

Historic Context Study of the Purgatoire River Region

State Historical Fund Grant #2008-01-059

Department of Local Affairs Grant #6015

Preserve America Grant #08-08-AP-4005

Fall 2011



Colorado Preservation, Inc.

BUILDING A FUTURE *with* HISTORIC PLACES

Project Director:

Abbey Christman

Report Authors:

Richard Carrillo

Abbey Christman

Kathleen Corbett

Lindsay Joyner

Jonathon Rusch

Report Layout:

Michelle Chichester

Research Assistance:

Michelle Chichester

Emily Noggle

Lauren Trice

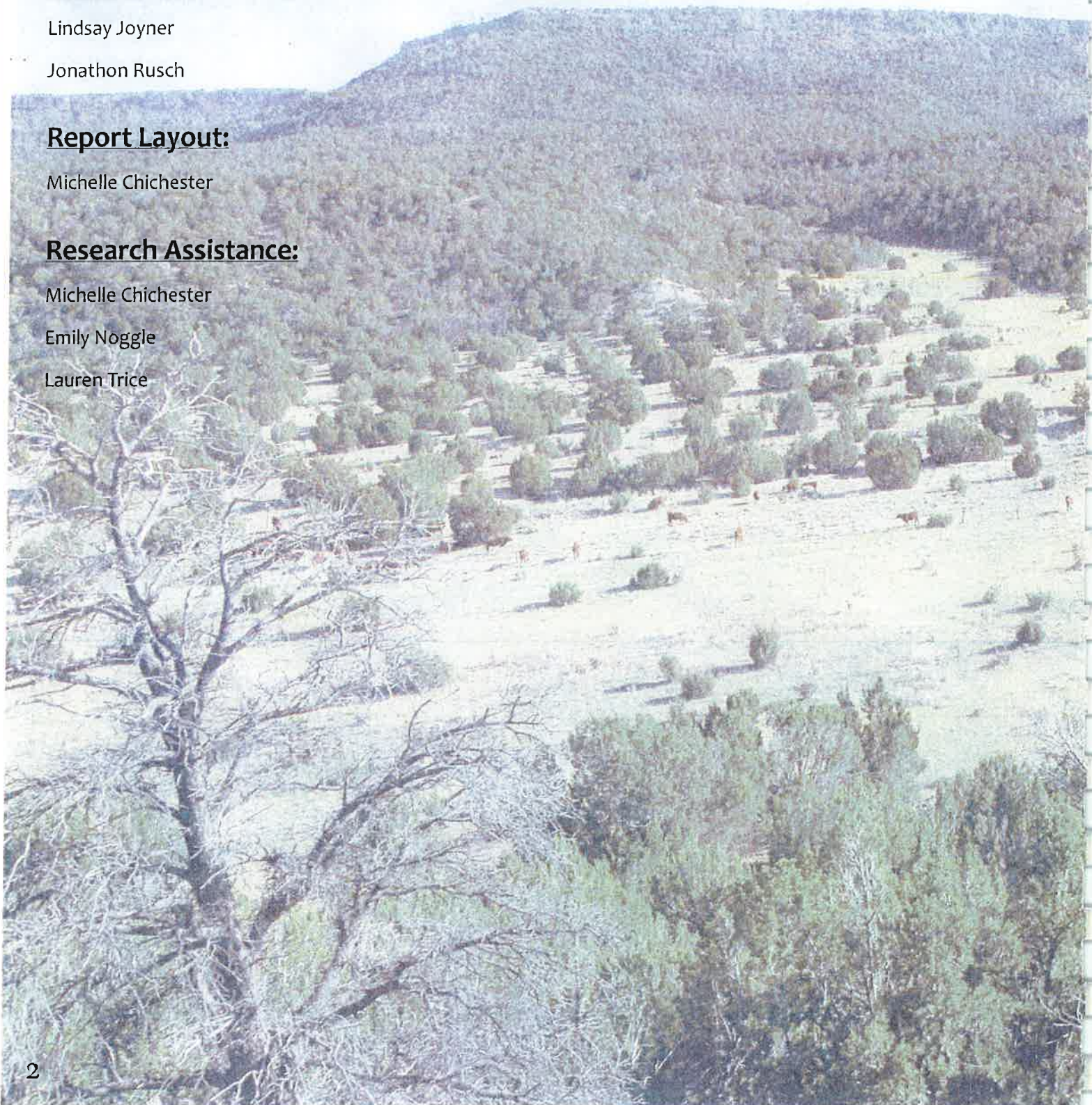
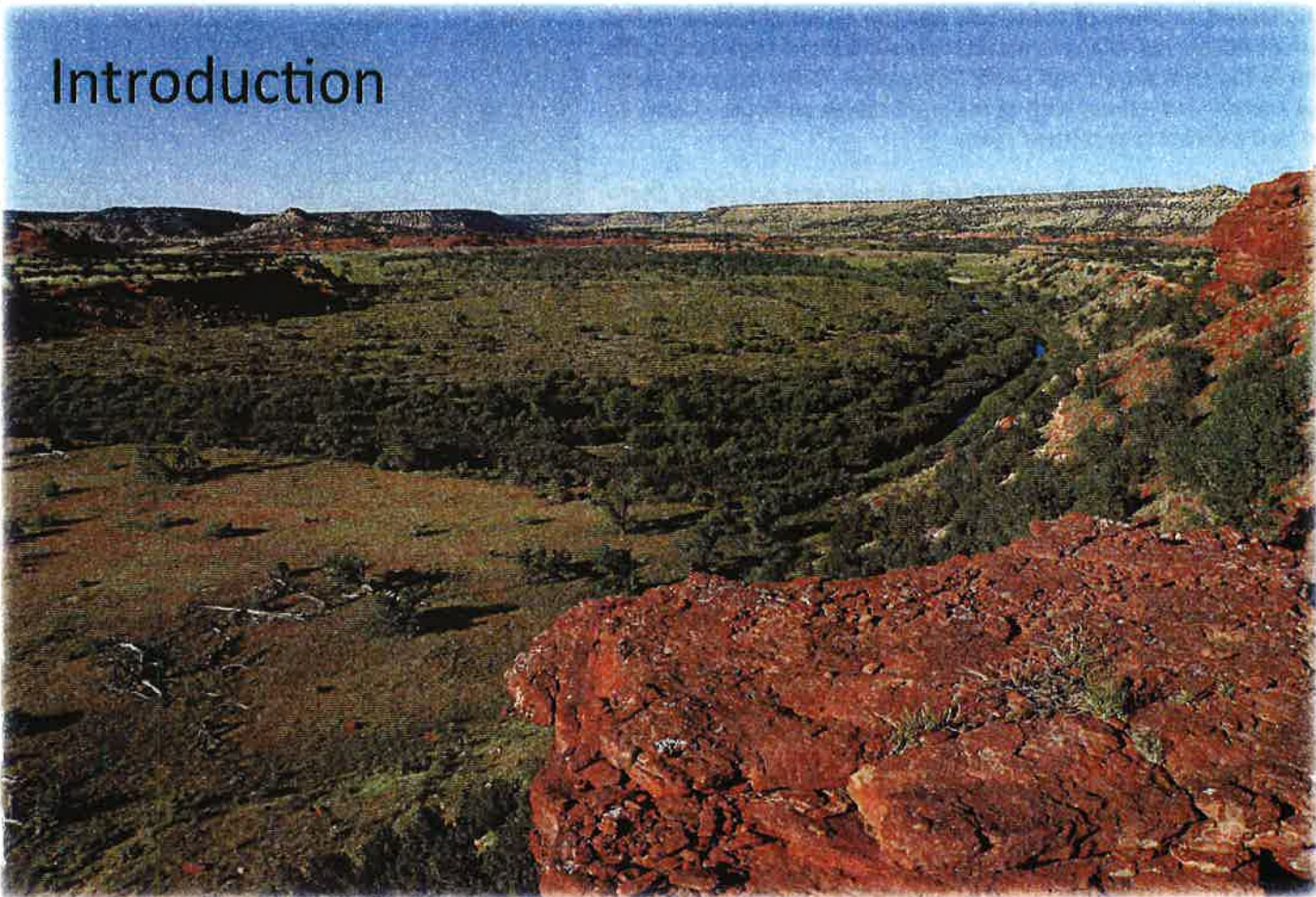


Table of Contents

Introduction	5
Prehistoric Overview	9
Native American Ethnohistory	15
Historical Archaeology	23
Settlement and Ethnicity	33
The Homestead Acts	39
Vernacular Architecture	51
Transportation	61
Cattle Ranching	67
Sheep	73
Farming	77
Commerce and Community	85
Religion	91
Education	97
Depression and the Dust Bowl	101
General Bibliography	105
Archaeology Bibliography	111



Introduction



This historic context study is intended to accompany the survey project Colorado Preservation, Inc. conducted in the Purgatoire River Region of southeastern Colorado during 2008 and 2009. The following contexts have been developed to provide a framework for understanding the history and significance of the resources recorded during the survey project. The survey developed from the grassroots movement of the local ranching community to oppose the expansion of the Army's Pinon Canyon Maneuver Site. With most of the region divided into large ranches, there has been very limited access and little public awareness of the wealth of historic resources in the area. The ranchers who approached Colorado Preservation, Inc. had dual goals: to document the architectural and archaeological resources of the area potentially affected by expansion, and to share this history with the public to raise awareness of the unique history and culture of the region.

Colorado Preservation, Inc. received grants to fund the survey from the Colorado Historical Society's State Historical Fund, the Colorado Department of Local Affairs, and Preserve America. No regional architectural surveys and limited archaeology had been conducted in the area. With the exception of previously recorded prehistoric rock art, potential survey findings were unknown. Survey work was conducted by a team composed of both an architectural historian and an historical archaeologist. The built environment was examined along with any surrounding surface artifacts, such as glass, ceramics, cans, barrel hoops, auto parts, and stove parts.

The survey consisted of two parts: a reconnaissance-level survey and an intensive-level survey. During the reconnaissance-level survey 464 prehistoric and historic sites were recorded. Prehistoric resources included petroglyphs, rock shelters, and tipi rings. Historical resources included more than 200 homesteads as well as schools, churches, cemeteries, irrigation systems, cattle corrals, and sheep pens. At the conclusion of the reconnaissance-level survey, fifty-eight resources were selected for intensive-level survey.

The vast majority of the survey was conducted on private lands. Ranchers guided the survey team to a wide range of resources including petroglyphs, abandoned homesteads, one-room schools, and cemeteries. This teamwork approach between the ranchers and surveyors created a unique opportunity to exchange information. Ranchers learned about survey methods, historic preservation, and the historical significance of sites on their land, while the survey team came to appreciate ranching operations across generations, contributing to a greater understanding of the cultural landscape and overall identity of the region.

One of the biggest surprises of the survey was the extent of homesteading era resources discovered. Many homesteaders abandoned their land in the 1930s due to the dust storms and Great Depression. Today dugouts, stone ruins, and corrals—along with abandoned stoves and cars—testify to the failed land ownership dreams of many.



The Purgatoire River region of eastern Las Animas and southern Otero Counties has a unique identity based on its specific landscape and cultural heritage. This part of Colorado's eastern plains is crisscrossed by canyons and arroyos. Tall mesas run along the region's southern border, and the Sangre de Cristo Mountains rise on the west. Historically, the Mountain Route of the Santa Fe Trail ran through the heart of the region. The Purgatoire River, which originates in western Las Animas County and flows generally east-northeastward for approximately 175 miles to Bent County, has also served as a focal point of the region. The ranching landscape of eastern Las Animas County is very different in character from the mountainous western part of the county, whose development revolved around the mining industry. Southern Otero County has much more in common with eastern Las Animas County than with the northern portion of the county, which is characterized by fruit and vegetable truck farms located along the Arkansas River. The ranching industry has created strong cultural and economic ties between eastern Las Animas and southern Otero Counties, forming a large, regional community. The region is rural with only a few small towns (Branson, Hoehne, and Kim). It has escaped the development pressures facing many other rural areas in Colorado and is instead threatened by gradual population loss. The built environment and working landscape has changed little since the 1940s, making it an ideal place to interpret the history of homesteading and the region's ranching heritage.

