, and second, the European and American trappers that would arrive in the early nineteenth-century, forever altered the Utes' use of the land. Whereas they once relied on nature's providence to satisfy the demands of subsistence, the land provided enough resources to allow the Utes to develop a new sense of what their needs were and how to satisfy them.

If we extrapolate the data that Flores compiled for the Comanche, it may be possible to estimate the number of surplus hides that the Utes harvested for trade and barter.. According to Flores, a population of "thirty thousand bison Indians," harvested an average of 50,000 bison robes per year for trade. This number represents a 60 percent surplus per capita in robes or one-and-two-thirds robes per person for trade. If we apply these numbers to the White River Ute population, which, as we discussed previously, was about 600 persons, then we may estimate that the Utes took about 1,000 additional hides every year purely for trade. Taken together, the White River Utes' dietary, domestic, and surplus bison harvest probably averaged about 5,000 head per year. If the Utes did harvest bison in quantities sufficient to satisfy their needs, the harvesting of 5,000 bison per year does not seem to be a significant number if the source herds were as plentiful as Meaney and Van Vuren suggest.<sup>72</sup> Moreover, these numbers suggest that although the Utes began to hunt for reasons other than subsistence, their population was still small enough to balance the deleterious effects of their participation in the market.

Perhaps if we made the same calculations with the entire Ute population the annual bison harvest might approach the Comanches' yearly harvest. In 1800, the Utes totaled about 8,000 people throughout all major Ute bands." By mid century, however,

<sup>&</sup>lt;sup>72</sup> Meaney and Van Vuren, "Recent Distribution of Bison," 7.

epidemics had decimated the Utes' population base and by 1880 the total Ute population was approximately 3,975 people and only 2,244 on the Uintah-Ouray Reservations.<sup>73</sup> For the earlier population, the annual (subsistence) bison harvest would have been about 52,000 animals. When trade is factored into the equation, the number would have risen to approximately 83,200 bison per year, a hefty number. But not all Ute bands hunted bison, in fact most of the bands hunted this species lived on or near the Western Slope, specifically the Northern Utes, which included the Uncompany (Taviwach), White River (Parusanuch and Yampa), and Uintah. For the Northern Utes, the resulting harvest at 6.5 bison per person would have been approximately 14,586 bison per year. When the 60 percent trade surplus is added, the number of bison Ute hunters from all Colorado bands harvested rises to about 23,376 bison per year, still a very large quantity. If we add the rest of the Colorado Ute bands, to the groups who accessed the commons then the stress on the animal populations would have risen, even dramatically. It is important to remember that while these numbers are significant, they relate to people that relied almost entirely on bison for their subsistence and bears almost no resemblance to the Utes who, as hunter-gatherers, continued to implement their diversified hunter-gatherer subsistence strategy clear up until the United States Government removed them to their reservation in Utah.

In the northern Rockies, the Salish Indians of northwest Montana occupied a park-like environment similar to the White River Utes' territory in Colorado. The Salish, like the Utes, hunted the small groups of bison that crossed the mountain ranges into their territory. In time, the increased efficiency that resulted from their use of horses during

 <sup>&</sup>lt;sup>73</sup> David Rich Lewis, *Neither Wolf Nor Dog*, 32, 36. Donald Callaway, Joel Janetski, and Omer C. Stewart, "Ute," ed. By Warren L. D'Azevedo, Great Basin, vol. 11, Handbook of North American Indians (Washington, D.C.: Smithsonian Institution, 1986), 359.

their hunts put no small amount of strain on the small herds of bison that had wandered into their territory. By the early 1870s, the Salish found that the herds were rapidly disappearing not only from their own hunting practices but also because of the pressure that the large, powerful, and extremely competitive Plains tribes put on the bison populations.<sup>74</sup> The Utes, like the Salish, were not the only ones hunting bison on the Western Slope. Arapaho, Cheyenne, Sioux, Crow and Blackfoot hunters ventured into the Utes traditional hunting territories on the Western Slope and undoubtedly leaned heavily, if only intermittently, on local bison populations.<sup>75</sup> Moreover, while the pressure from the combined Indian tribes was undoubtedly heavy. It is important to note that the white population for all Colorado counties that would have relied on ungulates from the Western Slope, approximately 90,672 people, far exceeded the number of Indian hunters in the region and undoubtedly had a much greater impact on the ability of wildlife populations to replenish themselves.<sup>76</sup>

My sense is that the Northern Utes alone were incapable of decimating the bison herds on the Western Slope alone, partly because they did not restrict their hunts to Colorado but traveled to the Laramie Plains to hunt, and partly because the needs of their relatively small population did not over-tax the resource base. Despite this caveat, however, the Utes, as with virtually any people presented with an unprecedented opportunity to strengthen their economic position, undoubtedly capitalized on the opportunity to enhance their subsistence economy. Clearly, their acquisition of the horse and their continuing participation in trade with Spanish and Euroamerican traders gave the Utes pause to reinterpret their definition of the commons and how they should use the

 <sup>&</sup>lt;sup>74</sup> John Fahey, *The Kalispell Indians* (Norman: University of Oklahoma Press, 1986), 55.
 <sup>75</sup> Black, Islands in the Rockies, 16.

<sup>&</sup>lt;sup>76</sup> http://www.manta.library.colostate.edu/research/colorado/county1.pdf

resources. In any case, while the Utes began to make new choices about how to use the wildlife resources of the commons, they still maintained local control over them.

Despite the fact that the Utes' hunting strategies contributed to the extirpation of bison on the Western Slope, they continued to hunt bison and other large ungulates on their ancestral home range until the end of the nineteenth century. In order to do that, the wildlife populations on this region must have been high enough to support their dietary needs. On the Western Slope, the traditional home of the White River Utes-where the bison never congregated in large herds—it should not be surprising that Ute hunting efficiency decimated the small bison herds by the middle of the nineteenth century. Yet Historical evidence reveals that bison were still on the Western Slope as late as the 1880s. Frank Mayer, a market hunter who supplied meat to the Leadville Market during this era brought in a tremendous amount of meat from the Western Slope near the Middle Park community of Kremmling between August and November of 1878. During his fall hunt that year Mayer killed nearly ninety mule deer, over eighty antelope, seventy elk, seven bison, five bighorn sheep and one bear.<sup>77</sup> In a journal entry dated October 1, 1878, Mayer wrote, "As the migration is now well begun, I encounter elk and deer at all hours of the day. They are crossing the river junction in such numbers that shooting them requires no skill." <sup>78</sup> This harvest, damning evidence of the effect market hunters had on wildlife populations, also demonstrates the existence of healthy wildlife populations on the Western Slope, particularly the continued presence of bison in a region many people claim was devoid of this species before the midpoint of the century.

<sup>&</sup>lt;sup>77</sup> Bruce R. Gill, *Declining Mule Deer Populations in Colorado: Reasons and Responses*, June 2001, (Denver: Report to the Colorado Legislature, November 1999), 1, CDOW-77.

<sup>&</sup>lt;sup>78</sup> Ibid. The river crossing that Mayer mentioned here is at the confluence of the Blue River and the Colorado River just south of Kremmling, Colorado.

In the end, the Utes seemed cognizant of the wide diversity of resources on their home range. Moreover, their acquisition of the horse did not result in a transformation of their hunter-gatherer subsistence strategy as it did with groups like the Comanche. Instead, the horse seems to have increased the Utes' efficiency across their entire subsistence base. The continual presence of healthy animal herds in their traditional home range supports the notion that the Utes' low population density combined with their own distinct optimal foraging strategy to enable them to attain a (temporary) state of equilibrium with their environment, even though they began to use the resources of the commons to procures for themselves the new elements that helped make up their new definition of the good life.

This assertion, much like the one that began this study, begs a number of questions, such as were the wildlife populations in northwest Colorado depleted? What measures were taken to prevent the total extirpation of native animals in the region? How did the implementation of these new measures alter the way in which resources from the commons were used? Did these changes result in a new vision for the commons, and if so, how did people, especially those that had local control over the commons, react to the change? Perhaps if we look at the introduction of the market economy and the subsequent influx of immigrants into the region throughout the nineteenth century, we may see how the White River Utes and the newly arrived white populace utilized the available resources and what measures, if any, they took to ensure the continued existence of these big animal species.

## Appendix 3

Ute Trade <sup>79</sup>			
Primary Group	Trade Items	Exchange Items	Trade Partners
Ute	Hatchets, knives	Mescal	Walapai
Ute	Horses	Leggings, beaded blankets, porcupine quills	Arapaho
Ute	Buckskins, buckskin clothing, elk hides, elk hide storage sacks, buffalo robes, saddle bags, horses, bandoliers, beaded bags, tweezers, beaver and otter skins, buffalo generative organs, pitch for ceremonial whistles, "wedding baskets"	Chief blankets, saddles, bridles	Navajo
Ute	Red ocher, blue dye; buffalo, deer, and antelope meat; hides; horses; backed bows; beaded vests; leggings; Navajo blankets	Corn, corn meal, wheat flour, wheat bread, dried fruit, tobacco, sugar, coffee, pottery, woven goods, iron knives	Tewa Pueblos
Ute	Guns, black powder, bullets, percussion caps, Navajo silver shoe buttons	Blankets, buckskins	Havasupai
Ute		Maize	Норі
Ute		Catlinite pipes	Plains groups

<sup>&</sup>lt;sup>79</sup> Richard E. Hughes and James A. Bennyhoff, "Early Trade," in *Handbook of North American Indians*, 11:241.

## Chapter 3

## Utes, Market Hunters, and Sportsmen on the Northwestern Slope of the Colorado Front Range

The Utes were as susceptible as any people were to the vagaries of change and progress. Most experts estimate that the arrived in the region around AD 1250-1300. Initially the Utes were a pedestrian people who implemented their unique subsistence strategy by following an annual round, harvesting different resources according to season and elevation. About 450 years after they arrived in the region, they acquired horses. And although the Utes continued to harvest resources with the same shrewdness as they had before, they also began to modify their ideas about the land and its animal inhabitants. More specifically, the animals upon which the Utes subsisted were plentiful enough to accommodate their expanding economy. Even as the Utes engaged in trade with European traders at Taos and the more remote outposts in western Colorado, the wildlife populations throughout the Western Slope remained notably substantial. But by the latter half of the nineteenth-century, the charismatic big wildlife populations began to decline.

The story of game conservation in the United States began in the first half of the nineteenth-century. Historian John F. Reiger traced the origin of game conservation from sporting hunters such as southern plantation owner William Elliott, to New England's privileged elites Theodore Roosevelt, and George Bird Grinnell. Although the faces changed, the story remained essentially the same. American sportsmen advocated a policy that stressed the "acceptance of a proprietary interest in game." The conservation

movement did not always receive the general acceptance that its promoters sought. In fact, as William Elliott observed prior to the Civil War, "a revolution in thinking and law would have to take place before there was any hope of saving wildlife for the future." The problem lay, he lamented, in "the common people's 'deep disgust at the tyranny of the English game laws' which seemed to be the sorest and best remembered of their griefs." Many Americans who lived during the middle and latter decades of the nineteenth century continued to carry a grudge against anything that hinted at elitism. And since game conservation in Europe had been nothing more than a euphemism for restricting access to the commons to the wealthy and privileged, many Americans rejected the notion of conservation out of hand. As conservationist sport hunters continued to press the issue in the closing years of the nineteenth-century, Indians, commercial hunters, settlers, and sometimes even ranchers-though many ranchers sided with the elites-found different ways to rebel against what they perceived as ethnic and class warfare. The story of hunting on Colorado's Western Slope reflects this story and demonstrates that, as historian Louis Warren did in his prescient study of hunting at the turn of the century, as conservationists were busy trying to protect wildlife from overexploitation, they encountered resistance from locals that sometimes resulted in violent confrontations.<sup>1</sup>

That Colorado experienced a population explosion beginning in the late 1850s is no secret. In this fifty-year span between 1850 and 1900, Colorado's population grew

<sup>&</sup>lt;sup>1</sup> John F. Reiger, *American Sportsmen and the Origins of Conservation*, 3<sup>rd</sup> ed. (Corvallis: Oregon State University Press), 31, 38. Louis Warren, "The Hunter's Game: Poachers, Conservationists and Twentieth-Century America," (Ph.D. diss., Yale,, 1993).

from approximately 1,500 (mostly Utes) to over 500,000 people.<sup>2</sup> Historians Carl Abbot, Patricia Limerick, and Elliott West have all written probing studies on the West in general and Colorado specifically that attest to this. Throughout all of these histories, one theme has run consistently: the deleterious effect of population growth on a region with limited resources. And while population growth meant that more people relied on the region's resources, of even greater importance are the ideas about resource use that these new arrivals brought with them. The cultural mosaic that emerged from the population influx on the Western Slope during the latter decades of the nineteenth-century manifested itself in a number of ways. Spanish explorers, European and American trappers, hunters, settlers, tourists, and conservationists all introduced new ways of looking at the land and new ideas about who owned the resources and how to harvest them. More specifically, wild animals did not necessarily mean the same thing to Ute hunters that they did to sportsmen; nor did they mean the same thing to local settlers as they did to state wildlife officials. The introduction of the global market economy brought new technological, social, and economic elements into the equation, thereby challenging established perceptions and norms.

The meetings that took place between these groups on Colorado's Western Slope during the last decades of the nineteenth century were both a function of reciprocity between vastly different cultural and ecological forces and a process of redefining the non-human environment. This dynamic process had a profound impact on the evolving economy, culture, and ecology of the West in general and the Western Slope more specifically. On the Western Slope, as in all of the United States at the end of the nineteenth century, the demands of resource use surpassed extant cultural and economic

<sup>&</sup>lt;sup>2</sup><http://www.archives.state.co.us/archist.html>

ethnic constraints. Hence, the rise of conservation was the result of extra-local authorities—often in the form of conservationists, sport hunters, and other bureaucrats who sought to impose their new vision of who owned the land and how the plant and animal resources should be used. Understanding the contrasting notions that these groups had about which animals to hunt, how to hunt them, when to hunt them, and whenever possible, why to hunt them, will also help us understand the story of how local control of the commons gave way to extra-local authority.