The Purgatoire River region has been an historical frontier in both the sense of being an unsettled or sparsely settled area as well as being a boundary between nations or ethnic groups. Many still view the area as a frontier, a place that continues to be on the edge of "civilization" and remote from the state's major population centers. Until 1848, the region was part of Mexico and represented the extreme northern edge of a vast southwestern Hispanic territory known as Las Provincias Internas.

Southeastern Colorado's semi-arid climate has limited the types of human activities that could be carried out there successfully. The broad, open spaces and rolling terrain initially led many to view the region as an obstacle to travel through, rather than a place to settle down. From the 1820s through the 1870s, many traders passed through the region following the Santa Fe Trail, but few decided to settle there. Beginning in 1859, cowboys traversed the region, herding cattle from Texas to Denver to supply Western miners. Cattlemen soon discovered the region's gramma and buffalo grass to be ideal for cattle grazing, and large ranching operations were established in the region to take advantage of its open range land.

Many of the region's early residents came north from New Mexico, settling in the Purgatoire valley in the late 1850s and early 1860s on land acquired through Mexican land grants. During the 1870s and 1880s, they were followed by a wave of Anglo-American settlers seeking land under the Homestead Act. Accustomed to New Mexico's dry climate, the New Mexican settlers found the region much more welcoming than Anglo-Americans from wetter climates in the eastern U.S. The New Mexicans also had the advantage of building traditions and agricultural practices developed to suit the climate. The Atchison Topeka and Santa Fe Railroad completed its line through the region in 1878, sparking additional development and new communities soon sprang up across the prairies.



However, the boom was brief. Many found making a living in the region harder than they expected. A severe drought and several extremely harsh winters in the 1880s, killed many of the region's cattle and the hopes of many farmers.

Settlement remained sparse until changes to homesteading policy in the early 20th century helped create a homesteading boom. Under the original Homestead Act of 1862, settlers could acquire up to 160 acres of land. To receive title, homesteaders had to build a residence, put the land under agricultural production, and live on the land for five years. While 160 acres was sufficient to establish a successful farm in states like Iowa, more land was needed in the drier lands of the West. Influenced by the Dry Farming Movement, the Enlarged Homestead Act of 1909 increased the number of acres per homesteader to 320 in areas where irrigation was not possible. Scientific moisture management methods, including deep seeding, contour furrowing, and soil aeration were widely promoted as the key to conquering nature and farming lands formerly

thought barren.

Further revisions to the Stock Raising Act of 1916 provided a boost to the ranching industry. Though the blizzards of the 1880s and the arrival of new farmers and fences had ended the days of open range cattle industry, many in the region continued to use the region's short grass to graze cattle or sheep. The amount of acreage available under the Homestead Acts, however, was insufficient for homesteaders to run economically viable ranching operations. Acknowledging that most of the remaining government land in the West was not really for farming, the Stock Raising Act allowed homesteaders to claim 640 acres on lands determined suitable only for grazing.

Unusually wet weather during the 1910s and 1920s as well as a boom in agricultural commodity prices during World War I also contributed to a homesteading boom in the region. During the 1910s there were more than twenty new post offices and thirty new school districts established. The homesteading boom included Hispanics, from New Mexico as well as from Colorado, along with Anglo-Americans from states to the east, particularly Kansas, Missouri, and Texas. Roughly seventy percent of the homesteads documented during the survey were patented between 1910 and 1930. This region was one of the last regions in the state (and the country) to be settled. As a result, the region retained a frontier character much longer. During the 1910s and 1920s homesteaders in the region lived in primitive conditions in dugouts and simple one-room stone and adobe dwellings while residents of Trinidad and La Junta were building neat rows of bungalows with electricity and plumbing.

The homesteading boom soon turned into a bust. Agricultural prices dropped dramatically in the 1920s, dramatically reducing farmers' incomes. Many could not raise enough to get by and began to abandon their homesteads. When the drought and dust storms of the 1930s hit, there was a mass exodus. Crops withered, leaving nothing to hold the fine topsoil in place, resulting in severe erosion and dust storms. Many of the new homesteaders were forced off their land, losing their property for back taxes or selling out to their more successful neighbors. A series of New Deal programs were created to help, from providing immediate jobs to long-term changes in land use patterns.

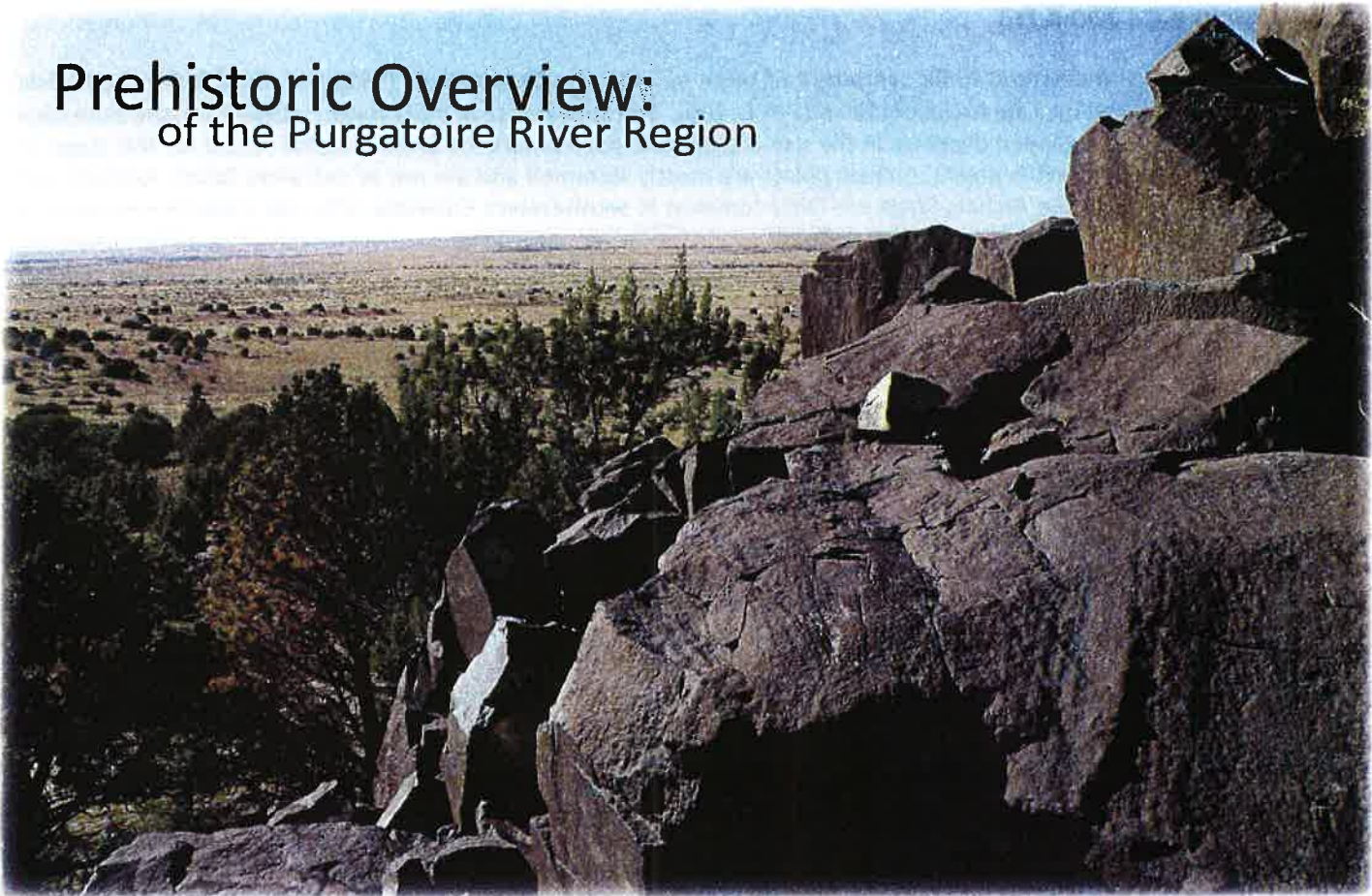
This led to a dramatic reversal of government land policy. Just two decades before, the federal government had increased the size of homesteads to encourage more farmers to come out and settle the West. But New Deal agronomists and scientists decided that much of the West was actually not suitable for farming. Cattle ranching was determined the more environmentally suitable, as well as economically viable, land use. In several locations, including the Purgatoire River Region, the government established programs to resettle farmers to other regions. The government bought out landowners with acreages considered too small to be viable, purchasing land they had previously been eager to give away. The new federal lands were taken out of cultivation, and new jobs were created to restore the prairie through contour furrowing, reseeding, and planting shelterbelts. Once prairie grasses were restored, lands were leased for grazing. The land purchased by the government eventually became National Grasslands and continue to be used for government-managed cattle ranching.

The 1930s marked the end of most dryland farming in the region, with only very limited farming continuing in areas where irrigation is possible. Like the days of the open range in the nineteenth century, cattle grazing is again the region's primary land use. Today's cattle ranches are primarily family-owned, many dating back multiple generations. These were the families that stuck it out through the tough times of the Great Depression in order to gradually expand their land holdings as their neighbors left. Now part of cattle pastures, the abandoned homesteads have been left largely untouched, leaving a remarkably intact record of the homesteading experience in the region.





Prehistoric Overview: of the Purgatoire River Region



Any full understanding of the history of human settlement in the survey area must begin with the people who lived in and moved across the region long before contact with Europeans was made. Although archaeologists continually discover new information about prehistoric peoples, much about the prehistory of southeastern Colorado is still not known. The archaeological record of this region tells us that it was occupied by aboriginal groups as long as 11,500 years ago. In the survey area specifically, however, few prehistoric sites have been excavated, although artifacts found on the surface of the ground and prehistoric rock art provide abundant evidence that prehistoric groups were present. Much of the following summary of the region's prehistory is based on information derived from sites in close proximity to the survey area. These areas include the John Martin Reservoir (Eddy, et al 1982; Earles, et al 1987) and the Pinon Canyon Maneuver Site, which is encompassed by the survey area (Carrillo 1981, 1985, 1990, 1994a, 1994b, 1995a, 1995b; Carrillo and Kalasz 1990; Carrillo et al. 1989; Weber 1990; Hardesty et al. 1995; Carrillo et al. 1996; Carrillo et al. 2003; Carrillo 2009; Zier and Kalasz 1999:73).

The following summary provides an overview of the stages of development for prehistoric cultures from the Paleoindian Stage (10,500–5000 B.C.), though the Archaic Stage (5500 B.C.–A.D. 200) and the Late Prehistoric Stage (A.D. 100–1725). Each of these stages is marked by unique sets of technological and cultural changes and adaptations, which are visible in the archaeological record of the survey area.

Paleoindian Stage (10,500 B.C.–5000 B.C.)

The earliest generally recognized evidence for human activity in southeastern Colorado dates to the Paleoindian stage, which took place at the end of the Pleistocene Epoch, when the climate was characterized by cool summers and warm winters (Bryson et al. 1970:53-74). Archaeological evidence suggests that Paleoindian people lived in egalitarian, nomadic bands of a few dozen individuals. They produced relatively large, occasionally fluted, lanceolate projectile points, which were used to hunt now-extinct Pleistocene animals, including mammoth and camel, as well as some still-extant species, such as bison, elk, deer, and bear. Paleoindian people depended primarily on large game and on seasonally available plant resources for food and the other necessities of life (Hester and Grady 1977:78, 79; Wheat 1971:24-28).