For the Colorado Utes, life during the early decades of the nineteenth-century continued much as it had during the last half of the 1700s. While many Plains tribes traded their hides, pelts, and furs at posts along the Arkansas, Missouri, and North Platte Rivers, the Utes, much like the Comanches and Apaches, attended the annual trade fairs in Taos Valley, New Mexico. These groups brought a wealth of merchandise for trade, including "pelts, buffalo skins, chamois [(tanned deer skins)], and plunder (especially captives whom they had kidnapped from other tribes...)." Indians attending the fairs usually sought "horses, trinkets, knives, and other metal objects."<sup>3</sup> It is difficult to estimate how many bison the Utes took for the trade value of their meat and hides. For the most part, the Utes preferred to raid weaker people to acquire the things they desired. There seems to be some indication, however, that they traded hides to the Navajos in exchange for finely-woven woolen blankets at an exchange rate of "five tanned buckskins or one well-dressed buffalo robe or one good mare" per blanket.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> David Lavender, *Bent's Fort* (New York: Doubleday and Company, 1954), 56. David J. Weber, *The Taos Trappers: the Fur Trade in the Far Southwest*, 1540-1846 (Norman: University of Oklahoma Press, 1971), 10, 23, 24-5.

<sup>&</sup>lt;sup>4</sup> Jan Pettit, Utes: The Mountain People. (Boulder: Johnson Book Company, 1990): 100.

The Utes did not limit their trade to the Navajos and Taos trade fairs. Spanish traders often journeyed to the Sawatch Mountains at the southern border of the Western Slope, seeking pelts and Indian slaves from the Utes. These excursions became so common that in 1712, New Mexico Governor Juan Ignacio Mogollón, following a royal decree, forbad traders, both Spanish and Indian, from entering the Utes' homelands. Yet traders living in New Mexico who knew nothing of this order continued to make *entradas* into the Ute commons into the early years the nineteenth-century.<sup>5</sup>

While the Utes' trade with the Spanish ended after the Mexican Revolution in 1821, they began to deal with Euroamericans who ventured into the region in the 1820s and 1830s. Around the middle of the 1830s, Antoine Robidoux constructed two forts in the country, one at the forks of the Uinta and Whiterocks rivers, and the other on the Gunnison River near the mouth of the Uncompahgre. By now, the government controlled Indian trade on an official basis, but in the far west, particularly in the regions where Mexico was still the sovereign power, local traders such as Robidoux operated with few restrictions. North of Robidoux's fort, trappers, Snake Indians and Utes came to trade at Fort Davy Crockett on the Green River. Robidoux's Post, also known as Fort Uinta, was also extremely popular amongst both Utes and trappers on the Western Slope. The ability to exchange beaver pelts and meat for manufactured goods, firearms, powder, and lead, brought the Utes back to the For Uinta time and again. And by 1839, the Utes' involvement in the Taos trade ground to a halt.<sup>6</sup>

Remarkably, the Utes' withdrawal from the Taos trade was not related to any changes in Mexican trade policy. Despite the fact that Mexico officially outlawed slavery

<sup>&</sup>lt;sup>5</sup> Weber, *The Taos Trappers*, 10, 24-5. The reasons for this order are not clear.

<sup>&</sup>lt;sup>6</sup> Ibid, 214-16.

in its new constitution, the slave trade in New Mexico continued virtually unabated as late as the 1850s.<sup>7</sup> At mid nineteenth-century, Mexican traders still traveled to Sevier Valley, Utah, where they engaged in the slave trade with the Paiutes, "paying one hundred dollars or the equivalent value in horses for boys, and up to twice that amount for girls."<sup>8</sup>

The years between the Mexican War and the end of the Civil War are notably silent on the history of human activity on the Western Slope. Life continued, however, and the Utes continued to make their annual rounds, adjusting their behaviors for changes in the climate. Between AD 1450-1850, during what is termed the Little Ice Age, effective precipitation increased notably with conditions approaching those in existence during the early Late Holocene. These conditions brought an increase in effective precipitation and resulted in some indication that the boundaries of cirque glaciers in the montane regions of Colorado expanded significantly.<sup>9</sup>

Wetter conditions also meant larger wildlife populations and for the Utes, this trend probably meant a higher standard of living. Sometime toward the end of this phase, however—probably in the 1840s—it seems that something happened to effect the wildlife populations in the region drastically. Joseph L. Wescott, who built his first log cabin on Willow Creek in 1865, was the first white immigrant to settle in Middle Park. Wescott once told fellow Middle Park resident J.W. Davies of a terrible snowstorm that devastated the local animal populations one winter. Wescott recalled that "1,500 elk

<sup>&</sup>lt;sup>7</sup> Frank McNitt, *The Indian Traders* (Norman: University of Oklahoma, 1962), 5, 17.

<sup>&</sup>lt;sup>8</sup> Ibid, 18.

<sup>&</sup>lt;sup>9</sup> William P. Eckerle, "Eolian Geoarchaeology of the Wyoming Basin: Changing Environments and Archaic Subsistence Strategies in the Holocene," in *Changing Perspectives of the Archaic on the Northwest Plains and Rocky Mountains* edited by Mary Lou Larson and Julie E. Francis, 139-167. (Vermillion: University of South Dakota Press, 1997).

starved to death at his cabins on Grouse creek, and [another] 3,500...elk [died] on a small strip of wind-swept ground on Willow creek, which give one a faint idea of the many thousands, perhaps a half million dead elk in Grand county." Davies asked Wescott if his friends, the Utes, were responsible for the disappearance of the bison in the region as there were bison skulls all around. Wescott answered that "he had asked his Indian friend Chief Peah of the Utes that same question years before, to which Chief Peah replied: Buck no kill 'em buffalo. Snow three pony deep at Hot Sulphur Springs." Davies added that the renowned scout, trapper and mountain man, Jim Baker, once recalled that "the fifteen feet of snow in Middle Park that winter killed off all kinds of wild game in Middle Park and that the snow stood twelve feet deep at the forks of Cherry creek and the Platte river where Denver now stands, where he (Baker) wintered with the Utes and where the Indians lost ninety percent of their saddle horses."<sup>10</sup> It seems likely that the storm that caused this devastation probably occurred sometime during the early to mid 1840s. By the 1870s, wildlife populations had rebuilt and were numerous enough to support a vibrant trade in commercial and recreational hunting that lasted the better part of thirty years.

Before recreational or sport hunters ever made it to Colorado, the Utes, local settlers, and market hunters engaged in a multilateral assault on local wildlife populations. Congress established the Colorado Territory in 1861, when the population for the entire Territory—with the same boundaries as it has today—was 34,277, only a

<sup>&</sup>lt;sup>10</sup> "The Davies Manuscript," Davies Collection, TMS 1:300, Grand County Historical Society. The Utes apparently managed to preserve the remnants of their herd by feeding the surviving ponies bark and twigs from fallen cottonwood trees.

handful of whom lived in more remote areas such as the Western Slope.<sup>11</sup> Along with Joseph Wescott, Charlie Utter was one of the earliest residents of the region. Utter, a resident of Hot Sulphur Springs, established a hunting camp in the Gore Range in 1859 and delivered wagonloads of deer, elk, and antelope to the mining camps in Central City and Georgetown. There is no indication as to how large these wagons were, but one commercial hunter who killed big animals in the same region during the 1870s averaged between 2,000 and 6,000 lbs of meat per load. In 1870, Dan Perkins and his father (name unknown) came to the Western Slope to join the hunting market. Like Charlie Utter, Sam Martin, and others, the Perkinses sold their kills to the miners in Georgetown and Central City.<sup>12</sup>

In 1875, preliminary evaluations indicated the existence of 'an important silvercopper-lead complex" among the high easterly peaks of the Never Summer Mountains. The discovery precipitated a rush of prospectors to the Western Slope and in a short time, additional filings appeared on the books, one for gold placers on Willow Creek, and another for the Gore Range at the western end of Middle Park. The population grew so quickly that county commissioners instituted two new election precincts in the region. Farther south, carbonate strike were filed near the present location of Leadville and yet another population boom on the Western Slope ensued.<sup>13</sup>

Another longtime Hot Sulphur Springs resident and first official mail carrier for Middle Park, William Kimball, also entered the meat market on the Western Slope.

<sup>&</sup>lt;sup>11</sup> <u>http://www.archives.state.co.us/1870/index.htm</u>. I have been unable to determine the population density for specific geographic locations such as Middle Park, but the lack of organized counties in the western half of the state suggests that the majority of people lived along the Front Range and were undoubtedly engaged in mining the regions' recently discovered mineral wealth.

<sup>&</sup>lt;sup>12</sup> "Old Trappers," Jenne Papers, Vol. 1, MS, Grand County Historical Society.

<sup>&</sup>lt;sup>13</sup> Robert C. Black, *Island in the Rockies: The Pioneer Era of Grand County, Colorado* (Granby, CO: Grand County Pioneer Society, 1969), 111-112.

Kimball and his brother Gaton hunted antelope, deer, and elk and caught fish out of the Colorado River, all of which they hauled to different mining towns in the region. Kimball and his brother sold the deer for "\$1.00 a piece sometime [*sic*] selling as many as twenty a day. And bringing back theirs [*sic*] winter supply of groceries."<sup>14</sup>

It is virtually impossible to determine the quantity of animals that market hunters and Utes—whose hunting rights were still intact—extracted from the Western Slope during the second half of the nineteenth-century.<sup>15</sup> Apparently, the market for charismatic big wildlife was a growing concern, for on December 3, 1866, the Territorial Legislature of Colorado created an act "To Preserve the Game in the Territory of Colorado." This new piece of legislation limited the hunting season to the months between the 16<sup>th</sup> of August and 14<sup>th</sup> of January each year, and carried a fine of \$50 for "each and every offense" of hunting outside the prescribed season.<sup>16</sup> Because Colorado was still a territory, the Utes retained their rights to hunt in their traditional range on the Western Slope. The territorial assembly, however, had not authorized legislation for the appointment of deputy wardens, thus there was no mechanism for enforcing the new laws.

Despite these new restrictions, the northern Utes still had to compete with local and professional hunters for access to the region's wildlife. John Himbaugh was one of the first settlers in Middle Park. Himbaugh moved to Hot Sulphur Springs in 1874 and kept a diary until he left for Colorado Springs in 1877. Himbaugh recorded several instances of local citizens interacting with the Utes. Apparently, the Utes often came to

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> Donald Callaway, Joel Janetski, and Omer C. Stewart, "Ute," ed. By Warren L. D'Azevedo, *Great Basin, Vol. 11, Handbook of North American Indians* Washington, D.C.: Smithsonian Institution, 1986): 355.

<sup>&</sup>lt;sup>16</sup> Territory of Colorado. Organic Act of the Territory: with amendments thereto. Legislative Assembly, Sixth sess, 3 December 1866.

the hot springs (for which the town was named) to trade "buckskins" for manufactured goods, and to race their horses for cash prizes. In 1876, W. J. Stokes and W. N. Brown, who had visited Middle Park during the previous summer, imported a store of dry and manufactured goods, opening a mercantile in Hot Sulphur Springs. In a short time, the store evolved into a trading post where the Utes "swapped meat and skins for goods. A mountain sheep sold for \$6.00 and an antelope for \$2.50."<sup>17</sup> There is no indication as to the volume of trade, but Himbaugh's reference to these incidents suggests that it was an all day affair and that many settlers attended these small-scale trade fairs.

While Middle Park residents sometimes enjoyed good relations with the Utes, and shared access to the commons, things did not always go well. The year before Stokes and Brown built their store in Hot Sulphur Springs, Chief Colorow's band of Utes attempted to discourage white settlement in Middle Park. Although white settlers in the region often accused Colorow's band of having "slaughtered them [the game], and set fire to the forests in order to discourage and drive out the whites,"<sup>18</sup> it seems highly unlikely that one band of Utes could have eliminated all of the animals in the area in just one season. Perhaps the most interesting and even controversial aspect of Himbaugh's diary is his use of the word "slaughter" in reference to Ute hunting. Himbaugh may have simply used "slaughter" in the place of "killed" or even "hunted." However, he may have also used the word as a derogatory term, painting the Utes as destructive. There is no further evidence, however, to suggest that Himbaugh had anything negative to say about the Utes. In fact, another one of his references to white-Ute relations was about a horse race in which local white youths raced against the Utes. While the Utes won the "purse,"

<sup>&</sup>lt;sup>17</sup> "Early History of Hot Sulphur Springs," J. N. Pettingell Collection TMs 26, Grand County Historical Society.

<sup>&</sup>lt;sup>18</sup> Ibid.

Himbaugh did not refer to them in a disparaging manner.<sup>19</sup> In this light, Himbaugh probably did not use the word "slaughter" in any manner intended to bring ill fame to the Utes.

Although the Utes may have set fires to intimidate the local citizenry, and ensure their own primacy over the commons, it is possible that they understood that fire was essential for managing the local ecosystem and for maintaining healthy wildlife populations. Local settlers like John Himbaugh sometimes recalled how the Utes used fire to intimidate the local citizenry, by the end of the 1870s their conversations turned to another aspect of the Ute use of fire. In 1879, White River Indian Agent Nathaniel Meeker reported that the Utes often burned forests to ensure that they had a ready supply of dry wood close to the agency for winter fire use. And in a letter to James Thompson, Special Agent for the General Land Office, Superintendent of the White River Agency J.B. Donaldson, reported that the Utes burned forests "in order that their ponies could travel...[because there was] now too much timber."<sup>20</sup> The Utes used fir to effectively alter the environment. On the one hand, they used fire to ensure that they had firewood to last through the winters, and on the other hand, they used fire to clear undergrowth from forests. There is reason to believe that the Utes also recognized another, and even more important use for fire. Wildlife biologists and ecologists suggest that while fireinduced alterations in groundcover can displace certain wildlife species, the elimination of that same foliage can entice other animal species to occupy the affected area. Today, experts speculate that benefits to wildlife are likely to include higher birthweights, higher

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Congress, Ute Indians of Colorado, 46<sup>th</sup> cong., 2<sup>nd</sup> sess., 1880, S. Doc. 31, Serial 1882, 67, 106.

survival of adults, increased recruitments into the postfire populations, and for hunted wildlife species. improved harvestable yields.<sup>21</sup>

Yet the Utes were not the only ones starting fires on the Western Slope. Whites hunted the Western Slope in significant numbers during the summer and fall seasons. Indian agents suspected that "many of these fires are due to their carelessness, others to the actual settlers themselves."<sup>22</sup> Reports of this nature occurred in the record only rarely, suggesting that the Utes probably used fire far more extensively than the local white population and did so intentionally. On those occasions when the historical record established a connection between whites and fire, it was usually in reference to an accident.

The 1870s saw the beginning of a dramatic population increase in Colorado. While the population of the Colorado Territory was approximately 34, 300 people in 1860, by 1870, the population for the entire territory increased by nearly 7,000 people. In Clear Creek, Gilpin, Larimer, Park, and Summit counties--those counties that relied most on big animals from the Western Slope for their protein-the population rose to more than 8,500.<sup>23</sup> The Colorado Territorial legislation had a rather unique method for dealing with the population increase. The first step that the legislative assembly took involved moving the hunting season forward by two weeks, thus ensuring that hunters had access to the charismatic big wildlife before winter weather barred humans from the higher elevations. That the assembly also supported market hunting is clear from the section that forbade hunters from wasting their kills, requiring them instead to "preserve,

<sup>&</sup>lt;sup>21</sup> Leonard DeBano, Daniel G. Neary, and Peter F. Ffollicott, *Fire's Effects on Ecosystems*.(New York: John Wiley and Sons, Inc., 1998), 214-15, 217-18. <sup>22</sup> Congress, *Ute Indians of Colorado*, 46<sup>th</sup> cong., 2<sup>nd</sup> sess., 1880, S. Doc. 31, Serial 1882, 67, 106.

<sup>&</sup>lt;sup>23</sup> http://www.archives.state.co.us/1870/index.htm

or...bring into market, each and all parts of such game that [were] edible."<sup>24</sup> These new hunting regulations put no limit on the quantity or sex of the animals hunters could kill. The only real limitations were the five-month hunting season which ran from the first of August to the thirty-first of December, and the restriction against leaving carcasses to rot, which was a misdemeanor that carried a fine of \$25 for "each buffalo, elk, deer, mountain sheep, antelope or fawn" illegally taken or disposed of.<sup>25</sup> Many of the settlers in the region "made a living by killing game and catching fish for market in Georgetown, Central City and other live mining towns. Some was shipped as far east as N.Y. City."<sup>26</sup> Clearly, extra-local authorities from Denver and other urban centers used the Western Slope's wildlife population to encourage growth. While locals on the West Slope commons probably did not see it coming, the Territorial legislative assembly had a plan.

By 1876, Colorado gained admission to the Union as the 38<sup>th</sup> state. The new state legislature adopted "An Act for the protection of wild game and insectivorous birds" on 15 March 1877. From the moment Colorado's first legislative assembly passed this resolution, the contest for the commons was on. Apparently, the state assembly recognized the need to further curtail hunting and reduced the open season on charismatic big wildlife by six weeks. The new season ran from September 15 to December 31 each year. The assembly also saw continuing problems with waste and enacted a law that stated that only butchers and merchants were allowed to sell hind quarters or specific cuts of meat and were compelled by law to prove they had the entire carcass and were not

<sup>&</sup>lt;sup>24</sup> Territory of Colorado. Organic Act of the Territory: with amendments thereto. Legislative Assembly, Ninth sess,

<sup>1</sup> January 1872.

<sup>&</sup>lt;sup>25</sup> Territory of Colorado. Organic Act of the Territory: with amendments thereto. Legislative Assembly, Ninth sess, 1 January 1872.

<sup>&</sup>lt;sup>26</sup> "Early History of Hot Sulphur Springs," J. N. Pettingell Collection TMs 26, Grand County Historical Society

engaged in the unlawful practice of selling meat without proof that they possessed the entire animal. The new hunting statutes also outlawed the use of corals or enclosures to trap and kill animals without the express permission of the owner of the enclosure. The fine for breaking these laws carried a fine of \$50 - \$200.00 for each offense and thirty to ninety days in the county jail.<sup>27</sup> Already, extra-local authorities began to assert their dominance over the affairs of the locals on the West Slope. But supplanting the locals' ideas the disposition of the commons was not as easy as passing legislation. Conservationists and bureaucrats would both come to understand the tremendous resistance their ideas about wildlife and other resources could generate.

Perhaps the most intriguing aspect of this change in the penalty aspect of this law was the possibility that offenders had to serve time in jail. In his study on the birth of conservation in America, historian John Reiger traces the roots of the sporting ethic to Robert Barnwell Roosevelt, Theodore Roosevelt's uncle. In the 1860s and 70s, the elder Roosevelt wrote extensively on the sportsman's ethic, the most fundamental aspect of which was the "right of fish and deer to breed unmolested." The primary means of enforcing this policy, he wrote, was through proper legislation and the strict enforcement of hunting laws. "The only 'cure'...for the 'recklessness of the [poacher] and the ardor of the [trophy hunter]' he proclaimed, was a 'few months in jail."<sup>28</sup> While it is impossible to tell if Roosevelt's ideas influenced Colorado's legislative assembly directly, Colorado's passage of these new and stricter hunting laws seemed to put the new state right on the conservation curve. At this early stage, there was no provision for a permanent Game Commissioner, and the Colorado legislature had only given county

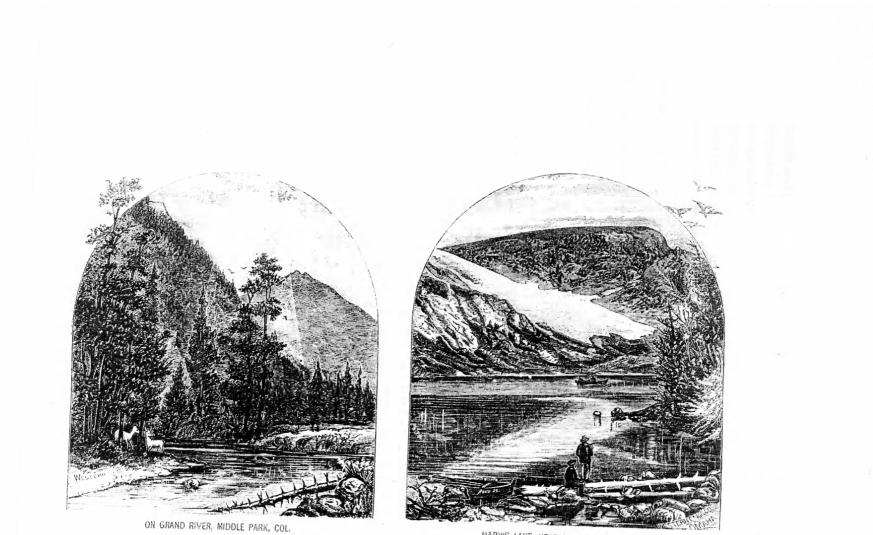
<sup>&</sup>lt;sup>27</sup> Colorado. *General Statutes*. General Assembly, Fourth sess, 1 August 1883.

<sup>&</sup>lt;sup>28</sup> Reiger, American Sportsmen, 76.

commissioners "the power to appoint special game wardens, who shall hold their office during the pleasure of the board."<sup>29</sup> Getting any West Slope local to discharge the office of deputy warden was nothing short of a challenge. Though there must have been some individuals willing to take the position, their efficacy was not sufficient to render any apparent evidence of successful enforcement of hunting laws. Yet as we will discuss later, the problem of enforcing these new laws presented the State Wildlife Commissioner with a completely new set of problems; ones that would be seriously augmented by the refusal of the Utes to conform to the new laws coupled with the exponential growth of participants in market and recreational hunting.

The growing numbers of people engaged in market and sport hunting can be traced to two factors: 1) the population increase that resulted from continued mining operations, and 2) the proliferation of literature on the Western Slope 's ample wildlife populations. Commercial hunters continued to hunt throughout Middle Park and the Western Slope trying to satisfy the market for wild animals and sport hunters began to answer the call to come to Colorado to hunt. In the late 1870s, Robert Strahorn embarked on a journey through the West by rail. His mission was to "introduce all classes to the great central region lying beyond the Missouri." Strahorn kept careful notes of the various attributes of each region, paying close attention to their value as a destination for well-heeled vacationers and sportsmen. Strahorn mentioned Middle Park as an ideal destination for touring and hunting, praising Middle Park as the "finest" of the park regions of Colorado, holding innumerable attractions for:

<sup>&</sup>lt;sup>29</sup> Colorado, *Laws*. General Assembly, 5<sup>th</sup> sess., 7 January 1885.



REACTED VIA UNION PACIFIC RAILWAY, COLORADO CENTRAL BRANCH.

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health and pleasure-seekers or sportsman...Its accessibility, the wildness, singularity and sublimity of its scenery; the coolness, salubrity and invigorating influences of its climate and its inviting baths [Hot Sulphur Springs]; its dozens of rivers and lakes, alive with gamy grout, and its deep solitudes of mountain and forest, only broken as haunts for noble game—these alone render it a mecca to be eagerly sought.

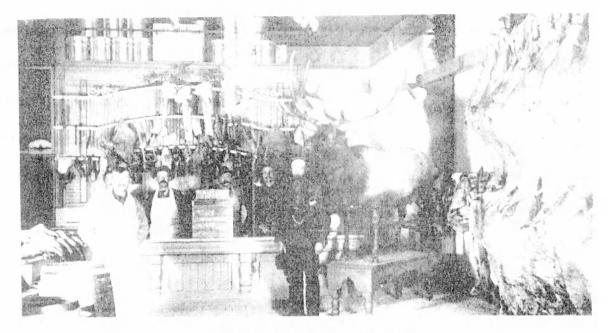
The stage ran "tri-weekly...[with] fare from Georgetown to the [Hot Sulphur] Springs, \$8...[and] Saddle ponies [could be rented at the Springs at \$1.50 to \$2 per day. Board [could] be obtained in all desirable localities at from j\$2 to \$3 per day."<sup>30</sup>

Veteran bison runner Frank Mayer did not answer Strahorn's call personally; it was his long acquaintance with a former bison-hunting partner that drew him to the Western Slope. After six (somewhat) profitable years hunting bison, Mayer abandoned the Plains for an opportunity to check out some mining prospects in Leadville Colorado. Mayer acquired his mining interests by "grubstaking an old trapper" he had met while hunting bison on the Plains. While Mayer initially discounted the old timers' calls to "come a-runnin," he discovered upon his arrival that there was definitely a mining boom on in the Leadville region.

In 1878, Leadville was in the midst of a population explosion. The population was 14,820 (Denver had 35,629) and growing by the day.<sup>31</sup> Mayer noted that there was no shortage of money, but the cost of living was exorbitant and the quality and quantity of food, particularly meat, was lacking. Mayer recalled that he paid "\$8 a day for room alone, and \$1.50 for a leathery beefsteak." The price of the meal itself inspired him to take up his rifle and re-enter the commercial meat market.

<sup>&</sup>lt;sup>30</sup> Robert E. Strahorn, To the Rockies and Beyond, or a Summer on the Union Pacific Railway and Branches: saunterings in the popular health, pleasure, and hunting resorts of Nebraska, Dakota, Wyoming, Colorado, New Mexico, Utah, Montana, and Idaho with descriptions of the Black Hills, Big Horn and San Juan Regions, and Special Articles on Stock Raising, Farming, Mining, Lumbering and Kindred Industries of the Trans-Missouri Region (Omaha: Omaha Republican Print, 1878), 64-66.

<sup>&</sup>lt;sup>31</sup>http://manta.library.colostate.edu/research/colorado/City1.pdf



FULTON MEAT MARKET IN DURANGO COLORADO

Having had several years of experience hunting bison on the Plains, Mayer was well equipped to supply the Leadville meat market with wild animals and he managed to secure contracts for " a minimum weekly supply of three tons of assorted big-game meat, elk, deer, antelope, and bighorn...at prices guaranteed over a period of six months. [He] was to get 10 cents a pound for elk, deer and antelope; 12 ½ cents for mountain sheep, 15 cents for bear, carcasses to be rough-dressed with heads, hides, and feet on." Mayer contracted with a teamster to haul the weekly kills for fifty percent of the profit.<sup>32</sup>

Mayer's outfit consisted of his mining partner Hank (who was also a trapper), whom he paid \$5.00 per day to cook and help around camp. They took a supply of flour, sugar, coffee, baking powder, dried fruit, tobacco, canned goods, bacon, and whiskey with them into the hills of Middle Park, where they set up camp in the Gore Range near

<sup>&</sup>lt;sup>32</sup> Frank H. Mayer, "Market Hunting in the 70s," Edited by Charles B. Roth, Outdoor Life, (June 1935), 1.

Kremmling on August 1, 1878. Mayer was extremely particular about his weapons and usually, even when he was bison hunting, carried at least three guns. On this expedition, he carried a Sharps .40/70, a Ballard .40/90, and a Maynard .40/70 with an extra 28-gauge shotgun barrel. Hank brought a Sharps .45/70. They also took a supply of primers, 100 rounds for each piece and an extra 1,000 patched bullets that could work in all of the .40 caliber rifles. Preferring to use English powder in his cartridges for he found it "superior to any of American make." Mayer explained that he did "not mean to be disloyal to American institutions in saying this. American powders are good enough propellants, but they have one common failing. They burn hot, dry, and cakey in the barrel, making cleaning a somewhat tedious and more or less unsatisfactory job."<sup>33</sup>

Over the course of approximately three months, Mayer killed and shipped almost 250 animals weighing approximately 75,000 pounds. The aggregate numbers are extremely difficult to calculate, but wildlife biologist R. Bruce Gill estimates that Mayer harvested 89 mule deer, 85 antelope, 70 elk, seven bison, five bighorns, and one grizzly.<sup>34</sup> Mayer understood the nature of his work and the results that it could produce. Having hunted bison on the Plains for six years, he "saw the mountainous stocks of hides at Denver, Laramie City and Doge awaiting shipment [and] realized the buffalo was doomed." Mayer acknowledged that if the state did not enact legislation to protect the wildlife populations from over-hunting (even from the likes of himself) they would suffer the same fate as the bison. In his journal entry for August 18, he wrote:

I've been a killer ever since coming out here, but I believe laws will have to be passed to protect these wild-game animals. I am convinced of it. As long as it is

<sup>&</sup>lt;sup>33</sup> Ibid, 1, 13.

<sup>&</sup>lt;sup>34</sup> R. Bruce Gill, *Declining Mule Deer Populations in Colorado: reasons and responses* (A report to the Colorado Legislature, November 1999), Special Report No. 77 Denver: Colorado Division of Wildlife, June 2001): 1.

free for everybody to slaughter as many animals as he likes, the thing that happened to the buffalo will happen to the deer, elk, and pronghorns. They will be wiped out.<sup>35</sup>

Mayer noted that as the cold weather advanced animals became increasingly easier to procure. He killed over fifty percent of his take between September 16 and October 24 when the elk and deer began to move out of the mountains into the lower elevations, driven by cold temperatures and snow. On October 1, Mayer observed that as "the migration is now well begun I encounter elk and deer at all hours of the day. They are crossing the river junction in such numbers that shooting them requires no skill." Mayer was able to fill his "daily quota of a dozen head." The carcasses froze overnight, and by hanging them in old sheds, he preserved them until the teamster arrived to haul them back to Leadville.<sup>36</sup>

By October 24, Mayer was back in Leadville, cashing out and bound for Denver with \$1,700 in his account. Hank stayed in the hills to trap over the winter. Mayer knew that for the bountiful herds the end of days were close at hand and in closing his diary he wrote, "the only consolation that the remembrance of it can afford me is the certainty that my record will never again by duplicated by a market hunter. The game is going."<sup>37</sup>

<sup>&</sup>lt;sup>35</sup> Ibid, 94.