The Paleoindian stage is divided into three periods, each of which is marked by distinctive projectile points. These include the Clovis period (10,500 B.C.–9000 B.C.), the Folsom period (9000 B.C.–8200 B.C.), and the Plano period (8200 B.C.–5500 B.C.). Although Paleoindian projectile points have been found on the ground surface throughout southeastern Colorado, no Paleoindian sites containing intact deposits have been excavated south of the Arkansas River (Zier and Kalasz 1999:73).

Archaic Stage (5500 B.C.–200 A.D.)

The Archaic stage is generally understood to be comprised of three periods: the Early Archaic (5500 B.C.–3000 B.C.), the Middle Archaic (3000 B.C.–1000 B.C.), and the Late Archaic (1000 B.C.–A.D. 200). The appearance of more diverse stone tools, the expansion of the use of ground stone, and a general decrease in the size of projectile points mark the archaeological record for this stage. In contrast to earlier Paleoindian projectile points, Archaic points are mostly stemmed and are not as delicately flaked. Artifacts and archaeological evidence dating to the Archaic Stage are fairly common in southeastern Colorado, although considerable regional differentiation exists—few Archaic stage sites are well defined.

The Early Archaic Period

In prehistoric times as in historic times, people's lifeways changed in response to their environment. The Early Archaic period (5500 B.C.–3000 B.C.) is marked by the onset of the Altithermal climatic episode, which brought hotter and drier conditions, leading to significant changes in culture and tool technology. As the large Pleistocene animals became extinct, people in the Early Archaic turned to hunting smaller game and gathering wild plants. The drastic change in climate may have also led to a partial depopulation of the Plains, with some groups relocating to the relatively cooler, wetter, and higher foothills and mountains (Benedict 1979; Benedict and Olson 1978). Large, shallow side-notched and some large corner-notched projectile point types are characteristic of the known Early Archaic sites located in the mountain-foothill areas and along mountain slopes. In southeastern Colorado, Early Archaic projectile points have been found on the ground surface at sites in the Apishapa Highlands, the John Martin Reservoir area, the Fort Carson Military Reservation, and the Pinon Canyon Maneuver Site (Alexander et al. 1982:179-180; Anderson 1985; Anderson 1989; Eddy et al. 1982:169; Lutz and Hunt 1979:133; Zier and Kalasz 1999:102).

Middle Archaic Period

During the Middle Archaic period (3000 B.C.–1000 B.C.), culture and tool technology continued to change. Sites that date to the Middle Archaic, both in and outside of the survey area, have helped archaeologists understand the ways that these groups lived and moved in the Purgatoire region. Archaeologists theorize that these groups followed a carefully calculated schedule of seasonal hunting and foraging, moving onto the Plains and the interior montane basins to hunt large and small game and to gather and process wild plants (Frison 1978:46; 49). Middle Archaic peoples in the Purgatoire region continued to live in small groups and may also have traded with others at a distance: for instance, the Wolf Spider site (5LA.6197), on the Purgatoire in Las Animas County, contained a pendant manufactured from a freshwater bivalve shell (Zier and Kalasz 1999:119).

Late Archaic Period

The Late Archaic period spanned the time between 1000 B.C. and A.D. 200. Aboriginal groups during this period continued to subsist on the foods they obtained from hunting and foraging. A noticeable increase in the amount of ground and pecked stone artifacts yielded in Late Archaic period sites, compared to that found in sites from earlier periods, suggests that processed plants gained importance as a food source. Late Archaic peoples also shifted emphasis in hunting to small mammals, such as jackrabbits, cottontail rabbits, and prairie dogs, and did not hunt large game animals, like elk, deer, and bison, to the same extent as their predecessors. A substantial number of prehistoric sites in the survey area were occupied during the Late Archaic period. Archaeologists have been able to establish that some sites were occupied continuously or repeatedly during both the Middle Archaic and the Late Archaic.

Late Prehistoric Stage (A.D. 100 A.D.–A.D. 1725)

Archaeologists understand the Late Prehistoric stage as a bridge between the well-established Late Archaic peoples and historically known Native American cultures (Zier and Kalasz 1999:141). Important changes in the technologies of tool production, ceramics, and the construction of dwellings took place during the Late Prehistoric stage. This stage is generally understood in three periods: the Developmental period (A.D. 100–A.D. 1050); the Diversification period (A.D. 1050–A.D. 1450); and the Protohistoric period (A.D. 1450–A.D. 1725).

Developmental Period (A.D. 100–A.D. 1050)

During the Late Prehistoric stage, a hunting and foraging lifestyle persisted throughout the Purgatoire region. Even so, cultural and technological changes adopted from other groups are evident in the archaeological record, marking the Developmental period (Eighmy 1984; Wood 1967; Zier and Kalasz 1999). The Developmental period saw the people of the Purgatoire region beginning to make ceramic vessels, and small, corner-notched arrow points indicate that the bow and arrow came into use during this period. Some evidence suggests that Developmental period peoples in the region cultivated corn and beans, although it was not dominant in their lives (Zier and Kalasz 1999:179). Another important development was the construction of architecture. This was accomplished either through building walls within rockshelters or constructing small stone structures on more exposed ground (Zier and Kalasz 1999:174-75; 179-80). Archaeologists have noticed a marked increase in the number of sites dating to the Developmental

period. They believe this may suggest a significant population increase, or that it may also be a result of greater site visibility due to the presence of architectural remains (Zier and Kalasz 1999).

Diversification Period (A.D. 1050-A.D. 1450)

Archaeologists apply the term “diversification” to this period because they have identified culturally diverse groups that lived during this time, even though they do not completely understand the reasons for these divergences. Generally, settlement sites that date to this period are larger and more complex, indicating that population growth continued during this time. Within the Diversification period, two phases of occupation, the Apishapa phase (A.D. 1050–1450) and the Sopris phase (A.D. 1050–1200), are evident in the Arkansas Basin. While these phases represent two distinct groups, archaeologists believe that both groups had their origins in the Developmental period (Zier and Kalasz 1999:189). The Apishapa phase is well represented in the survey area, with such important sites as the Sorenson site (5LA.330) and Umbart Cave (5LA.125). The Sopris phase had a geographic focus on the upper Purgatoire—to the west of the survey area—and few if any Sopris sites are found in the survey area (Zier and Kalasz 1999:192).

The Apishapa phase developed on and around the Chaquaqua Plateau, in what is now Las Animas County. Apishapa site types include rockshelters, camps, and also villages (DeVore 1998:24). These last are found in defensible locations near arable land and some evidence of horticulture, indicating that the Apishapa were a semi-sedentary people. Artifacts found on Apishapa sites include a wide variety of stone tools, such as arrowpoints, scrapers, knives, graters, choppers, tapered flange drills, and manos and metates, as well as basketry and cordmarked pottery (DeVore 1998:24). Archaeologists have noted similarities between Apishapa artifact assemblages, particularly ceramics, and the assemblages of the Plains Village groups who lived east of the Arkansas Basin and practiced horticulture to a far greater extent (Wood 1971; Zier and Kalasz 1999:203).

During the peak of the Apishapa culture, from about A.D. 1000 to about 1350, the number of habitation sites and the size of these sites increased, indicating an expansion in population. Apishapa houses were constructed of posts and brush built upon (mostly circular) stone enclosures. Floors typically formed shallow basins, and walls were sometimes extended to form fences, alleys, or plazas (Zier and Kalasz 1999:196). A small number of Apishapa sites show evidence of storage facilities built to hold maize and beans, of which several varieties were cultivated. Nevertheless, archaeologists believe that horticulture did not play a major role in the subsistence strategies of the Apishapa, and that wild plants and large and small game were still the dominant food sources of these people.

Archaeological evidence indicates that the Apishapa phase groups abandoned the Chaquaqua Plateau in the fourteenth century, although archaeologists are not sure why. A drought affected the Southwest around that time, and many think the area occupied by the Apishapa may have also been affected. Others think that the Apishapa may have been pushed east most likely by the early Apaches, and joined with the Arikara, Pawnee, and Wichita groups (Zier and Kalasz 1999:208).

The Protohistoric Period (A.D. 1450–A.D. 1725)

The Protohistoric period describes the time in which groups that we understand only through the archaeological record were replaced by, or became, groups that we understand because they are documented in historical records. This period has been generally understood to focus on the earliest phase of contact between aboriginal groups and Europeans. In the Purgatoire



region, this contact was made around A.D. 1540, when the Coronado Expedition first met Native Americans in the area. It ended around A.D. 1725–50, when contact between the Native Americans of the Arkansas Valley and the Spanish colonies in New Mexico began to happen more regularly. In the interest of continuity, however, archaeologists understand the Protohistoric period to begin considerably earlier than first contact, with the abandonment of the area by Apishapa groups (around A.D. 1350–1450) and the arrival of Apachean peoples. These latter groups, who migrated into the area around A.D. 1450, were ancestors of the Plains Apache and were associated with the Athapascan linguistic culture (Wyckoff 1998:26; Zier and Kalasz 1999:250).

Within southeastern Colorado, a number of purported Apachean sites have been reported. The Loudon site (5LA.6204), located in the survey area, is dated A.D. 1435 and has been attributed to early Protohistoric Apachean occupation (Greer 1966). Other sites suggest that eastern Apachean peoples were present in the Carrizo Creek area of southern Las Animas County by A.D. 1400. Some Protohistoric sites near the survey area feature spaced stone circles (tipi rings) and earth rings (Campbell 1969:404, 407, 419; Hand et al. 1977:65-67). Micaceous tempered pottery found in associations with these sites may, however, be attributable to Taos-Picuris Pueblos rather than to Apachean peoples (Wedel 1959:593; Wood and Bair 1980:21-22), and may indicate trade with Puebloan groups. More nomadic than their Apishapa predecessors in the area, the Apache were not farmers, and were heavily dependent on bison for food and many other of life's necessities (Wyckoff 1998:26).

Although Spain claimed the Purgatoire and surrounding territory with the Coronado Expedition, a consistent non-Native presence in the Purgatoire area was still more than two centuries away. The interim was a time of upheaval and unrest. By the early 1700s, the Purgatoire region saw groups of Comanches pushing into the area from the north, forcing the Apache southward (Wyckoff 1998:31). By the end of the Protohistoric period, in the mid-1700s, regular trade existed between Native groups in southeastern Colorado and the northernmost outposts of New Spain, in what is now northern New Mexico, although conflicts were still frequent (Wyckoff 1998:29-31).

Late Prehistoric Stage Rock Art

Over the many centuries people have called the High Plains Desert home, its canyon walls and rock faces have served as canvases upon which they have inscribed and painted meaningful images. The methods, forms, and scenes that rock artists have created have changed and over time. Some rock art has been pecked into rock—these are known as petroglyphs—while painted rock art are known as pictographs. Today, archaeologists have developed increasingly sophisticated methods to understand it. By applying radiocarbon dating methods to decipher how old rock art panels are, researchers now have a better understanding of the ways that rock art changed as cultures developed or as groups of people were replaced by other groups.

The earliest known petroglyphs in southeastern Colorado have been documented on the Pinon Canyon Maneuver Site and date to the Archaic period (5500 BC to 200 AD). These fall within a category archaeologists call the “pecked abstract style,” because they were made by scarring the faces of stone surfaces with sharp, harder stones, and because the images take abstract, non-representational forms, such as wavy lines, spirals, and circles, or combinations of these forms. These forms were popular during the Middle Archaic period, between 4,600 and 3000 years ago. In the Late Archaic period, about 3,000 to 1,800 years ago, rock artists continued to produce abstract designs, but began to use rectangular forms and parallel lines. They also began to produce images around this time that could be identified as animals, although which animal being depicted was not always clear. Archaeologists categorize these latter images as the “pecked representational style” (Loendorf 2008:79)

Later, during the Late Prehistoric Stage (also known as the Ceramic period), rock artists who lived in and traveled through the Purgatoire River region created both petroglyphs and pictographs. The figures depicted by the Late Prehistoric stage artists were more identifiable as people and specific animals—human figures were shown with fingers, often with arms bent. One well-known rock art panel on the Pinon Canyon Maneuver Site, the Zookeeper Site (5LA5993), shows a human—possibly a shaman figure—surrounded by dozens of animals, including deer, pronghorn, and others that could be coyotes or dogs. The meaning of such panels is never entirely clear, but in this case the human figure appears to be exuberantly wielding some sort of instrument to orchestrate the animals around him (Loendorf 2008:86-94).