<sup>&</sup>lt;sup>36</sup> Ibid, 70-71. The River crossing he wrote of was at the confluence of the Blue River and the Colorado River south of Kremmling, Colorado.

<sup>&</sup>lt;sup>37</sup> Ibid, 71.



COMMERCIAL ELK AND DEER HUNTERS AND THEIR KILL IN COLORADO IN 1885

Mayer's reasons for hunting are rather simple to interpret. He was in it for the money. Moreover, he was an astute businessman. He possessed a keen business sense, and had an eye for opportunity. Perhaps, if he had been more inclined to an urban lifestyle, he might have been a banker or perhaps owned his own law firm. But Mayer loved the outdoors, and with his sharp intellect, business acumen, and his talent with a Sharp's .40/70, he probably saw only one possible outlet for his talents: the hunt. Commercial hunters like Mayer probably had something in common with the Utes and sport hunters. Although he hunted for for his living, rather than as sport, he subscribed to the one-shot, one-kill ethic, one of the basic tenets of the sportsmen's code. It is important to note, however, that Mayer's devotion to the single-shot kill had its roots in economics. Simply put, any time he spent more than one cartridge on a kill, he began to lose money. For in contrast to sportsmen, Mayer was aware of the cost of ammunition and how carelessness could eat into his profit margin. For Mayer, as for the Utes, efficiency was the order of the day. White market hunters were not the only ones taxing the Western Slope 's wildlife populations. Now the Utes had a ready market for the furs, hides, and robes they harvested. White River Agent Nathaniel Meeker reported that a number of posts operated on the Western Slope. Charles Perkins established a post on the "Snake River, 90 miles distant [from the Uintah reservation], with heavy stocks of goods; Mr. Lithgow, on Bear, 45 miles distant; Mr. Peck, on Bear, about the same distance, and Taylor & Perkins, on Mill Creek, 29 miles just over the line." The proximity of these posts to the Western Slope meant that the Utes easily transported their kills from their favorite hunting grounds to these posts, spending what money they had where they sold the pelts and meat for cash and goods.<sup>38</sup>

All of these traders would have held government issued licenses to trade with the Utes, and until Colorado passed a law against trading with Indians in 1885, Western Slope traders probably enjoyed a dependable if not prosperous commerce with the Utes and commercial hunters on the Western Slope. Contrary to the earlier days when government agents had difficulty enforcing the laws against trading liquor to the Indians, by the time Lithgow, Perkins, and Peck opened their trading posts on the Western Slope, their commerce with the Utes consisted of bartering hides for goods, or hides for money. Historian Frank McNitt states that "firearms were not usually a trading post commodity, nor was whisky freely dipped from a hidden barrel: the trader, wishing to stay alive, placed too high a value on his life."<sup>39</sup> Moreover, the proximity of these trading posts to the white settlements and the Ute reservations meant that these local whites, both settlers and Indian agents scrutinized the traders' activities.

<sup>&</sup>lt;sup>38</sup> Congress, Ute Indians of Colorado, 46<sup>th</sup> cong., 2<sup>nd</sup> sess., 1880, S. Doc. 31, Serial 1882, p. 125.

<sup>&</sup>lt;sup>39</sup> McNitt, The Indian Traders, 69.

When the Utes went on one of their hunting trips in midsummer of 1879, Meeker reported that they had killed "several hundred antelopes...in Middle Park...They also killed three bison, which may be called a mountain buffalo." Earlier in the decade, Meeker lamented, there were some two-dozen bison in the park. Local settlers had largely "refrained from shooting them, as they held them both as a curiosity and an attraction, but the Indians have killed them off so that now there are less than half a dozen."<sup>40</sup> The new settlers brought with their ideas about the land and its resources with them. For many of the immigrants who lamented the passing of charismatic big wildlife, the days of the commons were at an end and the time for extra-local control over the resources was at hand, and "suffocating prior local claims beneath the blanket of extra-local, federal authority became a way for immigrants to assert control over the mountains, forests, and game."<sup>41</sup>

By 1880, Colorado's population neared 200,000 people, over half of who lived in the counties that continued to rely to some degree on charismatic big wildlife from the Western Slope for protein.<sup>42</sup> Colorado's legislative assembly took further note of the diminishing wildlife populations and in 1885 outlawed the killing of any wildlife for "the sole purpose of securing the hide or skin of any such animal or animals." The assembly also outlawed the commerce in "any skin or skins of buffalo, elk, deer or antelope, either

<sup>&</sup>lt;sup>40</sup> Congress, *Ute Indians of Colorado*, 46<sup>th</sup> cong., 2<sup>nd</sup> sess., 1880, S. Doc. 31, Serial 1882, p. 148-9. In his study of the decline of the American bison population, William Temple Hornaday estimated that the number of American bison running wild and unprotected as of January 1, 1889, in Colorado and southern Wyoming, totaled a scant 46 animals; more than half of the total number of wild bison within the United States' boundaries. Hornaday did not include the recorded 256 captive bison in the United States, the bison under government protection in Yellowstone National Park, (200), or the estimated 550 bison believed to exist in Canada. William Temple Hornaday, *The Extermination of the American Bison: with a sketch of its discovery and life history*, (Seattle: Shorey Book Store, 1971), 525.

<sup>&</sup>lt;sup>41</sup> Warren, The Hunter's Game, 177.

<sup>&</sup>lt;sup>42</sup> <u>http://www.archives.state.co.us/archist.html</u>; <u>http://www.archives.state.co.us/archist.html</u>; <u>http://manta.library.colostate.edu/research/colorado/County1.pdf</u>.

tanned or in their natural condition, that have been taken by Indians, or other hunters, who kill such animals for the sole or chief purpose of taking their skins." County commissioners received the power "to appoint special game wardens," and instruct Judges to "appoint special constables" to uphold the laws and arrest, without warrant, suspected violators.<sup>43</sup> For the first time ever, Colorado's lawmakers enacted legislation that was more than just rhetoric. Yet, the appointment of special wardens and constables did not mean that hunters suddenly developed a new respect for the law.

Following the Meeker Massacre in 1880, the government forced over 650 Utes from the White River Agency to relocate to the Uintah Reservation in eastern Utah, where they joined another 800 Utes from various Colorado and Utah bands. The Uncompanying Utes had to sell their land and relocate—361 of them—to the Ouray Reservation, established by executive order in 1882.<sup>44</sup> Despite their removal from their traditional homes on the Western Slope, however, the Utes continued to return to hunt in Colorado.

The White River Utes' 1863 treaty with the United States government recognized their right to hunt in their traditional commons on the West Slope, specifically their favored hunting grounds on the "Bear River and White River District, generally conceded to be the best game country in the Union."<sup>45</sup> Although the Northern Utes officially lived on the Uintah-Ouray Reservation in Utah, their government agent was frequently unable to furnish them with rations. Since the mid 1880s, the Utes took advantage of the reservation pass system, traveling to their traditional hunting ground in Rio Blanco, Garfield, and Routt Counties. While fish and big animals were scarce near the Uintah-Ouray reservation in northeast Utah, the Utes were able to

<sup>&</sup>lt;sup>43</sup> Colorado. Laws. General Assembly, Fifth sess, 7 January 1885.

<sup>&</sup>lt;sup>44</sup> Callaway, Janetski, and Stewart, "Ute," ed. By Warren L. D'Azevedo, Great Basin, Vol. 11, Handbook of North American Indians, (Washington, D. C.: Smithsonian Institution, 1986): 355.

Sumner Matteson, "Red man and White Man in Colorado's Hunting Fields," Outing, Vol. 38 (1901), 32.

access charismatic big wildlife within a three-day ride of the reservation to their former home range in northwest Colorado.

November presented the best time to kill mule deer and the Utes often hunted on the Western Slope at the confluence of Wolf Creek and White River (about 95 miles from the reservation) and at four separate springs along Rawlins road, (25 miles farther). On one expedition, a party of five Utes spent three days in this region and harvested 21 animals, (bucks only) and were forced to leave nearly a dozen behind simply because the wounded animals managed to make it areas that the hunters, probably due to rough terrain, were unable to penetrate.<sup>46</sup> Despite the fact that this level of waste was not a common occurrence, incidents like these gave the Utes' detractors more fuel for their campaigns to have them restricted to their Utah reservations. Some locals, allied with extra-local authorities and conservationists often complained the Utes killed not only deer and elk, but also killed "cattle by the thousands," and burned the winter ranges so that the cattlemen were unable to feed their stock. They also reported that the Utes' took only the pelts of the animals they killed, leaving "rotting carcasses" in their wake.<sup>47</sup> Curiously, in contrast to cases such as the ones John Himbaugh wrote about in his diary, the local citizenry was not only concerned with Utes killing wildlife, but also about the loss of their private property, specifically their cattle. That the Utes would kill cattle to intimidate the locals and to vent their frustrations seems probable. That they would kill wild animals and leave them to rot, particularly when they still depended on them for subsistence is another matter, one worthy of further investigation.

<sup>&</sup>lt;sup>46</sup> Sam Q. Robinson to Adjutant General, August 30, 1886, 4137-1886, Letters Received by the Office of Indian Affairs, 1881-1907, RG 75, NA., pp, 1, 16. Robinson does not state why the Utes had only bucks in their possession.

<sup>&</sup>lt;sup>47</sup> Ora Brooks Peake, *The Colorado Range Cattle Industry* (Glendale, CA: The Arthur H. Clark Company, 1937), 50-51.

In the mid 1880s, the White River Utes, who numbered just over 600, occupied the bottom tier of the social hierarchy on the Western Slope.<sup>48</sup> By comparison, the official census for counties on the Western Slope at the same time put the white population at over 150,000. In a similar situation in New Mexico at the end of the nineteenth-century, Navajos, Apaches, and numerous other tribes who occupied "the bottom rungs of the social ladder" in the territory competed with each other and with white settlers for access to hunt in New Mexico's Mogollon Mountains. In both cases, incumbent wildlife officials "excoriated Indian hunters for either-sex deer hunting, market hunting, and wastefulness."<sup>49</sup> In both instances, small populations of Indian hunters attempted to continue their subsistence hunting practices only to face the wrath of settlers, state officials, and conservationists who looked upon Indian hunting methods with disdain. Whether or not the Utes were wasting meat remains unknowable, however, given the constant antagonism they received from private and public sectors, it seems reasonable to believe that some of the alleged depredations against private property were legitimate.

The Utes, along with market hunters, and sport hunters continued to take their toll on the local wildlife populations, and in late March 1887, the Colorado legislature outlawed the killing, wounding, ensnaring or trapping of "bison or buffalo with the State for a period of ten (10) years." The State legislature also put a hunting moratorium on Bighorn sheep for a period of eight years, and on mountain goats for ten years. The hunting season on antelope, deer, and fawns ran from September 1 to November 31. Elk season (for bull elk) also ran from September 1 through November 31. Hunting for the "sole purpose of securing the skins or horns," however, became illegal throughout the

<sup>&</sup>lt;sup>48</sup> John C. Ewers *The Horse in Blackfoot Indian Culture: With Comparative Material from Other Western Tribes*, (Washington: Smithsonian Institution Press, 1955, 1985), 27.

<sup>&</sup>lt;sup>49</sup> Warren "The Hunters Game," 180.

year.<sup>50</sup> The creation of new laws did little to help stop the overexploitation of the region's charismatic big wildlife, particularly the few remaining bison in the region despite the moratorium the state placed on this species. By the late 1880s, the bison and bighorn populations were dwindling at an alarming rate.

Colorado's human population continued to expand and by 1890, the population of the entire state reached 413, 239, while the population for those counties still dependent on Western Slope wildlife for their nutritional and economic needs more than doubled from 110,410 in 1880 to 221, 858.<sup>51</sup> The state legislature again took steps to curb the slaughter and in early January enacted legislation creating an Office of the Game and Fish Warden and providing for the appointment of district and deputy wardens throughout four separate districts in the state, each comprised of a given number of counties. For instance, district two encompassed Garfield, Rio Blanco, and Routt counties—the Utes' traditional hunting grounds and the favored destination of commercial and sport hunters—all of which lay on the Western Slope. The contest for the commons was on.

1891 was a notable year for Colorado conservationists. In early March, Congress repealed the timber-culture laws and passed the Forest Reserve Act, granting the president the power to "set apart and reserve" timber stands in any "State or Territory having public land and bearing forests."<sup>52</sup> Within seven months, President Benjamin Harrison set aside the White River Plateau Timber Land Reserve as the first national

<sup>&</sup>lt;sup>50</sup> Colorado. Laws. General Assembly, Sixth sess., January 1887.

 <sup>&</sup>lt;sup>51</sup> <u>http://www.archives.state.co.us/archist.html; http://www.archives.state.co.us/archist.html; http://manta.library.colostate.edu/research/colorado/County1.pdf.</u>
 <sup>52</sup> U.S. Statutes at Large 26 (1891): 1095-1103. An act to repeal timber-culture laws and for other

<sup>&</sup>lt;sup>52</sup> U.S. Statutes at Large 26 (1891): 1095-1103. An act to repeal timber-culture laws and for other purposes.

forest in Colorado.<sup>53</sup> The local commons, as they once existed in Colorado ceased to exist and the public commons replaced them. With one signature, the United States government, as an extra-local authority, redefined the Western Slope and all of its plant and animal inhabitants.

Taking advantage of the new federal legislation, the Colorado General Assembly immediately moved to deal with the deplorable condition of the state's wildlife management policies and with the strength of the new federal laws to support them, passed two bills that further restricting hunting methods and the disposition of wildlife taken in the field. The Assembly outlawed the use of dogs "for the purpose of running or coursing deer, antelope or elk." This law carried a penalty of a fine of \$10 to \$50 each time a suspect was apprehended. In another move that was sure to please all conservationists, the Assembly, in language that was sure not to startle recreation and sport hunters, enacted legislation that ended market hunting in Colorado. The language of the law was specific in its intent for the assembly did not target the hunters. Rather, they set their sites on the butchers and shop owners who sold the meat for retail. The new law stated that "Any person, or persons having in their possession and offering for sale, or causing to be offered for sale, any game, game fish or game fowl, killed within the boundaries of the State of Colorado, shall be guilty of a misdemeanor, and upon conviction, shall be fined n the sum of not less than five dollars nor more than one hundred dollars for each piece... offered for sale."54

While the legislature had done their part by enacting legislation to protect the wildlife populations, the State Fish Commissioner's job was not easy. In his 1893 report

<sup>&</sup>lt;sup>53</sup> U.S. Statutes at Large 27 (1891): 993. By the President of the United States of America. A Proclamation.