Painted rock art is rare in comparison to petroglyphs, due in part to the tendency of open-air pictographs to wear away. Those that remain are found in rock shelters and protected locations. Petroglyphs and pictographs from the Protohistoric period, beginning in the 1600s and lasting for at least the next 200 years, tend to be “biographical;” they depict events such as battles and hunts, using discernable features like bows and arrows or riders on horseback. Some rock art from this period depicts teepees.

Although most rock art is thought to have been produced by Native Americans, this is not the case: Europeans and others also inscribed imagery on rock faces. In the seventeenth and eighteenth centuries, Spanish missionaries entering the area would add crosses to rock art panels in order to alter what they believed was pagan imagery. Hispanic and Anglo-American traders, and later settlers, who moved through southeastern Colorado inscribed names, dates, and pictures of cattle, horses, or other wildlife. Some figures may depict historic events; one anthropomorphic figure in Picture Canyon on the Comanche National Grassland, for instance, is covered with a dense series of dots and is believed to represent a smallpox victim.

Prehistoric Resources

from the Purgatoire River Region

Rock Art

Prehistoric rock art sites are found in sheltered or exposed places and consist of petroglyphs, i.e., shapes or images pecked onto stone surfaces. Earlier rock art is generally more abstract, with wavy lines, circles, and spirals. Later rock art tends to depict more recognizable images, such as human and animal forms.

Shelters

Shelter sites are found in or along rock outcrops. These consist of artifacts and other remains consistent with human habitation or temporary occupation. Associated artifacts may include worked stone or ceramics.

Stone/Slab Enclosures

These sites consist of arrangements of stone slabs set upright in the ground surfaces, enclosing a defined area. These stones served as substructures for shelters made of organic material, such as poles, brush, or hides. Associated artifacts may include lithics, groundstone, or ceramics. Stone/slab enclosures constructed by the Apishapa are common in the survey area.

Bedrock Metates

Bedrock Metates are associated with food processing, and consist of a small depression on a rock surface, upon which corn or other food was ground with a smooth rounded rock, known as a mano. Some sites contain multiple bedrock metates, indicating that food processing was a communal activity.

Campsites

These sites indicate a temporary location of human activity, and may have been used in the course of food procurement, such as hunting or gathering plant resources. Associated artifacts might include lithics, groundstone, ceramics, and fire-cracked rock.

Springs

Water sources were important to human habitation. Springs and other naturally occurring water sources were used by prehistoric peoples, although rarely as sites of occupation. Artifacts found at or near springs are usually associated with hunting or water acquisition, and may include lithics or ceramics.

Lithic Scatters

Lithic scatters consist of a collection of worked stone—or the byproducts of worked stone—found in a concentrated area. Cores, flakes, points, scrapers are possible artifacts at these sites, and indicate that stone tool manufacture took place at the location of the site.



5PE.6955 Rock Art



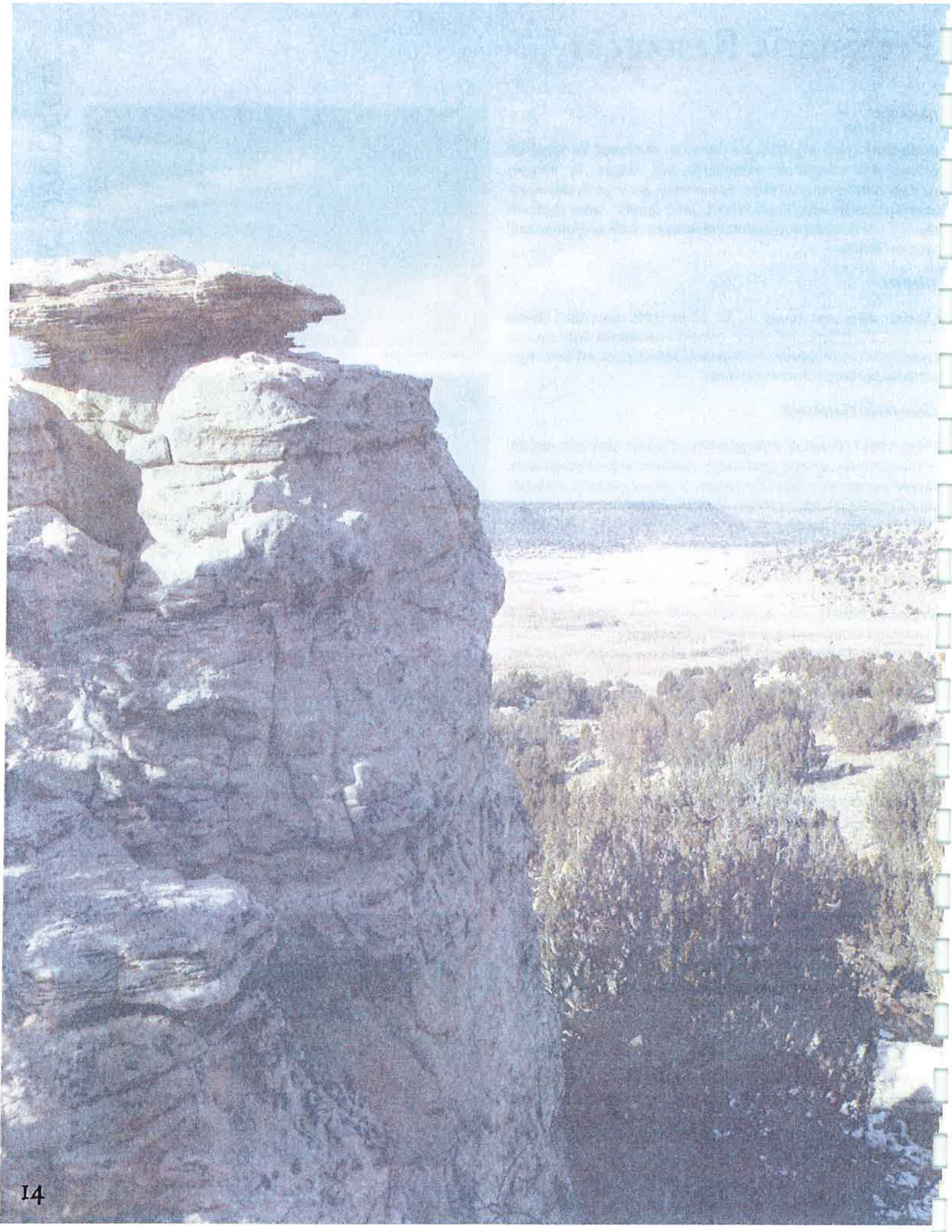
5LA.11851 Rock shelter with petroglyphs



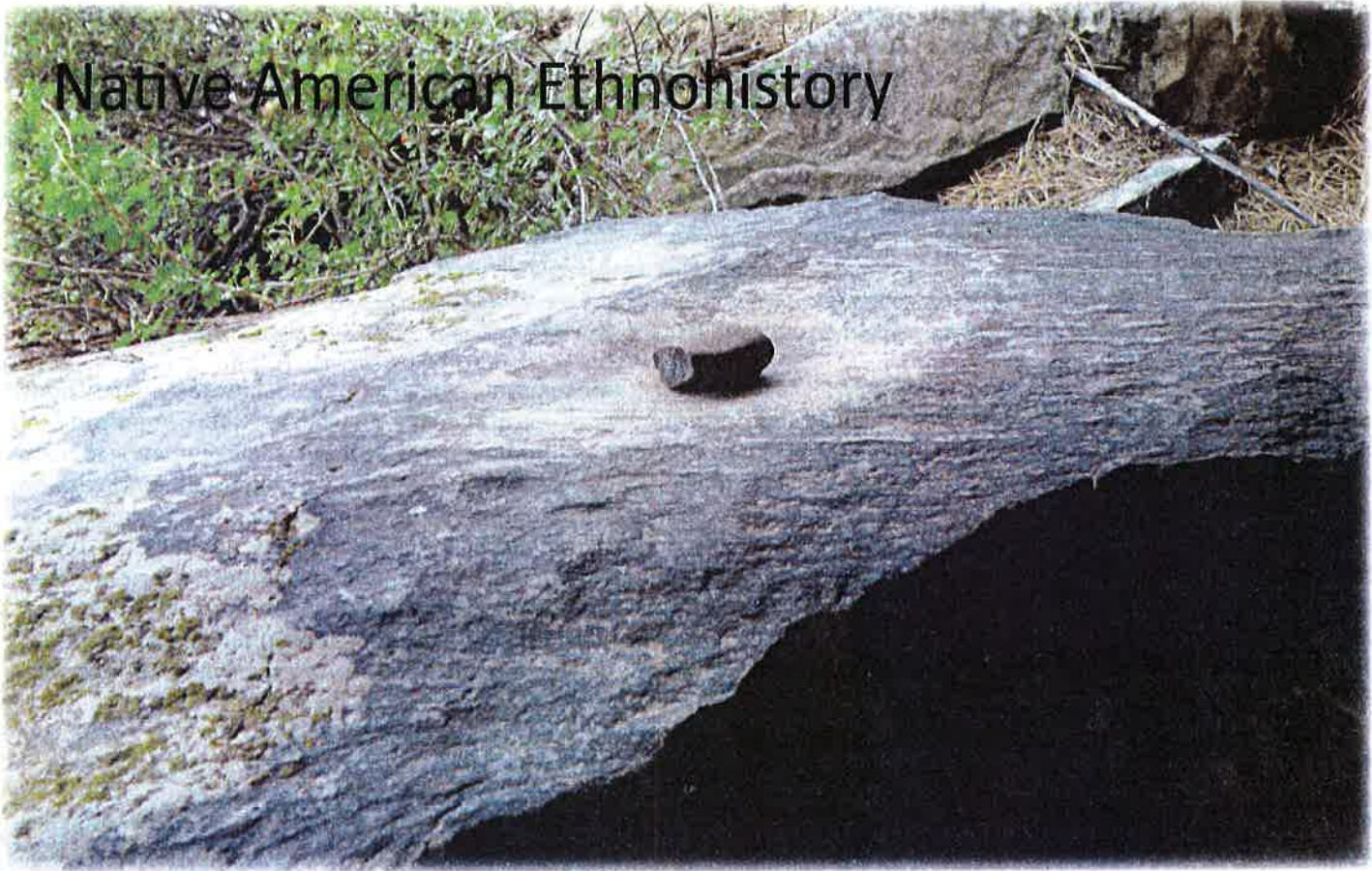
5LA.11981 Apishapa



5LA.11851 Bedrock metates



Native American Ethnohistory



Geographic Context and Euro-American Influence

Beginning in the early nineteenth century, dramatic culture change and population movements among Native Americans and New Mexicans took place on the High Plains. The Purgatoire region, located at the southwestern margin of the High Plains, was a place of dynamic cultural interaction between Plains groups and those in neighboring regions, including the Rocky Mountains and the American Southwest (Weber 1990). The Purgatoire area lies in the Colorado Piedmont, and is surrounded by three major physiographic regions. To the north and east is the short grass prairie of the Great Plains; to the west is the Sangre de Cristo Range (Spanish Peaks) of the Colorado Rockies; and to the south is the Raton Mesa uplift. Also included are the more distant desert and oasis areas of the American Southwest.

For most of the Native Americans of the East, Great Plains, and Rocky Mountains, the century between 1770 and 1870 was marked by tremendous change. Population levels rose and plummeted with cultural florescence, disease, and displacement. Survivors ultimately became wards of the federal government. All of these changes were direct or indirect results of Euro-American contact and were intimately tied to two phenomena of Euro-American origin: the fur trade and horse culture. Both are key elements in post-contact Native American culture change and are highlighted here to exemplify the type and extent of changes wrought by Euro-Americans.

Although the beaver fur trade began in the Northeast and the Great Lakes area, it eventually reached the Plains and the Southwest. The introduction of the horse, on the other hand, came from the opposite direction (the Southwest), and in a relatively short time horses were commonly used by the tribes of the Plains and Plateau regions. New forms of economic exchange that accompanied Anglo-American goods affected Native American groups and the Hispanic population in the Southwest. These groups went from self-sufficient units to subordinate members of the international trade community (Weber 1980,16; Weber 1990); however, one should not lose sight of the fact that these people actively adapted to or resisted these processes.

The fur trade spread west from the Northeast through the deciduous forest ecozone, which was the habitat of the beaver. As an industry, the fur trade later included the somewhat different trade in buffalo hides on the Plains. Native Americans participated in the fur trade as a matter of necessity and survival. Their ability to trade for firearms (without which they were at the mercy of those who had them) and other goods was predicated upon their access to beaver or bison. To ensure this access, tribes pushed west from their traditional territories into the territories of other tribes, resulting in a domino effect of population pressure and cultural conflict (Weber 1990).

As this trade network of beaver pelts and guns exerted pressure from the Northeast, equally momentous catalysts for cultural change—horses—were spreading to the Plains tribes from the Southwest. With the meeting of the horse and gun frontiers in Montana, the classic “Plains horse culture” was formed. Small, scattered groups coalesced into large and powerful tribes. The annual migration cycles of these tribes no longer responded solely to the availability of resources for human consumption but increasingly addressed the requirements of the horse herds. Horses created wealth and power differences both within and among tribes. Mounted groups expanded their territory at the expense of horseless groups, and the social organization of Plains tribes was almost completely restructured. As the territories of Plains tribes expanded and contracted, new groups were pushed or drawn to the Plains as well. The Comanche moved south from the Wyoming area to dominate the southern Plains, while the Lakota (Sioux) thrust westward onto the northern Plains. Other groups, such as the Ute, retained their home bases in the mountains but added a Plains hunting period to their calendar and Plains elements to their material culture. The Ute, along with the Jicarilla Apache, raided in regions as far east as the Texas and Oklahoma panhandles. (Lewis 1942; Secoy 1953; Weber 1980, 17; Weber 1990).

Not only did the adoption of horses and guns bring grand-scale population and territorial changes to the Plains, these innovations also fundamentally changed the way Plains tribes viewed and used the natural environment. Previously, Native Americans on the Plains were pedestrian nomads who collected wild foods while following and hunting herds of bison, their primary economic resource. These groups were generally egalitarian: resources to make needed goods were equally available to all, and material possessions were necessarily limited to what people could readily carry. Horses and guns, however, meant that those groups who acquired them had superior buffalo hunting abilities. Additionally, the national and international bison hide trade network created an external market for hides, which were no longer used by only the people who procured them. Increasingly, the various tribes were economic groups competing for and dependent upon an external trade network over which they had no control. As these formerly self-sufficient societies became both producers (of hides) and consumers (of guns and other Euro-American manufactured goods), they lost some of their previous subsistence options. Although they struggled to retain their lifeways, they ultimately became satellites of the larger market economy (Hickerson 1973; Mishkin 1940; Secoy 1953; Weber 1980, 17-18; Weber 1990).

Spanish Territory

Native Americans and New Mexican Hispanic pobladores (settlers) developed a system of guarded cooperation during the 200 years they coexisted between the seventeenth and nineteenth centuries. Spain’s claim on the New World, which was based on Columbus’ discovery, included what is now Southeastern Colorado. In 1540, members of the Coronado expedition were the first Spaniards to enter the region that generally comprises the present American Southwest. Historians refer to this region, which served as Spain’s northern frontier, as the Spanish borderlands (Bannon 1974; Bolton 1964; Weber 1982). Spain made no attempt to colonize the area located in present-day Colorado, which was used for hunting and trade with indigenous Native American Plains groups. This tradition was acquired from Pueblo Indians, who had established a trade network that long predated the arrival of the Spanish (Kenner 1969; Carrillo 1990).

With the 1803 Louisiana Purchase by the United States, France forfeited control of an enormous portion of the mid-continent, leading to a dispute between Spain and the United States over the western boundary of the territory. In 1819 the dispute was resolved with the Adams-Onís Treaty (also known as the Transcontinental Treaty). This treaty delineated the Spanish-U.S. boundary as a series of rivers and parallels commencing with the Sabine River (now the western boundary of present-day Louisiana) and ultimately reaching the Pacific Ocean along the 42nd parallel (the present southern boundary of Oregon). In southeastern Colorado, this boundary was the Arkansas River, bringing the United States within several hundred kilometers of the northernmost New Mexican settlements (Anderson 1985, 46; Friedman 1985, 34; Lamar 1977, 4-5; Mehls and Carter 1984; Stoffle et al. 1984, 58; Weber 1982, 12; Carrillo 1990).

Beginning in 1786, when the Comanches and the government of New Mexico negotiated peace, important trade systems developed in the region and continued basically unchanged for nearly 100 years—well into the American period, which began with the United States’ acquisition of New Mexico in 1847 (and is ongoing). Comancheros (Hispanic New Mexicans and Puebloans who traded with the Comanches and other tribes) and ciboleros (Hispanic buffalo hunters) ventured from central New Mexico onto the Plains, including the Purgatoire region (Forbes 1960, 78-114; Weber 1990). With the exception of traffic in horses and mules, the initial trade of both groups was generally a simple exchange of the produce of the valley for the game of the Plains (Forbes 1960:86). American trading posts later became suppliers to the comancheros and the consumers of goods they carried. From 1819, the year the Adams-Onís Treaty established the Arkansas River as the U.S.-Spanish border, a trade fair took place annually at the confluence of the Purgatoire and the Arkansas. In the 1870s, American buffalo hunters all but eliminated bison as a species, effectively ending this trade network (Hämäläinen 2008).

General Ethnohistory

Although Spanish records of the Plains Apache dated to Coronado’s 1541 expedition, by the turn of the eighteenth century the Apache ranged widely across the Great Plains: from north of the Black Hills of South Dakota southward along the Front Range of the Rockies, across the central High Plains into central Texas and across the Rio Grande into northern Mexico (Weber 1990). Two

Spanish expeditions that came into the Purgatoire River valley soon after 1700 documented two major ethnohistoric patterns at this time. The Juan de Ulibarri (1706) and Antonio Valverde Cosio (1719) expeditions noted that the valley was in the midst of Apache territory, which extended from at least central New Mexico to the western Kansas plains and presumably much farther to the north. Secondly, both expeditions documented the increasing pressure exerted on Apache groups by the Ute and Comanche. By at least 1706, Colorado Apache groups joined to protect themselves from Comanche and Ute attacks (Kenner 1969, 28). This, combined with the expansion of French trade onto the central and southern Plains—as well as pressure from the Pawnee and the Jumano on the Cuarteles (a more sedentary Apache group along the Arkansas River)—forced the withdrawal of the Apache from their territory in Colorado and western Kansas. By about 1750, the Apache had migrated from the northern and eastern parts of their territory into what is now New Mexico, Texas, and Mexico (Weber 1990).

Comanche

The Comanche were initially a hunting and gathering, mountain-based people. Of Shoshonean linguistic stock, they probably resided with the closely related Shoshone in western Wyoming, southern Idaho, and northern Utah. Later, the Comanche became aggressive and highly mobile raiders and hunters of plains bison; they spread from their ancestral homelands east onto the Plains and to the southeast, displacing the Apache populations of the Colorado and Kansas plains. The Comanche were first recorded in 1705, when the Spanish reported them trading in Taos. In the next year, Ulibarri reported that the Comanche and allied Ute were about to attack that community. At that time their homeland was thought to be in the valleys around the headwaters of the Arkansas River (Hyde 1959, 64-65; Kenner 1969, 28; Shimkin 1940, 40; Wedel 1959, 75-76; Weber 1990).

By 1706 the Comanche were actively raiding in southeastern Colorado. Ulibarri reported that Penxaye Apache, who occupied the area between the present-day towns of Pueblo and Trinidad, had retreated from expected attacks by Comanche and Ute. Comanche attacks stepped up in subsequent years, including a destructive raid on Taos. These raids increasingly interfered with the barter between New Mexico and Plains Apaches, and in 1719 New Mexican Governor Antonio Valverde Cosio led 600 men in an expedition against the Comanches in northeastern New Mexico and southeastern Colorado. Valverde did not find the Comanches but did locate numerous trails, camps, and habitation sites along his looping route through much of southeastern Colorado. Kenner described Carlana Apaches in this area as "...shattered remnants of a once powerful tribe, in full retreat before the Ute and Comanches" (Kenner 1969, 30). Even after retreating to the La Jicarilla area along the Cimarron and Ponil creeks in northern New Mexico, the Apache were not safe and continued to attract Comanche raiders.

Following the breakup of the Comanche-Ute alliance in 1748, the Ute found themselves subject to Comanche attack in the area south of the Arkansas River and east of the Rockies. In 1749 the Ute ceased their raids on northern New Mexico settlements and requested Spanish protection from the Comanche.

With the voluntary removal of the Apache, who had posed a still-formidable barrier east of Pecos, the Colorado Comanche expanded unchecked south and southeast into the second half of the eighteenth century. Until 1758 their winter camps stood on the Arkansas, but by 1761 they had extended southeast to the Canadian River on the Texas Panhandle. During this period, Comanche territory reached from the Arkansas River above the Huerfano on the northwest, south along the Pecos River to near the Big Bend country of Texas, east to the present-day Austin area, and north to the Great Bend of the Arkansas in Kansas. Comanche raids extended far beyond these boundaries, well into Old Mexico on the south and against the Pawnee and Arikara villages on the north (Wallace and Hoebel 1952, 7-8; Wedel 1959, 76-77; Weber 1990).

Perhaps the single most important success the Spaniards were to have during the years of Comanche raiding was Governor Juan Bautista de Anza's 1779 expedition against the Comanche chief, Cuerno Verde (Green Horn). With Pueblo, Ute, and Jicarilla Apache allies, de Anza marched north through the San Luis Valley, crossed the Front Range near present-day Colorado Springs, and captured Cuerno Verde's camp near present-day Pueblo while Cuerno Verde and his warriors were away on a raid. A short distance to the south at the foot of Greenhorn Mountain, Cuerno Verde stumbled into de Anza's trap, where he was killed, along with many of his warriors. Following this battle, Spanish-Comanche relations along the far northeastern frontier of New Mexico were generally quiet (Kenner 1969, 50-51). In 1785 nearly 8,000 Comanche convened at Big Timbers, near present-day Las Animas, Colorado. They selected an emissary, Ecuacuerpa, to negotiate a permanent peace with the New Mexican government in Santa Fe (Hämäläinen 2008).

Spanish attempts to "civilize" some Comanche bands included the construction in 1787 of a fixed village, San Carlos, on the Arkansas River near present-day Pueblo, Colorado, in hopes that the Comanche would take up horticulture and stock raising. The Comanche abandoned the settlement the following spring, possibly due to the death of a headman's favored wife—the Comanche were not comfortable remaining where someone had died—and a general distaste for the confinement of a settled life (Moorhead 1968, 161-163; Weber 1990).

Although at the northwestern margins of their territory, Comanches continued to live in southeastern Colorado and on the upper Arkansas into the early nineteenth century. In 1806, Zebulon Pike noted this and suggested erecting a trading post for them "near the mountains on the Arkansas" (cited in Wedel 1959, 76). By 1821, when fur trader Jacob Fowler traveled along the Arkansas, the area was more a frontier than part of the core territory of any single group. Just west of the present-day Otero County line, Fowler encountered a large camp of Kiowa Indians. Over the course of the next several weeks the camp was joined by large numbers of Comanche, Arapaho, Cheyenne, and at least two other less well-identified groups. This total encampment, Fowler estimated, reached between 10,000 and 18,000 persons. That the Crow and Taos Pueblo Indians were also present around this time is further evidence that area was on the periphery of a number of different territories, or was a transit zone (Coues 1970, 53-68; Weber 1990).