<sup>&</sup>lt;sup>54</sup> Colorado. Laws. General Assembly, Eighth sess., 7 January 1891.

to the governor, State Fish Commissioner Gordon Land wrote about the myriad problems he encountered while trying to enforce the new laws. Land believed that one of the most critical problems he dealt with was the "utter inefficiency of local wardens, who [were] influenced by their surroundings and governed by their friendships." The district wardens that Land spoke of, particularly those living in the northwest section of the state, were unwilling to report against their neighbors, or help in the fight against the violator's of the state's hunting laws.<sup>55</sup>

Commissioner Land had little success during his tenure as State Fish Commissioner and in late 1893, the governor appointed a new Fish Commissioner, W. R. Callicotte. Callicotte successfully secured the cooperation of the press, and managed to organize, with limited success, the sport hunters and fishers in the Colorado, Utah, and Wyoming region into "The Colorado Sportsman's Association."

Callicotte, in his biennual report to the governor, stated that while the Utes' hunting incursions into Colorado were problematic—in so far as they incurred the wrath of settlers and sport hunters—the quantity of animals they took every year was "greatly exaggerated." The real problem, he observed, was the spike in the number of "hunting tourists and specimen hunters" in the region. Callicotte bore an apparent disdain for the "non-resident, aristocratic nabobs, who care nothing about game preservation." These sport hunters, he stated, "mortally wound more than they kill and save." Yet they followed the letter of the law as wardens rarely caught them without the requisite hunting tags or more animals than legally allowed.<sup>56</sup> Callicotte's report goes against virtually

<sup>&</sup>lt;sup>55</sup> Colorado. Biennial Report of the State Fish Commissioner, 1893.

<sup>&</sup>lt;sup>56</sup> Colorado. Biennial Report of the State Fish Commissioner and Game Warden of Colorado, 1893, 1894. I was unable to acquire information regarding the number of tourists and hunters in Colorado for most of

everything we understand today about sport-hunters and their subscription to the hunting ethic. Moreover, Callicotte mentioned nothing about the countless commercial hunters who harvested huge amounts of charismatic big wild life in their efforts to satisfy meat markets around the state. Callicotte's perspectives are important if for no other reason than he was the only wildlife commissioner at the turn of the century to recognize that sport hunters were partly responsible for the extirpation of charismatic big wildlife in Colorado.

While in the years from 1887- 1893 the hunting for big animals season ran from September 1, to November 31, the lawmakers, in their infinite wisdom, changed the open season to run from August 1, through November 1. There is no other apparent motive for this change except that it enabled tourists and sport hunters to pursue their quarry in the upper elevations until the weather forced both humans and animals to quit the mountains for the season. This act also established bag limits based on a dubious quantity that they dubbed, "reasonable necessity." The act carried a rider, however, which suggested that "reasonable necessity" was no more than "one elk, deer, or antelope, in the possession of any one person at a time." Although this law appeared to limit hunting, in actuality, it allowed people to take their entire families into the field and fill their limits without regard to who actually killed the animals. For instance, one person could take his family out, (wife, and one or more children) and kill one animal for each person in the party.

In his widely-cited study on the mammals of Colorado, David Armstrong wrote that a party of Utes killed the last known bison in northwest Colorado in 1884, near

the 1890s. However, if their numbers are anywhere near those that came from out of state to hunt at the turn of the century, the commissioner's argument was understated.

Cedar Springs at the west end of Middle Park.<sup>57</sup> Interestingly enough, however, in 1893, the Colorado legislature passed a law forbidding the hunting of bison and mountain sheep "at any time."<sup>58</sup> It is unclear how many bison were still alive in Colorado in the mid 1890s, but the passage of such a law certainly suggests that there may still have been a small bison population in the state. In fact, William Temple Hornaday estimated that the number of American bison running wild and unprotected as of January 1, 1889, in northwest Colorado and southern Wyoming totaled 46 animals, more than half of the total number of wild bison within the United States' boundaries.<sup>59</sup> That this (or any) number of bison managed to survive so long in a region as heavily hunted as the Western Slope seems nothing short of miraculous.

Despite the proliferation of hunting laws, Utes, market hunters, and sport hunters continued to stalk Colorado's charismatic big wildlife, and while many of them purchased tags to hunt legally, many more continued to poach their prey, taking more than the law allowed, and killing wildlife out of season. Gordon Land served as State Forest, Fish and Game Commissioner again in 1895-96, and in his biennial report to the governor he reported that the department was unable to enforce the state hunting laws. "The experiment," he raged, "of trying to get deputies to bear their own traveling expenses and accomplish anything like beneficial results has been tried, and…is a flat failure." The legislature provided an operating budget for the department that was sufficient to cover any expenses the wardens might have incurred in the execution of their

<sup>&</sup>lt;sup>57</sup> David M. Armstrong, *Distribution of Mammals in Colorado*, (Lawrence: University of Kansas, 1972), 308.

<sup>&</sup>lt;sup>58</sup> Colorado. *Laws*. General Assembly, Ninth sess, 3 January 1893.

<sup>&</sup>lt;sup>59</sup> William Temple Hornaday, *The Extermination of the American Bison: with a sketch of its discovery and life history*, (Seattle: Shorey Book Store, 1971), 525. Hornaday did not include the recorded 256 captive bison in the United States, the bison under government protection in Yellowstone National Park (200), or the estimated 550 bison believed to exist in Canada.

jobs. In what must have been a legislative oversight, however, the assembly failed to incorporate the wardens' ability to access the departmental funds in the passage that established their positions. Land stated that the press verbally attacked him, blaming him for not enforcing the hunting laws, when in truth, he had no access to the funds needed to cover the department's expenses as the state auditor withheld them while awaiting the outcome of a state Supreme Court decision.

Contrary to his predecessor's assessment of the situation, Land maintained that the "Indians,...skin hunters" and market hunters were responsible for depleting the game, thus creating a demand for more efficient game-law enforcement. According to Land, the Utes were still the worst offenders and their "methods of game destruction...are such as to result in entire extermination of...[the] deer and elk in a very few years of they are permitted to pursue them." Land maintained that the Utes received rations from the federal government and that they had "no real need...to prey upon our state game."<sup>60</sup>

Land's comments came at a time when sport hunters, conservationists, and wildlife officials throughout the West sought to challenge the primacy of Indian hunting rights. As Land began his tenure as the state's head forest and wildlife official, settlers in Wyoming were also growing tired of the Indians, commercial hunters, and pot hunters that were hunting without regard for conservation. The Wyoming settlers sought to bring the issue of Indian hunting rights before the courts. Their thinking was that although the Bannocks had hunted in the area for generations, settlers now dotted the land with farms and ranches. These people saw Indian hunting as an impediment to their own ability to act as guides to sport hunters who were willing to pay for their services as hunting

<sup>&</sup>lt;sup>60</sup> Colorado. *Biennial Report of the State Forest, Game and Fish Commissioner*, 1895, 1896. The record is silent on what specific Supreme Court Land spoke of and how it related to the distribution of departmental funds.

guides.<sup>61</sup> To claim the wildlife as the property of the state and seize the opportunity to make money on it—even at the expense of the tribes' subsistence needs—local settlers utilized the state legal apparatus to disenfranchise the Indians. In 1896, the Bannocks had their day in court but it was not a day that they would remember fondly. For when *Ward v. Race Horse,* went before the United States Supreme Court, the court determined that the moment Wyoming entered statehood, the Bannocks' hunting rights ended, regardless of treaty stipulations. With their new definition of the land as a resource base with a quantifiable value, citizens of Wyoming—through the United States Supreme Court—supplanted the Bannocks' vision of the land as their birthright, the source from which they had always drawn their subsistence.<sup>62</sup>

Their groundwork already laid out for them, Colorado conservationists and wildlife officials began to develop a plan to abolish Ute hunting rights in Colorado. Uintah Indian agent William A. Beck, and commissioner of Indian Affairs William A. Jones, both agreed that the *Race Horse* decision applied to the Utes and Bannocks equally. Now, working with Colorado and Utah game officials, agent Beck called the Utes to a council and ordered them to obey the game laws of the state in which they hunted or face arrest and possible fine or imprisonment for failure to comply.<sup>63</sup>

In 1897, the state legislature shortened hunting season to six weeks, running from September 1 through October 15, and passed a law expressly forbidding hunters to run antelope, deer, or bighorn sheep with dogs. Moreover, the law set limits on possession of kills at "not more than one deer or antelope in possession of any one person at any one

<sup>&</sup>lt;sup>61</sup> Warren, "Hunter's Game," 1-5.

<sup>&</sup>lt;sup>62</sup> Ward v. Race Horse, 163 U.S. 504 (1896).

<sup>&</sup>lt;sup>63</sup> Richmond L. Clow, "Colorado Game Laws and the Dispossession of the Inherent Hunting Right of the White River and Uncompany Utes," in *Trusteeship in change: Toward Tribal Autonomy in Resource Management*, 1-28 (Boulder: University Press of Colorado, 2001), 13.

time."<sup>64</sup> The Utes were used to a prolonged hunting season that allowed them to maximize their efficiency and acquire enough meat to help them through the winter. The shortened season and limits on quantities represented a clear threat to their subsistence needs. The new laws had the adverse effect of decreasing the Utes' independence and increasing their reliance on the federal government for commodities such as flour and meat.<sup>65</sup>

The Colorado legislature, along with State Fish and Game Commissioner J.S. Swan must have been pleased to learn that their efforts were beginning to pay off. Swan reported that most wildlife species were recovering and that there were "as yet a few buffaloes in the state, but their number is so small that little is known of them." Swan also obtained information from Frank Wells, a veteran guide and hunter who lived in Rio Blanco County, that the wildlife populations in Rio Blanco and Routt counties were still substantial. According to Wells, there were approximately "4,000 to 5,000 elk; at least eighty thousand deer; from ten thousand to fifteen thousand antelope, and that game of all kinds increased." In response to Swan's optimistic report, in 1899, the state assembly again changed the hunting season, extending it to twelve weeks, from August 15, through November 5. The legislature must have learned that hunters were killing elk at an astonishing rate, however, because they adopted legislation restricting elk hunting to an

<sup>&</sup>lt;sup>64</sup> Colorado. *Laws.* General Assembly, Eleventh sess, 6 January 1897. Mayer, "Market Hunting in the '70's," 11, 12. Frank Mayer, while in the company of one Charlie Tirer, a West Slope rancher that sold Mayer a horse, used Tirer's dogs to hunt elk. This was the only time Mayer admitted to having used dogs. The State Assembly passed the first law against using dogs in 1891.

<sup>&</sup>lt;sup>65</sup> For a detailed examination of Ute hunting rights see: Richmond L. Clow, "Colorado Game Laws and the Dispossession of the Inherent Hunting Right of the White River and Uncompany Utes," in *Trusteeship in change: Toward Tribal Autonomy in Resource Management*, 1-28 (Boulder: University Press of Colorado, 2001).

eleven-day period from October 25 through November 5 and limiting the legal hunt to one bull elk per person per year.<sup>66</sup>

Despite the state legislature's attempts to reduce the slaughter and waste of the state's wildlife populations, their measure garnered considerable criticism from active conservationists such as Sumner Matteson. Matteson published articles condemning Colorado's conservation efforts, often pointing out the absurdity of Colorado's new hunting season. The problem with a hunting season of this duration, (August 14-November 5) he argued, was that the "framers of this law were evidently more interested in tourist travel than in game population." The early hunting season encouraged sportsmen and tourists to spend more time in Colorado's hunting fields, taking antelope and deer from the middle of August until the end of October when they could turn to elk for the last eleven days of the season. The new laws did nothing to stem the slaughter, Matteson argued, primarily because most hunters "seem to think it is necessary to secure all the game allowed them by law." For example, hunting laws permitted hunting in August when the deer and elk were at higher elevations, and hunters found it more difficult to extract carcasses from hard-to-reach places than it would have been later in the fall when cold temperatures and snow forced the big animals down to lower elevations with less rugged terrain. As a result, hunters often killed (or fatally injured) prey that they could not retrieve, leaving it to rot in the mountains.<sup>67</sup> Matteson also argued that the late hunting season created other problems, specifically in that it was too

<sup>&</sup>lt;sup>66</sup> Colorado. *Laws.* General Assembly, Twelfth sess, 4 January 1899. If the game population for mule deer seems inconsistent with my earlier estimate, it is because Gill's estimates were for Middle Park only and did not include the deer populations throughout the rest of the Western Slope.

<sup>&</sup>lt;sup>67</sup> The meat that these hunters left behind undoubtedly fed hungry coyotes, wolves, wolverines, and bears. Although limitations in time and space do not permit me to address this issue at present, it is my intention to investigate how human waste encouraged the growth of hunter/scavenger populations and how humans responded to this trend.

easy to ambush deer descending from the higher altitudes. The "ranchmen and pothunters [had] no difficulty during that period in slaughtering large numbers in a single day, and if questioned, they credit[ed] two each to every member of the family or party, regardless of who may actually have done the killing." Matteson estimated that between 1895 and 1901, large wildlife populations in Colorado declined by fifty percent per year, leaving one animal in 1901 where in 1895 there were 50.<sup>68</sup> It is difficult to determine whether or not Matteson's estimates for wildlife populations are more accurate than the wildlife commissioner's. My sense is that certain species such as bighorn sheep and elk had been hit hard, and that bison were near extinction in the region. Deer, however, thrive in areas altered by human use. Their populations, while possibly smaller than they were prior to the great influx of immigrants in the 1870-90s, were probably still substantial.

In contrast to Matteson's perspective, State Forest, Fish and Game Commissioner J. S. Swan reported that the state's wildlife populations were beginning to recover. According to Swan, the Utes' annual hunting expeditions into Colorado supposedly presented the greatest obstacle in the wildlife populations' abilities to recover from the decades of over-hunting. Swan, unlike his predecessors, did not argue that the Utes wasted their kills. In contrast, he recognized that the Utes hunted "to provide themselves with the desired quantity of meat and hides" necessary for subsistence, and that they probably only took "from five hundred to one thousand head each season." He did note, however, that the Utes did not hesitate to kill cattle if they were not able to satisfy their appetite for wild animals.<sup>69</sup> When compared to the white population of Moffat, Rio

<sup>&</sup>lt;sup>68</sup> Matteson, "Colorado's Hunting Fields," 31-2.

<sup>&</sup>lt;sup>69</sup> Colorado. Biennial Report of the State Forest, Game and fish Commissioner, 1897, 1898.

Blanco, and Garfield counties in 1890 (5,678), the likelihood that the Utes, killed more big animals than the local population seems almost ludicrous, particularly when the majority of reports discussing the size of Ute hunting parties never exceeded 400 people, 100 of which were usually women and children.