In 1833, Bent, St. Vrain and Company began the construction of their famed trading post, Bent's Fort, just north of the Arkansas and east of La Junta. The local ethnohistoric importance of Bent's Fort is addressed more completely in the following discussion of the Cheyenne and Arapaho, but it should be stressed that Comanche, as well as other tribes of the Southern Plains, traded at this post. The fort became the economic and communications center for the southwestern Plains and adjoining mountain areas. In 1835, Colonel Henry Dodge met with large numbers of Cheyenne, Arapaho, Gros Ventre, Comanche, Pawnee, Arikara, and some Blackfoot visiting the post. At this time he passed out peace medals, advocating peace (Lavender 1972, 170-174). Some five years later an even larger peace parley was held 4.8 kilometers (3 miles) downstream from Bent's Fort and was attended by thousands of Cheyenne, Arapaho, Kiowa, Comanche, and Prairie Apache (Kiowa-Apache). After several days of dancing, gifting, feasting, and purchasing provisions from the fort, these traditional enemies from opposite sides of the Arkansas declared a peace among themselves and with the traders so that commerce would continue (Lavender 1972:201-203). In 1843 a trader at Bent's Fort observed that "some thousands" of Comanche were in the vicinity of the fort, although for the most part posts to the south, nearer to the center of their territory, were the focus of Comanche trade (Richardson 1933, 180; Weber 1990).

Settled in an area bordered by the North and the South during the Civil War, the Comanche were offered agreements by both sides. In the winter of 1861-62, with over 600 lodges, the Comanche camped at Fort Wise (later renamed Fort Lyon) and awaited annuity goods and items promised in an agreement signed the previous fall. The government aimed to ease tensions brought about by increased white transit and settlement pressures, as well as to free soldiers for duty in the East (Richardson 1933, 275-278). Due to increasing pressures from white settlement, the year 1864 saw widespread conflict involving Native Americans in the western Plains and in eastern Colorado, although Comanche military activity generally took place to the south on the New Mexico plains and in Texas. In 1867, Congress authorized a commission to secure lasting peace with the Native Americans of the southwestern Plains (the Comanche, Cheyenne, Arapaho, Kiowa, and Kiowa-Apache), resulting in a treaty signed in Barber County, Kansas. In return for peace and the right to build military posts, roads, and railroads through their territory, the Comanche were promised annuity goods, an agency, schools, farms, seeds, implements, a physician, and a carpenter. They were also confined to a reservation in what became western Oklahoma (Wallace and Hoebel 1952, 309-310; Weber 1990).

Ute

Like the Comanche, the Ute were of Shoshonean linguistic stock. Their territory was immediately to the south of the Comanche, extending from the Front Range of the Rocky Mountains west to the Oquirrh Mountains in Utah (Jorgensen 1972:29). Although the Ute traditionally lived west of the Front Range, their hunting range extended well onto the Plains, depending in large part on their relationship with the group(s) currently inhabiting that area (Jorgensen 1972; Schroeder 1965; Stewart 1966). In the period before 1700, the Ute hunted the eastern Colorado plains with the Jicarilla Apache and ranged as far south as the Texas panhandle. From about 1700 to 1750, the Ute and Comanche were allies and frequently raided and hunted together on the High Plains. As noted above, this alliance drove the Colorado Apache away from their territory to the east of the Spanish Peaks and into New Mexico by 1719. Tribal dynamics shifted again in the early 1750s, when the Ute-Comanche alliance dissolved. By 1754, the Ute had united with the Jicarilla Apache and the Spanish in attacking the Comanche (Schroeder 1965). From at least this point forward, the boundaries of tribal territories were not well defined and were often determined by power rather than by tradition (Weber 1990).

During the early 1800s, the Ute and Jicarilla Apache made seasonal expeditions onto the High Plains to hunt buffalo. Increasing pressures on the Ute and their subsistence base resulted in some Ute raids in northern New Mexico in the early 1850s. In 1854 an expedition of New Mexico volunteers, guided by Kit Carson, marched through the San Luis Valley, defeated the Ute at Poncha Pass, and pursued the remaining Ute eastwards towards the Purgatoire until being called back (Lavender 1972, 353). The last Ute contact in the region appears to have been a series of Ute-Apache attacks on settlements along the lower Purgatoire in 1868 (Lavender 1972, 392; Weber 1990).

Cheyenne and Arapaho

The Comanche's general drift to the south brought, and perhaps was encouraged by, the movement of new groups into the Colorado High Plains and Front Range country. Primary among these groups were the Cheyenne and Arapaho, who were part of the Algonquin language family. Although we do not know the details of the early history of these two tribes, we do know that they were previously horticultural village people who moved onto the Plains from the shores of the Great Lakes and the upper Mississippi Valley. Like the

Ute, the Arapaho traveled in small groups rather than in larger tribal units. They came from the valley of the Red River and entered the Plains before the Cheyenne, who arrived later and entered from somewhat farther south (Weber 1990).

Archaeological data suggest that Cheyenne residence on the upper Missouri River extended for at least one and possibly two centuries, ending by about 1840 (Wood 1971, 71). Their long-time neighbors, the Arapaho, were pushed onto the Plains ahead of the Cheyenne, and by about 1816 some Cheyenne and Arapaho were hunting together between the sources of the North and South Platte rivers. Although American explorer Zebulon Pike did not mention either group in his journey up the Arkansas in 1806, by at least 1811 the Cheyenne were reported among the tribes making predatory excursions into Mexico to steal horses from the Spanish to trade to the Arikaras (Berthrong 1963, 18; Weber 1990).

Subsequent years saw increasing Cheyenne and Arapaho presence in the area. In an 1816-1817 expedition, French fur traders August Choteau and Jules De Mun encountered a large winter encampment of Kiowa, Arapaho, and Cheyenne on Cherry Creek, near present-day Denver. In 1820, Captain John R. Bell, leading one contingent of the Stephen H. Long expedition, encountered "Arrapahoes" [sic] on the north bank of the Arkansas River, below the mouth of the Purgatoire River. Jacob Fowler, as previously noted, camped in 1821 with a large number of Cheyenne and Arapaho (as well as Kiowa and Comanche) at a sizable winter encampment along the Arkansas River near the present-day Pueblo-Otero county line. These initial contacts foreshadowed an increasing amount of Anglo-Native American contact along the Arkansas River in the late 1820s and early 1830s. During this period, interest in the southern Rocky Mountain area became increasingly focused on trading rather than just trapping, including trade with New Mexico and later Mexico. Changes in trade policy following Mexico's independence from Spain brought a rise in traffic on the Santa Fe Trail, and that included the arrival of the four Bent brothers—William, Charles, Robert, and George—in the Arkansas River Valley (Berthrong 1963, 4-26; Schroeder 1974, 393; Wedel 1959, 80-81; Weber 1990).

Returning to Missouri from Santa Fe in 1832, the Bent brothers camped at the confluence of the Purgatoire and Arkansas Rivers and were joined shortly by a number of Cheyenne returning from a successful horse raid against the Comanche to the south. Charles and William Bent explained their idea of a large trading post along Fountain Creek, near Pueblo. Reportedly, the Cheyenne were greatly impressed but argued for a site at Big Timbers, a location some twenty-five miles downstream from the mouth of the Purgatoire and a favorite Cheyenne camping site. The following spring, construction began on Bent's Fort at a site on the Arkansas, below Fountain Creek but about twelve miles above the mouth of the Purgatoire. The Cheyenne, as promised, provided a ready clientele for the fort, which also attracted additional Cheyenne and Arapaho to the area (Moore 1973). Shortly after the fort's completion, a group of Cheyenne drifted from the north toward the Arkansas River, with some 350 lodges representing what was probably more than 2,500 persons. Thus, the division of the Cheyenne into northern and southern branches was made permanent (Lavender 1972, 6-7, 138-154; Weber 1990).

As the predominant trading enterprise in this vast region, Bent's fort was tied to much of nineteenth century history of the southwestern Plains. Its location on the Arkansas River gave it access to a large and varied potential market. The Arkansas had become the boundary between the Cheyenne and Arapaho and various other southern tribes, including the Comanche, Kiowa, and Kiowa-Apache. The fort was also near the Ute and Pueblo tribes to the west and southwest. The Bents' trading permit granted them trading rights with the Cheyenne, Arapaho, Snake (the Wyoming Shoshone and probably the Comanche), Kiowa, Sioux, and Arikara. At the height of the firm's power, their trading territory ranged to the Texas Panhandle on the southeast, to just across the Arizona line on the southwest, to the Green River area in western Wyoming to the northwest, and to the Black Hills of South Dakota to the northeast (Weber 1990).

In addition to the established and regular commerce Bent's Fort enjoyed with the various tribes of the region, it also served as a major communication hub and meeting place. Major parleys between Native American groups and government representatives were held at or near Bent's Fort in 1835, 1840, 1848, and 1850. These attracted Cheyenne, Arapaho, Gros Ventre, Pawnee, Arikara, Kiowa, Comanche, Kiowa-Apache, and occasionally members of other visiting tribes. Intertribal and Native American-Anglo peace prospects were common topics of these gatherings, at which goods from the government were also distributed (Weber 1990).

These parleys reflected the shift from Native American to Anglo-American control. By 1851, the U.S. government felt it was necessary to demarcate tribal territories for High Plains tribes from southern Colorado and western Kansas through Montana. This demarcation was the intent of the Treaty of Fort Laramie of 1851, signed by representatives of the Sioux, Cheyenne, Arapaho, Crow, Assiniboine, Gros Ventre, Mandan, Arikara, and the U.S. government. The fifth article of the treaty defined the territory of the Cheyenne and Arapaho as follows:

...commencing at the Red Butte [sic], or the place where the road leaves the north fork of the Platte River to its source; thence along the main range of the Rocky Mountains to the head-waters of the Arkansas River; thence down the Arkansas River to the crossing of the Santa Fe road; thence in a northwesterly direction to the forks of the Platte River, and thence up the Platte River to the place of beginning (Van Hook 1933).

This treaty thus recognized the area north of the Arkansas in Colorado as Cheyenne and Arapaho territory. It is important to note that all parties to this treaty, Native American and Anglo American, recognized this territorial delimitation. The treaty also recognized the right of the United States to establish roads and military posts in the area. However, the Treaty of Fort Laramie was not ratified by the U.S. Senate and so was not legally binding (Van Hook 1933, 45; Weber 1990).

The Treaty of Fort Atkinson, which was signed in 1853 and ratified in 1854, recognized the Comanche, Kiowa, and Apache tribes as the inhabitants of the area south of the Arkansas. In addition, this treaty acknowledged the right of the U.S. government to build roads and posts and gave reciprocal guarantees against depredations. Together the treaties of Fort Laramie and Fort Atkinson recognized and delineated aboriginal territorial areas in eastern Colorado and established certain limited governmental rights, but these rights did not include the right of American citizens to settle in this territory (Van Hook 1933, 45-46; Weber 1990).

Around 1850, William Bent abandoned Bent's Fort and relocated to a site thirty miles further down the Arkansas River. Known for only a few years as Bent's New Fort, this stockade was acquired by the Army and in 1860 was renamed Fort Wise (later Fort Lyon). It was here that the next treaty affecting the Cheyenne and Arapaho was written and ratified. The Treaty of Fort Wise (1861) reserved the following lands for these tribes:

Beginning at the mouth of the Sandy Fork of the Arkansas River and extending westwardly along the said river to the mouth of the Purgatory River; thence along up the west bank of the Purgatory River to the northern boundary of the Territory of New Mexico; thence west along said boundary to a point where a line drawn due south from a point on the Arkansas River, five miles [8 kilometers] east of the mouth of the Huerfano River, would intersect said northern boundary of New Mexico; thence due north from that point to said boundary to the Sandy Fork to the place of beginning (Van Hook 1933, 63-64).

All other lands owned or claimed by these two tribes were ceded to the United States. In addition to a number of other conditions, the treaty stipulated that no white persons other than employees of the United States government "shall be allowed to reside or go upon any portion of said reservation without the written permission of the superintendent of the central superintendency, or the agent of the tribes" (Van Hook 1933, 64-65). However, neither Native Americans nor Anglo-Americans adhered to the territorial exclusivity provisions of the treaty, which were not enforced during the Civil War years.

These treaties' failure to establish Native American rights and to end conflict was made manifest by the Sand Creek Massacre, in which Colonel John Chivington led a contingent of Colorado Militia in an unprovoked attack on a peaceful Cheyenne and Arapaho camp at Sand Creek in November of 1864. The ensuing retaliations led to increasing pressure for the removal of all Native Americans from the eastern part of the state. In 1865, representatives of the U.S. government signed a treaty of peace with the Cheyenne and Arapaho in Kansas, on the Little Arkansas River. Ratified the following year, the Treaty of the Little Arkansas offered land to survivors of the Sand Creek Massacre and relatives of those killed there. It also effectively removed Colorado from the official territory of the Cheyenne and Arapaho, which was now in southern Kansas. A parallel treaty with the Comanche, Kiowa, and Plains Apaches was negotiated at the same site in 1865. Although these new reservations were located outside of Colorado and at some distance from the Bent's Fort area, the reservation boundaries were not impervious; Cheyenne and Arapaho presence in Colorado, including a number of raiding forays, continued. In the late summer and fall of 1868, the lower Purgatoire valley properties of Kit Carson, John W. Prowers, Thomas O. Boggs, William Bent, and E. R. Sizer were among those raided. No raids, however, occurred after 1868 (Kappler 1904, 887-891; Van Hook 1933, 69-71, 76; Weber 1990; West 1996, 309).

In sum, the effect of Euro-American contact on the Native Americans of the High Plains was devastating. In 1853 Indian Agent Thomas Fitzpatrick wrote of the economic conditions under which they subsisted:

...they are in abject want of food half of the year ... The travel upon the road drives [the buffalo] off or else confines them to a narrow path during the period of emigration, and the different tribes are forced to contend with hostile nations in seeking support for their villages. Their women are pinched with want and their children constantly crying with hunger ... Already, under pressure of such hardships they are beginning to gather around the few licensed hunters ... acting as herdsmen, runners, and interpreters, living on their bounty; while others accept most immoral methods with their families to eke out an existence (Lavender 1972, 349).

Thus, in the span of only a few decades in the nineteenth century, High Plains tribes went from dynamic, independent, and autonomous units to greatly weakened groups whose territories were delimited by an outside political power and whose economies were subordinate to national and international markets.

Native American Resources

from the Purgatoire River Region



5LA.11793 Pictograph

Tipi Rings

Tipi Ring sites are believed to be former tipi locations. These sites consist of collections of large stones set in circular configurations, with the stones having been used to secure the base of a tipi, which was a round-plan dwelling constructed of hides and poles.

Campsites

These sites indicate a temporary location of human activity, and may have been used in the course of food procurement, such as hunting or gathering plant resources. Associated artifacts might include lithics, groundstone, ceramics, and fire-cracked rock.

Rock Art

Like prehistoric rock art, Native American rock art could be pecked onto a surface, but painted rock art, or pictographs, are also common to this period. Native American rock art is usually representational, utilizing such images as humans on horseback, game animals, and even buildings.

Springs

As with their prehistoric predecessors, Native American people obtained water from springs, hunted near them, and sometimes considered them sacred. Artifacts found at or near springs are usually associated with hunting or water acquisition, and may include lithics or ceramics.

Trails

Trails are identifiable by their presence as a linear feature in the landscape. They can be marked by differences in vegetation and soil visibility, or they can be documented archivally. Rock art is often located along trails, and artifacts such as lithics and ceramics may also define sites associated with trails.

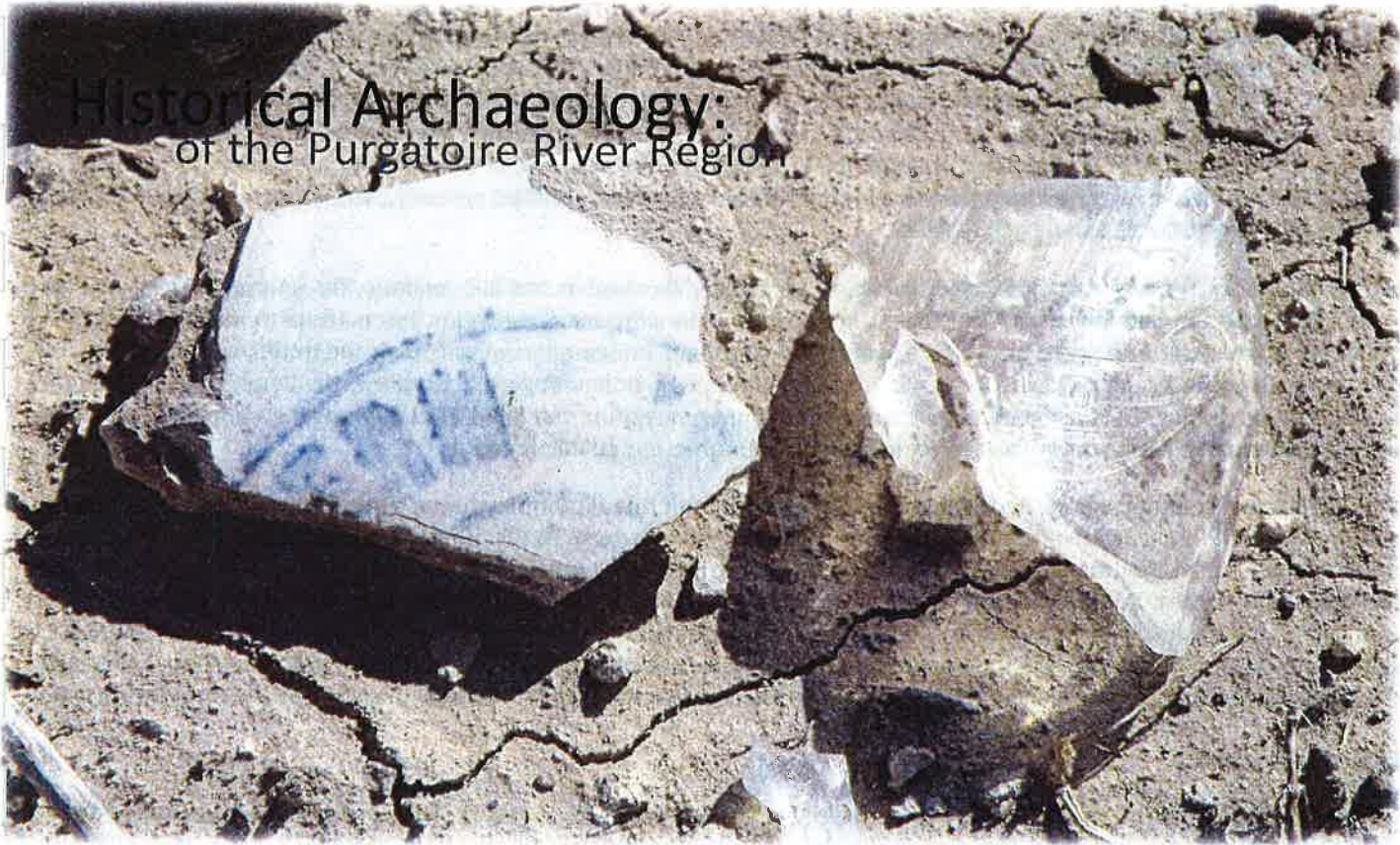


5LA.11838 Spring



5LA.11647 Tipi ring





Historical Archaeology: of the Purgatoire River Region

Historically, southeastern Colorado was a frontier in both the American and European sense. In the American lexicon a frontier represents an unsettled or sparsely settled zone—a place on the edge of “civilization.” On the other hand, in the European view frontiers are boundaries or borders between nations, provinces, or ethnic groups. In southeastern Colorado the way people viewed their frontiers varied according to their cultural perspective. The region of the Arkansas River and its major tributaries, the Purgatoire and the Huerfano, represented the extreme northern edge of a vast southwestern Hispanic territory known as Las Provincias Internas (the interior provinces) and comprised the provinces of Durango, Chihuahua, New Mexico, and Texas.

The Spanish referred to present-day southeastern Colorado as El Cuartelejo, or “The Far Quarter.” Today historians identify the former Spanish-controlled area as the Spanish Borderlands and the region of southeastern Colorado as the Mexican Rim. Southeastern Colorado at the period of contact represented a corridor used by northern Pueblo and Plains Apache groups for trade and hunting. El Cuartelejo was documented by Spanish expeditions beginning in the late sixteenth century. Spanish military excursions into the area, such as Juan de Ulibarri’s in 1706, took place throughout the eighteenth century, and by the late eighteenth century through the 1870s, the region was used by New Mexican ciboleros and Comancheros for hunting and trading. The mouth of the Purgatoire River, known as la nutria (the place of the beaver), served as a trading location during the last two decades of Spanish control of New Mexico. Zebulon Pike mentions Spanish camps along the Arkansas River and “a Spanish trace” (trail) ascending the mouth of Purgatoire River with the Arkansas River.

The Arkansas River served as the international boundary between territories held by France and Spain before 1803 and subsequently as the boundary between the territories of Spain and the United States. It was officially recognized in the Adams-Onís (or Transcontinental) Treaty of 1819; after 1821 it was the border between the United States and Mexico until becoming a part of the United States after the Mexican War and the signing of the Treaty of Guadalupe Hidalgo in 1848.

Initial New Mexican frontier settlement in what is now Colorado began in the San Luis Valley in the late 1840s and early 1850s, followed by settlement in the Arkansas and Purgatoire valleys in the late 1850s and early 1860s. The settlements were on claims derived through 1840s Mexican land grants. The earliest settlement in both the upper and lower portions of the Purgatoire River valley occurred almost simultaneously. The upper Purgatoire settlements initially consisted of groups of families who moved into the region from northern New Mexico and built plazas, which housed extended families. By contrast, many of the settlements in the lower Purgatoire Valley were comprised of mixed Anglo-Hispanic or Anglo-Native American families. A significant number of these settlers came to the area from Missouri, including William Bent, Thomas Boggs, John Browers, Kit Carson, all of whom had been associated with Bent’s Fort in the 1830s and 1840s, as well as with Bent’s Fort (later Fort Wise) in the 1850s at its later location near Big Timbers.

These new settlers brought with them two contrasting cultural systems. The New Mexicans brought a 250-year-old frontier tradition that incorporated Iberian, Moorish, Puebloan, and Plains cultural influences. The Anglo-Americans introduced a cash-based economic system with all its attendant material manifestations. The material remains of this latter system are found throughout the majority of the historic sites in southeastern Colorado. These sites, as represented by architectural and artifactual remains, span settlement periods from the Territorial period (1861-1875) through the first half of the twentieth century. The artifacts on New Mexican settlement, however, often vary from the typical nineteenth-century artifact patterns, with aspects of traditional New Mexican culture appearing at sites through the 1930s.

Ethnohistorical data taken from historical accounts of Anglo Americans involved in the U.S. military, the Santa Fe Trail trade, and settlement in the Purgatoire and Arkansas River valleys help explain the differences between the material remains of these two cultures. Spanning a time period from the early 1820s (when Mexico gained independence from Spain and trade on the Santa Fe Trail commenced) to the twentieth century, these accounts, in combination with archaeological data, show the deeply rooted traditions of the Hispanic frontier culture. This research helps counteract the misconception that in 1846 New Mexicans simply waited on the south side of the Arkansas River for Americans to come to their economic and political rescue.