Ute hunting parties included bands of Uintahs, who often hunted in Routt County, and bands of Uncompahgre or White River Utes, who favored the hunting grounds in Rio Blanco County. Of the two bands, Swan reported, the Uintahs were more aggressive and less likely to cooperate with state officials. In late October 1897, a band of Uintahs who were hunting in Routt County resisted the attempts of Sheriff Weber and troops from the Department of the Colorado to remove them to their reservation in Utah. A firefight ensued and the troops killed two Uintah men and injured (though not fatally) two women.<sup>70</sup>

Despite the wardens' best efforts, however, the Utes persisted in hunting in their traditional hunting grounds on the Western Slope. For the Utes, tradition implied much more than habit; tradition embodied their cosmology and their identity and lay at the foundation of their perceptions of who they were as a people. Central to the Utes' identity was the way in which they drew their existence from the land. The Utes perceived plants, animals, and other elements of nature including wind, mountains, and rocks, as "sources of specific powers." Traditionally, the Utes ethic toward natural resources was that "naturally occurring plants and wildlife...should be left free and respected and used only as necessary for life." Ute cosmology emphasized "1) links with ancestors, 2) traditional relations between Indians, 3) natural elements, which embody

<sup>&</sup>lt;sup>70</sup> <u>http://www.archives.state.co.us/archist.html</u>;

http://manta.library.colostate.edu/research/colorado/County1.pdf, *The Denver Times*, (Denver), 18 November 1900.

and grant power, and the traditional behaviors regarding them. These features of life are seen as equivalent to being Indian."<sup>71</sup> For the Utes, returning to Colorado to hunt was not really an option. The alternative would have been to abandon their traditional lifeways, of which hunting was a central aspect. Not hunting would have been a denial of their heritage and even their own existence. Why then, did so many whites interpret the Utes' traditional hunting practices as "slaughter," rather than efficiency? To answer this question, perhaps it might be best to look briefly at the Utes' behavior from an observer's perspective.

During the historic era, the Utes hunted on the Western Slope in the same places they had hunted for generations. They left the reservation in Utah and began their annual hunt in the third week of October and continued until "the Indian Agent, through the Ute police, [saw] fit to order them back to the reservation...though these orders [were usually] issued before the Indians...secured half the meat desired for winter use."<sup>72</sup> A typical Ute hunting excursion might have included an itinerary that looked something like this: during the late summer and fall months, the Utes often arrived in western Colorado in great numbers to hunt and dry meat for the winter and to trade with local merchants and indulge in their favorite past-times, drinking and gambling. The Utes usually set up camp along the tributaries of the White River, waiting until the fall snows pushed big animals down from the upper elevations. The Utes followed their hunt leaders "up the valley until they learn[ed] of such parks as...[had] been chosen by deer and elk in their retreat before the elements." In short order, they harvested and processed their kills,

<sup>&</sup>lt;sup>71</sup> Stephanie Romeo, "Concepts of Nature and Power: Environmental Ethics of the Northern Ute" *Environmental Review*, Vol. 9, No. 2 (Summer 1985), 163, 165.

<sup>&</sup>lt;sup>72</sup> Matteson, "Colorado's Hunting Fields," 32.

loading the meat on their horses for the journey back to the reservation.<sup>73</sup> "It is true, Matteson wrote, "that they have killed large quantities of game, yet...the Indians claim that until the white man has them all branded, 'Ute will hunt 'em all same maverick.'"<sup>74</sup>

Colorado's wildlife officials, journalists, and sportsmen, however, had no interest in Ute tradition. White market hunters often complained that the Utes slaughtered strictly for the hides. And while they had little or no regard for state hunting regulations, killing animals without respect to "age, sex, or season," those who knew the Utes were familiar with their butchering methods and knew that they found uses for virtually every part of the animals they killed including bones, gristle, entrails, brains, and even hoofs. The Utes, fearing that each hunt could be their last, increased their efficiency by securing "everything possible while in the field."<sup>75</sup> Perhaps the one aspect of Ute hunting practices that most offended sportsmen and wardens, was the Utes' willingness to kill does, cows, and fawns, a practice that violated the conservationists' and sportsmen's codes of hunting etiquette.

In the late fall of 1900 there was a public outcry about alleged Ute hunting depredations far out on the Western Slope in Rio Blanco County. Having received no response from the federal authorities to their request for troops to force the Utes back to their reservation, Governor Charles Thomas with Game Commissioner Thomas Johnson, formulated a plant to expel the Utes from Colorado. As a matter of course, Denver newspapers dramatized the point, threatening the drawing of blood and loss of life should the Utes resist. The papers went so far as to offer the details of Thomas and Johnson's plans to involve the "state troops" if the Utes resisted. "Commissioner Johnson," an

<sup>&</sup>lt;sup>73</sup> *The Denver Times*, (Denver), 2 December 1900.

<sup>&</sup>lt;sup>74</sup> Matteson, "Colorado's Hunting Fields," 32.

<sup>&</sup>lt;sup>75</sup> Ibid, 50.

article reported on November 24, 1900 "is loaded for scalps. He will carry with him two revolvers, a bowie knife and a Winchester, with hundred of rounds of ammunition."<sup>76</sup>

His journey stalled in Middle Park by inclimate weather, Commissioner Thomas could only make plans for what he hoped to do if he was able to catch the Utes in possession of game. The Denver Evening Post reported that Thomas wanted to "make an example of the Utes if possible and at the same time have the state and national laws regarding the Indian hunts tested so that the government [could] be held responsible for the action of the Indians in the future." In this instance, the Utes had the right, secured by treaty, to hunt on their traditional hunting grounds. But many conservationists and wildlife officials argued that the 1868 treaty was written at a time when white settlement of the Western Slope was only beginning. Moreover, Colorado was no longer a territory, and had been a state for nearly twenty-five years. The land and wildlife was the property of the citizens, which gave them the right to determine the course of resource conservation and use in the commons.<sup>77</sup> By the turn of the century, whites had settled the region and local wildlife officials, conservationists and settlers joined forces to bring test cases before the courts in an attempt to get legislation passed that would forever bar the Indians from practicing their traditional subsistence methods on the commons. This case was not specific to the Utes, but occurred in a number of areas including New Mexico. and Wyoming, among others.<sup>78</sup>

The *Denver Evening Post* reported news from Utah that suggested the White Rock Indian Agent had been unable to keep the Utes on the reservation that fall and they

<sup>&</sup>lt;sup>76</sup> Denver Evening Post, (Denver) 26 November 1900.

<sup>&</sup>lt;sup>77</sup> Warren, "The Hunter's Game," 8.

<sup>&</sup>lt;sup>78</sup> Ibid, 8, 202, 203, 210.

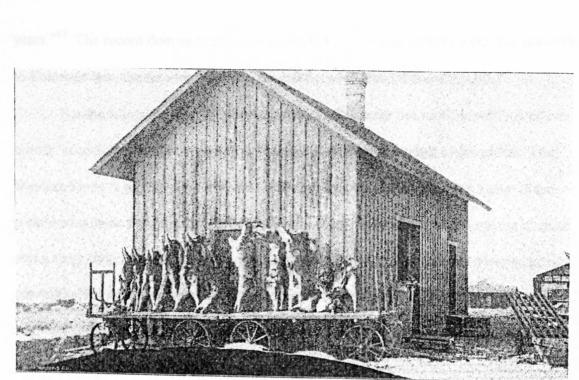
were "slaughtering more game than ever this season."<sup>79</sup> By the end of November, however, the Denver newspapers reported that it was extremely likely the Utes who had been hunting in Colorado were in touch with the reservation and knew that the commissioner was on his way to arrest them and confiscate their kills. Those Utes whom white settlers had seen twenty miles east of Rangely were in the company of tribal police.<sup>80</sup>

While tracking the Ute hunting party on its way back to the Utah line, commissioner Johnson and his posse encountered a party of twenty Mormons with "six large wagons loaded to their capacity with deer carcasses...[totaling an] estimated ...200 bucks and does." The Post reported that one man was responsible for killing twenty-one of them. Thomas confiscated the deer as evidence, distributed the meat to poor families in Meeker, and sent the hides to Denver Museums for exhibits and displays.<sup>81</sup> The leader of the Mormon hunting party was a non-Mormon named William Bennett. When the Judge asked him why they were killing deer out of season, Bennett answered, "The Indians kill game, why can't we?" Two of the Mormon hunters were unrepentant polygamists, and claimed that they needed to hunt if they were going to be able to feed their extended families. Most of the party, however, "stated that their crops had failed and that they were obliged to kill game and sell the hides to keep from starving." Johnson and his posse discovered that the Mormon hide trade was far more extensive than anyone had dreamed. Having captured six more poachers just eight miles from the Utah line, the Commissioner and his deputies ran into "scores of empty teams coming this way [into Colorado] to load deer hides...The business...carried on in this way for

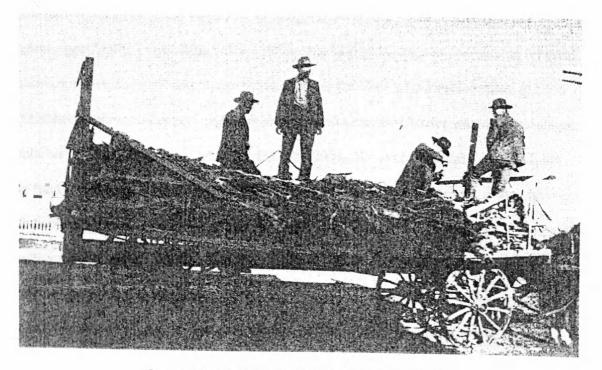
<sup>&</sup>lt;sup>79</sup> Denver Evening Post, (Denver) 24 November 1900.

<sup>&</sup>lt;sup>80</sup> Denver Evening Post, (Denver), 28 November 1900.

<sup>&</sup>lt;sup>81</sup> Denver Evening Post, (Denver), 2 December 1900.



CONFISCATED GAME IN GUNNISON COUNTY, NOVEMBER 29, 1802.



CAPTURED DEER HIDES (441) IN RIO BLANCO COUNTY, JANUARY, 1902

years.<sup>32</sup> The record does not reveal what the Mormon hunters' fines were, but according to Colorado law, the fine for poaching ranged between \$10.00 and \$500.00.<sup>83</sup>

For the Mormons, as with the majority of settlers far out on Colorado's western border, accessing the commons was not a matter of proprieties, but of priorities. The Western Slope 's aridity was (and still is) its defining characteristic. For many of the people who made their homes there, wresting a living from the land through agriculture was a risky proposition at best. In dry years, many cultivated vegetables simply did not grow, thus the dependency on charismatic big wildlife continued to be a part of life for settlers in the region. For these people, ideas about conservation carried little weight when they had hungry children and spouses to feed.

For over a decade, commissioners saw the annual Ute hunting expeditions as a threat to the preservation of wildlife populations in Colorado. Yet they also recognized that part of the problem lay with the federal government in general, and the local Indian agent, specifically, Uintah Reservation Indian Agent Myton, the commissioners, reported, showed no evidence of being interested in keeping the Utes on their reservation in Utah. This, however, was only part of the problem. Commissioner Charles Harris took matters into his own hands when he learned that Myton himself had crossed the Colorado border to hunt deer. According to Harris, he "quietly made a personal visit to his camp and was fortunate in coming upon him as he was in the act of conveying two deer out of the state without the required permit." Harris collected \$10 from Myton and issued him a permit.

Harris' run in with Agent Myton did nothing to prevent more Ute hunting expeditions into Colorado, and in 1901 Harris traveled from his office in Denver to the

 <sup>&</sup>lt;sup>82</sup> Denver Evening Post, (Denver) 5 December 1900.
 <sup>83</sup> Denver Evening Post, (Denver), 2 December 1900.

Rio Blanco County, where, he had heard, a party of Utes were hunting. When he arrived on the scene, Harris arrested seven Utes who "had in their possession a wagon load of 'jerked' venison, one hundred and forty odd deer hides, and some fawn and doe heads in hides." Although Harris took the Utes and the evidence to court, he was unable to get a conviction. The problem, he believed, lay with the citizenry who were "not inclined to incur the enmity of the Indians. May of the citizens have cattle," he recalled, "and other property in the localities where the Indians hunt and have frequent occasion to go there in person." According to Harris, fear of Indian reprisal against themselves and their

But Harris was only partly right. While it is true that some ranchers feared Ute depredations, there was another element on the West Slope that supported Ute hunters. In contrast to Harris' claims, the *Denver Evening Post* reported that eighty percent of the population on the Western Slope did not object to the Utes' annual hunt in Colorado. Cattlemen and other interests on the Western Slope had been resisting federal interference since the Timber Reserves Act went into effect in 1891. The Western Slope was the area "hardest hit by the [timber] withdrawals," and local residents had fought long and hard against conservation efforts in various forms since extra-local authorities began to impose their new vision of the commons as a public resource. In what was essentially a local effort, cattlemen, miners, small business operators, and the local press allied themselves to fight for their collective interests.<sup>85</sup> In this light, it seems likely that Harris was unable to get a conviction, not because the local populace sympathized with

<sup>&</sup>lt;sup>84</sup> Colorado. Biennial Report of the State Game and Fish Commissioner. 1901, 1902.

<sup>&</sup>lt;sup>85</sup> G. Michael McCarthy, *Hour of Trial: The Conservation Conflict in Colorado and the West, 1891-1907* (Norman: University of Oklahoma Press, 1977), 171. Two local newspapers that disseminated anticonservation rhetoric throughout the region included *Routt County Courier*, and *the Steamboat Pilot*.

the Utes, but because the Western Slope settlers perceived themselves as locals with a stake in controlling the resources of the commons. The locals had long harbored a seething resentment toward conservation, and in this area, where disputes had always been settled "not in courts of law, but on the range itself," cooperation with conservationists and wildlife officials was tantamount to betrayal of neighbors and kin.<sup>86</sup>

While the locals did not object to the Utes annual hunts, a practice that helped ensure more grazing ground for their own herds, they did, however, object to the destructive and wasteful practices of "white hide-hunters and Mormon citizens of Utah who kill deer for profit."<sup>87</sup> The White River timber reserve in eastern Rio Blanco County was not just the Utes and Mormons favorite hunting range, but was the preferred hunting ground for Colorado sport hunters. W. H. Stewart of Denver led a hunting expedition to the White River reserve in October 1900. Stewart and his party became suspicious that conditions were less than favorable as they encountered flocks of magpies with ever increasing frequency. "It was a regular sight," Stewart lamented, "...to frequently come across the carcass of a doe with only a loin or a ham cut away. One day we found seven carcasses thus cut up lying in one field and thirteen in another. It is not unusual to come across two to four. These deer are killed by white people."<sup>88</sup> Whether or not the local citizenry had committed the depredations seeking to lay the blame on sport hunters and tourist hunters with poor marksmanship is impossible to tell. In any case, Stewart was sure that the Utes were not to blame.

To many sport hunters, the sight of wasted meat symbolized the antithesis of manliness and sporting conduct as they defined it at the end of the century. With the rise

<sup>&</sup>lt;sup>86</sup> Ibid, 173.

<sup>&</sup>lt;sup>87</sup> The Denver Times, (Denver), 2 December 1900.

<sup>&</sup>lt;sup>88</sup> The Denver Times, (Denver), 18 November 1900.

of industrialization, masses of middle class men found their masculinity challenged by the their lack of physical labor. Men (and women) who felt that they had lost their primal strength believed that they could regain their strength, courage and determination—all of which were qualities that made Americans great—through hunting.<sup>89</sup> Yet the hunters' attempts to reinvigorate their lives through the chase were only effective if they followed the hunter's ethic. For the urban sports hunters seeking to reclaim some vestige of their masculinity the idea of killing a doe was a contradiction to their notions of women's roles in society. Because "doe and woman are both reified as mother, noncombatant and by extension, noncompetitor in the male world," hunters who killed does were acting out against one of the bedrock institutions of the civilized world, an institution that enabled men to hold themselves above the uncultured masses who had no reverence for women.<sup>90</sup>

But for those ranchers and settlers living on the Western Slope, deer represented a threat to their livelihoods in a number of ways. While urban sport hunters sought to reassert their masculine identity through the chase, ranchers, miners, and settlers had their own methods for maintaining their sense of manhood, often through their ability to find success in their chosen occupations, all of which had the same goal of putting food on the table. Any impediment to their ability to provide for themselves and their families would have resulted in a diminution of their sense of self. Since deer, bucks, does and fawns, ate the same type of vegetation as cattle they were a threat to the ranchers' interests and thus an impediment to the ranchers' ability to realize their sense of masculinity which was dependant on the success of their businesses. Moreover, once the animal had been killed, dressed, cooked, and set on the dinner table, the gender of the meat was irrelevant

<sup>&</sup>lt;sup>89</sup> Daniel Justin Herman, *Hunting in the American Imagination*, (Washington, D.C.: Smithsonian Institution, 2001), 219, 224.

<sup>&</sup>lt;sup>90</sup> Warren, Hunter's Game, 65.

with regard to its nutritional value and its ability to give the hunter the reassurance that he had put meat on the table. The best way for locals to maintain their sense of masculinity and to preserve the commons for their own interests, apart from eliminating the deer populations themselves, involved not testifying against the Utes who continued to come across the border to hunt wildlife, regardless of gender or age.

The proliferation of charismatic big wildlife on the Western Slope drew tourists and sports enthusiasts to the region by the thousands at the turn of the century. By 1900, Colorado's population was over one-half million and the population for those counties on the Western Slope, the population surpassed the quarter-million mark. The open season for deer in 1900 continued as it had for the previous four years, beginning on August 15 and ended on November 5. Over 1,500 tourists and sportsmen hunted on the Western Slope in the fall of 1900. Estimates for the number of deer the local populace took legally—surpassed 2,000 head. The Utes, in their three-week hunt between October 20 and November 10, killed about 500, while "hide-hunters…probably killed 1,000." In sum, guides, innkeepers, and trading post proprietors estimated that the take for the 1900 season ranged between 3,500 to 8,000 deer.<sup>91</sup>

Changes in the hunting laws at the turn of the century, including moratoriums on hunting certain animals (bighorn and elk), tighter restrictions on others, and more efficient enforcement of hunting regulations, resulted in a dramatic increase in animal populations for most species including antelope, deer, and bighorn sheep. Since the Colorado legislature had effectively put an end to commercial hunting back in the early

<sup>&</sup>lt;sup>91</sup> Colorado, *Laws*, General Assembly, Twelfth sess, 4 January 1899. <u>http://www.archives.state.co.us/archist.html</u>,

http://manta.library.colostate.edu/research/colorado/County1.pdf, The Denver Times, (Denver), 2 December 1900.

1890s, some animals began to recover, primarily deer and antelope. Chronically low elk populations, however, were symptomatic of another problem. According to John Woodard, Colorado's senior wildlife officer in 1903-4, elk populations were decreasing at an alarming rate despite the fact that elk season ran only from October 25<sup>th</sup> through November 5<sup>th</sup>. The primary cause, Woodard explained, was that, "so long as an order known as the 'Elks' lodge' [paid] a premium for the destruction of these animals, by offering a price for their teeth," Middle Park's elk populations would remain the target of wasteful hunting practices. Despite this major setback, restrictions on deer hunting and effective implementation and enforcement of hunting laws helped prevent the continued overexploitation of deer populations. Commissioner Woodard reported that the number of deer shipped from various railroad stations on the Western Slope declined by as much as eighty-five to eighty-seven percent, from 621 in 1902 to 80 in 1903, and 94 in 1904.<sup>92</sup> Although deer populations were not on the rise, this species began to enjoy something of a respite from the perpetual hunting pressure they had endured unchecked since before white settlers ever arrived on the Western Slope.

In 1903, the legislature again changed the season on antelope and deer. The deer season ran from September 15 through September 30. Lawmakers set in place the framework that would remove the strictures on bighorn sheep by 1907, when the hunting season for bighorn and antelope (both with horns) would run from October 15 until October 25. As with bighorn and antelope, the limitations on elk hunting would change in 1907 when the state legislature would reduce the open season to a scant five days during the first week of November.<sup>93</sup>

<sup>&</sup>lt;sup>92</sup> Colorado. Biennial Report of the State Game and Fish Commissioner. 1903, 1904.

<sup>&</sup>lt;sup>93</sup> Colorado. Laws. General Assembly, Fourteenth sess, 7 January 1903.

In an unsigned article dated December 16, 1900, a "veteran sportsman" discussed the problems facing the wildlife in Colorado. The anonymous author of this article recalled that in October of 1900—just six to eight weeks prior to the publication of his byline—a hunting party spent ten days on an expedition in the Crystal River area traversing the wildlife trails along the Grand River and Muddy and Divide creeks. For all their considerable time in the field, however, the hunting party failed to bag any animals and saw no more than a handful of deer over the course of their trip. According to the author, when he made a trip into the same area in 1897, he saw "hundreds and had no trouble killing all [they] cared for without going a mile from [their] camps."

The White River Plateau, Trappers' Lake and William's Fork basins consisted of "a vast natural garden of parks, groves and lakes of 1,800 square miles." Big animals appeared in abundant numbers here with deer and elk always visible from the Trappers' Lake trail." In the years between 1897 and 1900, people hunted the charismatic big wildlife so heavily that they virtually extirpated the wild ungulate populations. As late as October 1899, observers noted that there were still some deer along the White River south of Trappers' Lake gathering in herds of up to 300 animals. While there are some regions—inaccessible to people—where deer and small numbers of elk still ranged, the wildlife populations for most species continued to decrease. Moreover, the influx of settlers into the region pushed the deer north toward North Park on the eastern slope of the Continental Divide, an area encompassing about 5,000 square miles. But settlers continued to lay down roots in this region as well, a development that probably cut the big animals' range by almost half. So while the state's ability to enforce hunting laws effectively reduced the number of deer hunted and killed on the Western Slope, the continued settlement of the region meant that deer and other wildlife had to contend with human populations increases that reduced their range.

The sportsmen continued to argue that a number of factors contributed to the destruction of Colorado's wildlife populations. First, there were approximately 1,000 people living "in and near the game regions of the Grand, White and Bear rivers and their tributaries who kill[ed] from three to ten deer every year." Beginning in the spring, these folks also hunted through the summer, taking an occasional deer as needed, while in the fall they hunted more extensively, when they "hang them [deer] up or corn them like beef for winter supply." These settlers often took elk well after the season ended. Sport hunters, like the anonymous author of the wildlife article mentioned above, argued that "Ninety percent of these residents pay no attention whatever to game laws and never will until it is generally otherwise enforced or it becomes dangerous to violate them." Yet one of theses Western Slope residents, in a letter to the Denver Evening Post, wrote that, "You will never find a settler in the game region who kills any more than he has use for, and only when he needs the meat."<sup>94</sup> While the unnamed author of the *Post* article was probably exaggerating in his estimation of the number of outlaw hunters, for these settlers, as with the Utes, the commons represented their subsistence base. Utes and settlers resented and resisted sportsmen and conservationist's effort to limit their ability to take animals from the land that they had been utilizing for decades.

As long as Colorado's wildlife officers were unable to enforce the state's hunting laws effectively, hunters of all ethnic backgrounds continued to hunt, driving wildlife populations ever closer to extinction. The Utes continued to hunt in Colorado after the turn of the century but for the most part their visits were too brief to result in the

<sup>&</sup>lt;sup>94</sup> Denver Evening Post, (Denver), 16 December 1900.

destruction of too much game. Market hunters and sportsmen continued to hunt as well, and as transportation improved more and more tourists and sportsmen made the journey to Colorado's storied hunting grounds to bag at least one specimen before returning to their cities in the East. Local settlers carried their grudge against wildlife officers into the new century and in an article in the *Middle Park Times*, expressed their discontent with ever tightening hunting restrictions. The headline in the *Times* read that the state legislature again changed the hunting season on deer and also either upheld or placed a new moratorium on several species including antelope, bighorn, elk, and bison. "As usual," the *Times* stated, there was an "open season on bear, lyon, [*sic*] bob-cats, fox, wolves, coyotes, skunks, and *obnoxious deputy game warden grafters* [emphasis mine]."<sup>95</sup>

Although the state managed to develop and eventually effectively enforce game laws, many of the species that once flourished in the region were all but gone. Ute hunters near Kremmling in Middle Park had supposedly killed the last bison in northwest Colorado in 1893. The bighorn sheep managed to escape the same fate that met the bison. And under the protective umbrella of the state's game laws, they began the slow process of repopulating. The fate of species such as the ibex and moose remain something of a mystery. As mentioned before, wildlife biologist David Armstrong maintains that biologists introduced mountain goats into Colorado in the 1940s. Game laws from the 1890s, however, suggest that these animals had been in Colorado all along. If we eliminate the possibility that the state legislature enacted laws protecting a species that did not reside in the state—and I am not altogether sure that we should—then the

<sup>&</sup>lt;sup>95</sup> *Middle Park Times*, (Hot Sulphur Springs), 22 May 1908.

alternative is that this species was hunted (read that poached) to extinction. Moose, it appears, managed to survive in small herds and are still present on the Western Slope today.

Elk met with a similar end to that of the bison. All across the West, in Montana, Wyoming, Colorado, and New Mexico, hunters taxed the species relentlessly. The hunting pressure on elk in Colorado resulted in the virtual annihilation of the species. By 1916, the state found it necessary to introduce elk brought by rail from Wyoming back into the Rocky Mountains. Game wardens drove elk herds from the rail depots at the base of the Front Range up into the newly created Rocky Mountain Park where they would remain protected for all time. The effort to support a sustainable elk population in Colorado has been so successful that these days the elk are so numerous as to be something of a pest in the high altitude mountain communities in the region. In Estes Park Colorado, for instance, at the eastern gate of Rocky Mountain National Park, the elk herd numbers over 2,000 animals.<sup>96</sup> Having seen them myself, I can say with all honesty that they are as numerous as squirrels in a city park in July.

Although they never reclaimed their numerical superiority, antelope have managed something of a comeback on the Western Slope.

Perhaps the one species that emerged from the battle over the Western Slope commons with their numbers still relatively high was the mule deer population. Although Utes, commercial hunters, settlers, and sport hunters hunted this species extensively, there does not seem to be any indication that their numbers ever dipped as dangerously low as those of the antelope, bighorn sheep, or elk. Historically, mule deer respond exceedingly well to human induced environmental disruption. Man made fires,

<sup>&</sup>lt;sup>96</sup> Benedict, Sierra Club Naturalist's Guide, 327.

agriculture, irrigation and perhaps most importantly, predator removal, provide mule deer with ideal foraging range. In this light, mule deer populations, while dramatically reduced through hunting, undoubtedly responded quite well to the influx of humans on the Western Slope. Today, Colorado abounds with mule deer, and in fact has lately had to contend with one of the problems that has been associated with excess deer populations: chronic wasting disease.

When the Utes first arrived on the Western Slope three centuries prior to sustained white settlement, the commons represented a subsistence base that provided them with the means to ensure the proliferation of their way of life. Entering the Taos trade with other tribes in the late seventeenth and eighteenth-centuries resulted in the Utes' acquisition of horses and manufactured items. To obtain these items, the Utes often raided smaller and weaker Indian people for slaves that they could trade to the Spanish for the imported goods they desired. But the Utes also traded meat and hides from the animals they hunted on the West Slope for the items they desired. Their trade in these items symbolized a transformation in their perception of the commons from a subsistence resource base to a resource that they could manipulate to enhance their version of the good life.

As the Utes entered the nineteenth-century, they engaged in ever more trade with Europeans and Americans who showed them that hides and even meat, from animals that were normally outside their subsistence diet could be used to bring them trade goods and cash. The Utes, did not resist the temptation to participate in this spiraling sequence of events, and by 1873 had actually signed an agreement to participate in the commercial meat market on the Western Slope.<sup>97</sup> But the Utes' ability to increase their standard of living was attracted white hunters to the trade and before long, thanks to the constant influx of settlers and miners in the region, the commercial meat business was growing concern on the West Slope. Utes and white commercial hunters shared a similar vision of the commons as a pool of resources from which they could draw a richer life than mere subsistence afforded.

At the same time that the commercial meat market began to grow in northwest Colorado, sport hunters from the east began to hear of the tremendous game herds in the region. Thanks to railroad propaganda and the ruminations of luminary sportsmen such as Gifford Pinchot, Theodore Roosevelt, and George Bird Grinnell, wealthy urban hunters began to spend time hunting antelope, deer, elk, and bighorn sheep in Colorado and the West. When these sport hunters arrived, they brought more than their guns, they also brought some sophisticated ideas about the resources and how they ought to be used. For the conservation minded, the land, utilized at its most efficient was for more than mere subsistence, and beyond exploitation. The conservationist espoused a policy of democratization for the commons.

The process of democratizing the commons is, as Louis Warren so eloquently state it, "the story at the heart of America's western past: the local commons giving way to the extra-local, the community surrendering authority in resource allocation to state or national agents." But this process was not easy, and it was certainly was not simple. The course of transforming the commons into "public goods" required the participation of a broad cast of characters including the locals—Indians, settlers (ranchers and miners), and commercial hunters. It also involved the extra-locals—conservationists, urban sport

<sup>&</sup>lt;sup>97</sup> Clow, "Colorado Game Laws," 2.

hunters, and state and federal bureaucrats. <sup>98</sup> The contestants waged their battles in the courts, in the press, and in the commons, and the results were sometimes bloody. But the ability of the conservationists to take their message to the masses, that they sought to preserve the resources of the land for future generations, struck a nerve with many people at the turn of the century, and with popular support behind them, conservationists had begun to change the way many Coloradoans looked at the land.

<sup>&</sup>lt;sup>98</sup> Warren, *The Hunter's Game*, 11.

## **Appendix 4a**

County						
Name:	1860	1870	1880	1890	1900	1910
Adams	N/A	0*	0*	0*	0*	88 <b>9</b> 2
Arapahoe	N/A	6829	38644	132135	153017	10263
Boulder	N/A	1939	9723	14082	21544	30330
Clear Creek	N/A	1596	7823	7184	7082	5001
Denver	N/A	0*	0*	0*	0*	213381
Douglas	N/A	1388	2486	3006	3120	3192
Eagle	N/A	0*	0*	3725	3008	2985
Garfield	N/A	0*	0	4478	5835	10144
Gilpin	N/A	5490	6489	5867	6690	4131
Grand	N/A	0*	417	604	741	1862
Jackson	N/A	0*	0*	0*	0*	1013
Jefferson	N/A	2390	6804	8450	9306	14231
Lake	N/A	522	23563	14663	18054	10600
Larimer	N/A	838	4892	9712	12168	25270
Park	N/A	447	3970	3548	2998	2492
Pitkin	N/A	0*	0*	8929	7020	4566
Rio Blanco	N/A	0*	0*	1200	1690	2332
Routt	N/A	0*	140	2369	3661	7561
Summit	N/A	258	5459	1906	2744	2003
Teller	N/A	0*	0*	0*	29002	14351
Colorado						
Territory						
Era: 1861-						
1876	25371	21697	N/A	N/A	N/A	N/A
Colorado						
State Era:	N/A	N/A	110410	221858	287680	374600

## Human Population Statistics for Colorado counties dependant on wildlife from the Western Slope: 1860 - 1910<sup>99</sup>

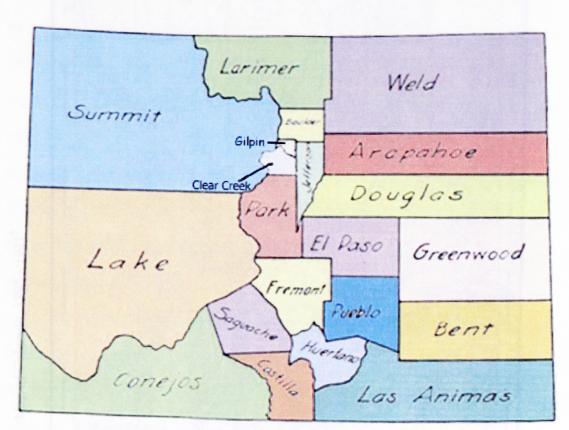
\*These counties were not in existence at the date listed.

<sup>99</sup> 1870 Census Index Colorado, "Colorado Population in 1870," http://www.archives.state.co.us/1870/index.htm

Colorado State Archives, "Colorado History Chronology," <u>http://www.archives.state.co.us/archist.html</u> "Colorado County Population 1880-1910"

http://manta.library.colostate.edu/research/colorado/County1.pdf

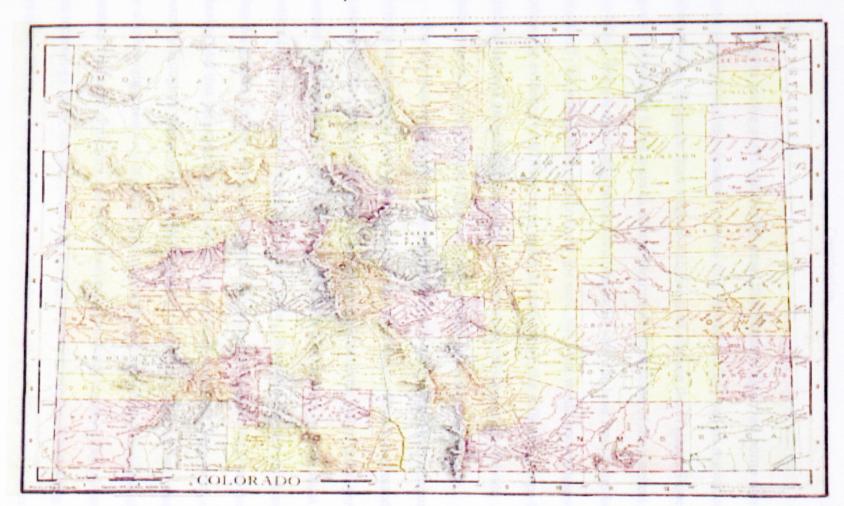
## Appendix 4b Colorado Counties in Existence in 1870<sup>100</sup>



Map of Colorado in 1870

<sup>100</sup> Counties in Existence in 1870, "Map of Colorado" <u>http://www.archives.state.co.us/1870/index.htm</u>

Map of Colorado, 1895 - 1911<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> "Map of Colorado," <u>http://www.heritageantiquemaps.com/Gallery/Rand%20McNally/RandMcNally1900Colorado.jpg</u>

## Conclusion

Over the course of the last 10,000 years, the Western Slope has borne witness to the emergence of vital and dynamic cultures that viewed the land and its resources in a number of ways. Evidence from various archeological sites on the Western Slope suggests that humans found ways to extract their needs from some of the harshest terrain in the West. But did these early human inhabitants all view the land from a similar perspective? We will probably never know for sure, but what we do know suggests that despite some evidence of differences in material technology, the different groups that hunted big animals using the hunting drive systems along the Continental Divide probably shared a similar vision of the land and its plant and animal inhabitants.

For the Paleoindian and Archaic hunters of the Western Slope, the commons involved a broad array of plant and animal resources that they collected, processed, used, and stored (for later use) as they became available. For the better part of 2,500 years the Mountain Tradition, as typified by the Yarmony site in Middle Park, was the most prevalent (if not the only known) culture in this region. But when the climate changed during the Middle-Archaic, new people entered the region seeking shelter from the withering heat that was scorching the regions around the mountains. These new people apparently brought a new projectile point technology with them. But did that mean that they also brought a new way of using the land as well, one that differed from the older Mountain Tradition? Probably, but the archeological evidence suggests that projectile point technology aside, the construction of the high-elevation hunting drives along the crest of the divide are designed for use in coordination with prevailing wind patterns. Thus, any differences that may have existed between the Mountain Tradition people and the newer Altithermal Refugium people probably took a back seat to the exigencies of climate and terrain. In this light, during the time that these groups shared access to the same plant and animal resources they may have shared a similar vision of the commons. What that vision may have been is impossible to say for sure, but all the evidence suggests that they viewed it as a common pool of resources from which both groups derived their subsistence.

How did these groups' subsistence methods effect wildlife populations on the Western Slope? While it is impossible to tell for sure, we do know that the megafauna disappeared during the Early Archaic, well within the time that the Mountain Tradition people were using the hunting drive systems along the Continental Divide, but there is now way to determine what role the hunters played in the disappearances. There are also problems to determine exactly which species these hunters killed. The acidic nature of the soil in the higher elevations means that only rarely do archeologists find bone remnants and the evidence they do find is often insufficient to determine the species from which the evidence came. Most archeologists suggest that the early occupants probably hunted species similar to those that inhabit the region today.

Even as the centuries turned, the Great Numic migration brought the Utes to the Western Slope on the heels of the Fremont Culture, which faded from existence nearly 800 years ago. Originally a pedestrian people, as all inhabitants of the Americas were prior to European contact, the Utes implemented a mobile collector strategy that was similar in many ways to the earlier Mountain Tradition subsistence patterns. The Utes had semi-permanent dwellings from which they would venture out in a seasonal round to

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collect plant and animal resources as they became available. Like the Mountain people, they would then process and consume some of the resources while storing the rest for the winter months.

But once the Utes acquired horses from the Spanish in the late seventeenthcentury, their lives and subsistence patterns began to change in ways they never could have imagined. Acquiring horses, small pedestrian Ute bands coalesced into larger mobile villages thus modifying and expanding their relationships with other Ute communities. Taking advantage of their newly increased mobility the Utes also altered their subsistence patterns. For while they continued to harvest resources much as they had before—using a modified and extended version of their annual round—they also began to participate in the global market place, trading slaves, animal hides, and meat for items that enhanced and expanded their vision of the good life. This new vision of what comprised a good life, including the acquisition of material wealth, particularly in the form of horse herds meant a change in how they came to view the plant and animal resources that they relied on for subsistence.

Trading with the Navajos, Spanish—and later the Mexicans at Taos—and eventually the Euroamericans who established trading posts in the Utes' territory, encouraged the Utes to see the commons as capable of producing more than what they had derived from it before the Europeans arrived. Formerly, the commons provided meat, skins and hides, and a wide variety of vegetables that satisfied their subsistence needs and gave them something to trade with other pedestrian tribes. Now, however, in addition to the things that the commons provided before, the Utes were able to trade hides and skins for guns and ammunition, steel knives, cloth, whiskey, and most importantly, horses. The Utes' acquisition of the horse opened up a new realm of possibilities for their use of the land. For the most part, the Utes' subsistence strategies remained quite similar to their older ways, but the horse allowed for greater mobility, and thus greater and more efficient utilization of the commons, a condition that seemed to continue until white settlers came to stay on a permanent basis beginning in the middle of the nineteenth-century. The question remains for this era, how did the Utes' subsistence strategies affect local wildlife populations? Again, it is impossible to tell, but barring climate-induced catastrophes such as the great blizzard that struck the Western Slope in the 1840s, the wildlife populations as they existed when the European and Americans began to settle the region suggest that the large animal populations were healthy and vibrant. It is important to note, however, that it is quite possible that the bison populations were already declining by the time white settlement of the era began in the mid-nineteenth-century. As discussed earlier, this was probably a result of both changing climatic conditions and hunting pressure rather than just one or the other.

Looking back on the final stage of this story from a distance of over 100 years, we can see that the history of hunting on the Western Slope was a microcosm of what was happening across the country in general, and the West more specifically around the beginning of twentieth-century. In 1997, historian Louis Warren published his treatment of the history of poachers and conservationists in the United States.<sup>1</sup> In this now classic study, Warren argued that this story was part of a greater trend that took place in the beginning of the twentieth-century, particularly throughout the West, that involved the "local commons" relinquishing control over resources to "extra-local" authorities. To conservationists, sport hunters, and the bureaucracies that worked with them, the best

<sup>&</sup>lt;sup>1</sup> Louis Warren, *The Hunters Game*, (New Haven: Yale University Press, 1997).

way to ensure that resources remained available to the greater public was to have them declared "public goods." With best intentions, concerned extra-local agents began to work toward the democratization of the commons. But best intentions aside, their methods and goals were counterintuitive to the way in which locals perceived the commons. As a result, locals—Indians, settlers, and market hunters—met the extra-locals' efforts with scorn, mockery, and in many cases, armed resistance.

In most ways, the history of hunting on the Western Slope is a reaffirmation of Warren's hypothesis. After Colorado entered the Union in 1876, state legislators began the process of imposing extra-local control over access to the commons with their passage of hunting regulations. As Warren argues, "game laws helped create a new social order on the land by demarcating a new wildlife commons, one that fit the socioeconomic needs of settler society better than the older commons."<sup>2</sup>

Although the passage of new hunting regulations had no immediate impact on the Utes, who already had hunting privileges established by the 1868 White River Treaty and the 1873 Brunot Mineral Agreement, commercial hunters, and settlers (miners and ranchers), found themselves the target of extra-local attempts to regulate the commons. At first the extra-local's efforts to control hunting had little impact on resource management and in the late 1870s and 1880s, Colorado's commercial hunting enterprise waxed strong. But sport hunters began to appear in the region and over the following decade, Colorado's state legislature—operating as agent for the conservationists—used closed seasons and hunting licenses to construct "boundaries" around wildlife as "a kind

of common pool resource, regardless of where the resource actually was within the state."<sup>3</sup>

Although conservationists received a boost in their efforts to redefine the commons as public goods with the passage of the Forest Reserves Act and the establishment of the White River Forest Reserve, the state still had limited success in enforcing hunting regulations, even after they passed legislation creating the Office of the Commissioner of Forest, Fish and Game, in 1891. Problems plagued the wildlife commissioner's office and deputy wardens on the Western Slope were often loathe to arrest violators of the state's hunting laws. Many of the individuals that county officials deputized had long standing relationships with the poachers and their families, and for those who grew up on the Western Slope hunting the wildlife in the local commons was undoubtedly an important part of their subsistence practices. Thus, like the Utes, miners, and ranchers, some deputy wardens also viewed extra-local authority as an unwanted presence in the local commons.

Although the state effectively outlawed commercial hunting in 1891 Indians, miners, and ranchers continued to resist outside control over the commons. Extra-local authorities began to implement more effective hunting regulations but many locals carried out their subsistence patterns in the same ways they always had, drawing from the land at will with little regard for conservation. Sport hunters continued to lobby for more restrictions on hunting and found success with moratoriums on certain species and shortened hunting seasons. Although the wildlife commissioners reported that the programs were producing desired results with higher wildlife populations, evidence of hunting depredations continued to surface.

<sup>3</sup> Ibid, 25.

Extra-locals argued over who was responsible for the destruction of the big animals. Wildlife commissioners pointed at the Utes who, they maintained, had no regard for limits or for hunting the correct gender. In contrast, conservationists such as Sumner Matteson blamed the pothunters and tourist hunters for the destruction of the state's wildlife populations. This division between the extra-local authorities continued to hamper their efforts to protect the local wildlife from over-hunting. Eventually, however, conservationists eventually found a way to reason with the majority of anticonservationists on the West Slope. But winning the battle did not mean that the war was over, and today interested parties in Colorado continue to debate the issue of federal control over the resources.

This revolution in human perceptions of wildlife as public property did not occur overnight, and in many ways is not complete. Conservationists and hunters are often at odds over wildlife management policies. The ability of the state to efficiently manage the wildlife populations has again come under fire as Colorado's deer populations are showing signs of chronic wasting disease. And in other cases, wildlife advocates cite privately owned game preserves as disease vectors that threaten the vitality of untamed wildlife populations. But one has to wonder if the opening up of the game drives on the Continental Divide that allowed for two different cultures to use the same resources during the Altithermal hiatus nearly 6,000 years ago met with anything like the contest over the commons during the recent past.

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