The Hispanic subsistence system used in the Purgatoire region was a result of adaptations that occurred over a period of 250 years or more and incorporated many Native American customs. Beginning in the early 1820s, the introduction of the Anglo-American cash-based economy—marked by the construction of Bent's Fort in the 1830s—caused extensive changes in this system, both in New Mexico and southeastern Colorado. These changes occurred gradually, initially affecting New Mexican urban centers such as Santa Fe, and later spreading to the frontier regions including the Purgatoire and Arkansas valleys. American influence accelerated in the late 1840s with the construction of U.S. military forts in New Mexico and present-day Colorado, and its predominance following the Pikes Peak Gold Rush of 1858 forced changes in the traditional subsistence system of the New Mexicans at the most basic levels.

Archaeological Evidence

Historical archaeological, archival, and historical evidence indicates the majority of the recorded sites in the Purgatoire Valley are associated with Anglo-Americans who began to settle the region of southeastern Colorado in the early 1860s. A smaller, less well-defined group of multicomponent sites exhibit few or no Anglo-American artifacts but do contain lithics and groundstone. In addition, several of these multicomponent sites contain minimal and selective amounts of Anglo-American artifacts, mainly tin cans and bottle glass. In some cases the bottle glass appears to have been modified by knapping in a fashion similar to that seen on flaked prehistoric stone tools. These sites are thought to represent New Mexican Hispanics who settled the Purgatoire River valley in the 1860s and 1870s and who appear to have undergone considerable change through time while retaining some aspects of their traditional culture.

Although the extensive Native American use of the area during the historic period has been documented, very few archaeological sites representing this use have been identified. Most of the sites recorded to date in the project area relate to agrarian settlement. Some of the remaining sites are related to transportation, town settlement, and commercial activity. Though some traders and sheep herders used the Purgatoire River Region prior to 1860, settlers did not arrive until the 1860s. Settlement sites fall into one or more of these three general subperiods:

1860-1890

Many of the initial settlers of southern Colorado were Hispanics from northern New Mexico, along with a minority of Anglo-Americans and European immigrants. Most acquired their land under the provisions of the Homestead Act of 1862, although many settlers were present who did not file claims or acquire legal title to the land. The early settlers resided primarily along the Purgatoire River and its tributaries. Severe drought and extremely hard winters forced many of the early settlers out of the area in the mid- to late-1880s. A distinct artifact assemblage identifies sites from this time. Firearm cartridges can be used to diagnose site dates: earlier sites may contain large caliber (.50 and .40) rimfire cartridges, with large caliber (e.g., .40) centerfire cartridges more common on post-1873 sites. Bottle glass is also diagnostic for this period: olive green, amber, and lime green bottle glass dating to the 1860s; aqua glass dates to the 1870s; and amethyst glass dates to the 1880s. Bottles and canning jars are present on these sites, and clear glass may be present throughout all of these periods, although in varying quantities. Hole-in-top hand-soldered tin cans date to the 1860s and 1870s, and machine soldered cans date to the 1880s through early 1900s. Machine-cut nails date to the early 1890s, as do ceramics—including both white and decorated earthenware improved earthenware, and both earthenware and stoneware utilitarian wares.

1890-1909

Between the drought and extreme winters of the mid-1880s and the Enlarged Homestead Act of 1909, settlement in the project area was sparse. As a result, sites from this period are not as frequent. The typical artifact assemblage generally resembles that of earlier subperiod sites but with some differences. Smaller caliber, smokeless powder rifle cartridges in the range of .30 caliber came

into use during this time. Shotgun use increased around the turn of the twentieth century, although shotguns were often cost-prohibitive for residents of southeastern Colorado. Use of the older black powder cartridges continued at least into the 1930s and possibly the early 1940s, when production ceased at the beginning of World War II. Machine-cut and wire nails and machine-soldered and sanitary tin cans are also present at sites from this subperiod.

1909-1930

The Enlarged Homestead Act of 1909 and the Stock Raising Act of 1916 spurred a boom of homestead settlement in the project area, although falling agricultural prices and drought caused many of the new arrivals to abandon their homesteads. This allowed the more established ranchers to acquire or lease larger tracts of land; however, some post-1910 homesteaders adapted to raising livestock and managed to acquire sizable land holdings. Sites from this period are the most numerous in southeastern Colorado. These sites contain considerable evidence of conspicuous consumption through greater quantities of material remains than at earlier sites. The sites of this subperiod can be identified by certain types of diagnostic artifacts, comprising large quantities of bottle glass (amethyst, amber, clear, and blue); cartridges (smaller caliber [.30] and from more manufacturers) and shotgun shells; primarily sanitary-type tin cans (milk cans continue to have had a small lead seal on top); and the exclusive use of wire nails and more window glass in building construction. Architectural remains on these sites may range from a single dugout depression to several elaborate stone foundations or ruins.

Historical Archaeology Resources

from the Purgatoire River Region

Homesteads

Homesteads may be defined archaeologically by the material remains related to homestead settlement. Characterized by the intention of permanence, these sites include domestic artifacts, such as dishes or toiletry items, to a much greater extent than sites that signify temporary occupation. Building remains are also part of these sites, in the form of remnant foundations or cellars, or standing buildings or structures.

Communities

An archaeological site based on collective activities performed by groups of families or individuals. Examples of communities might be religious groups or people engaged in a common economic endeavor (e.g., communal farming). Artifactual remains that define communities might be related to specific endeavors not found on other types of sites.

Trash Scatters

Dump or trash areas are collections of artifacts that were discarded by their users in a specific location. These are found near historical archaeological sites that have seen occupation by people over a period of time, or if found in isolation from such a site can be considered to be sites in and of themselves.

Rock Inscriptions

Settlers and homesteaders often marked rock surfaces with inscriptions of names, dates, or other information or observations. These inscriptions are sometimes found along trails, and identify the travelers who passes through an area. Rock inscriptions may also be found on abandoned buildings, in rock shelters, or other locations in which travelers might have stopped long enough to leave their mark for posterity.



LA.11682 Typical trash scatter



5OT.1180 Rock inscription

Campsites

Campsites indicate temporary occupation, and historic campsites may be related to stock raising economies, such as cow camps or sheep camps. These may be marked by the presence of artifacts related to these economies. More generally, campsites related to recreational activities such as hunting or camping may yield artifacts such as whole or broken food and beverage containers or other items of daily use.

Moradas

Moradas were religious buildings associated with the Penitente religion, which had a significant presence in the project area in the 19th century, a presence which has some representation even today. Artifacts associated with Moradas may include worked glass, which was used ritually. Moradas were cruciform-plan buildings, and are easily identifiable in the archaeological record. Morada sites may also include secondary or ancillary buildings as well.

Trails

Historic trails are linear features and may be marked by linear swales or ruts, which may be only marginally visible on the landscape. Other sites, such as campsites or trash scatters, are sometimes found along trails.

Representative Artifacts

from the Survey Area



Hole-in-top tapered tin can with key opening. Machine-soldered (1875-1920s)

Some kinds of fresh foods were not as available to early homesteaders and settlers in the Purgatoire Valley as they are to local residents today. Cans such as the one found here usually held sardines or some other kind of fish or meat and were popular because they were portable and had a long shelf life—an important attribute if trips to the market were months apart. In the 1940s and 1950s, as refrigeration technology advanced and home freezers became increasingly common, rural residents became less reliant on canned meats.



Cast iron cook stove

This stove was made by the Great Western Stove Company, headquartered in Leavenworth, KS, and Denver, CO. The company was involved in the production of stoves for several years under the "Great Western Manufacturing Company," but in 1875 the Great Western Stove Company was formed in earnest in Leavenworth. It offered cook stoves, ranges, and heating stoves in over one hundred sizes and styles, and its sales territory covered Kansas, Colorado, New Mexico, Missouri, and Nebraska. Wood-burning cook stoves were important equipment on a homestead, and they saw use even in the hottest of weather.



Iron barrel hoop with riveted ends

Wooden barrels were indispensable for hauling water from water sources to homesteads. They often held a family's only potable water, in a region in which the high mineral content made well water unsafe for drinking. Barrels were constructed (then as now) with arched staves held in place by iron hoops; their tops were either removable or were drilled with holes.



Bedrock metate and mano on a sandstone outcrop

Manos and metates—both in bedrock and smaller portable metates—were utilized by Native Americans and Native Hispanic homesteaders to grind seeds, nuts, and other foods. Used prehistorically and historically, these were, in fact, something of a long-ago predecessor to the modern-day food processor. However, manos and metates were rarely used by Anglo-American homesteaders or settlers, who were less accustomed to using found natural materials for food processing.



Aqua-colored "JE Gombault's Caustic Balsam" bottle, with cork finish, ca. 1899. Manufactured by the Lawrence-Villiams Company, US and Canada

Gombault's was a liniment oil, popular in the late 19th and early 20th centuries. It was developed by a French veterinarian for use with horses, but became popular as a general remedy for human aches and pains. This bottle does not have a threaded top, indicating it originally was sealed with cork.



Hand-painted polychrome porcelain plate sherds

A homesteader or settler would not have been likely to use hand-painted porcelain for everyday use. More probable, this plate came from a set that was highly valued, possibly even a family heirloom. Many homesteaders brought items of sentimental or material value with them to their new homes. But dishes break, and even the loveliest patterns sometimes ended up in pieces on the ground.



Clear glass “Dr. King’s New Life Pills” bottle with cork finish, ca. early 1900s

Prior to the 1906 passage of the Pure Food and Drug Act, patent medicines were popular—but questionable—remedies for common ailments. Usually made with some variety of vegetable compound liberally laced with alcohol, patent medicines also could contain opiates or morphine. The ailments they addressed were only vaguely alluded to on the packaging. The Chicago-based makers of Dr. King’s New Life Pills claimed they could cure everything from constipation to the common cold. Patent medicine bottles are common artifacts in rural settlements, where access to doctors often involved extensive journeys.



Amethyst bottle base. Unidentified embossing. The base has been modified/worked along the side, for use in cutting or scraping

The purple tint to old glass is caused by manganese, which was added in the manufacturing process prior to 1914, when World War I ended trade of the mineral. This bottle base was chipped to make a knife, as earlier people had done with stone to make tools. Artifacts such as these indicate that some traditional skills survived and were adapted to new materials.



Brown-glazed utilitarian stoneware sherds from crock or jug

Versatile and sturdy, stoneware crocks or jugs were commonly used for pickling or fermenting foods, cheese, or preserves. The thick stoneware sides kept the temperature more stable and the contents cool. These containers were traditionally made with dark brown or gray glazing.



Artifact scatter consisting of amethyst bottle and embossed bowl glass sherds, ca. 1880s, and two gray salt-glazed utilitarian stoneware sherds

The stoneware sherds comprise crocks or jugs principally used for food storage in the form of pickling, fermentation, etc. The painted or stenciled advertisement crocks served to advertise for various enterprises and businesses. This scatter is typical of that found on most old homestead sites.



White salt-glazed stoneware crock sherds from one vessel. Five light gray basalt flakes on rock

It is not uncommon for archaeologists to discover prehistoric and historic artifacts on the same site. One reason for this is often the simple fact that what one person or group recognized as a good place to dwell, was also recognized as such by a later person or group. The stoneware crock sherds found at this site indicate that one set of inhabitants was storing food in a commercially obtained vessel sometime in the late 19th or early 20th century. The basalt flakes tell us that much earlier people at this site were engaged in flaking stone, an activity associated with stone tools.



Embossed decorative cast iron sash window lock, ca. late 19th century

In the later decades of the 19th century, standardized building supplies were more readily available. This window lock with embossed design was typical of Victorian-era domestic choices in décor and home furnishings. This was a time when small refinements such as this symbolized a virtuous home.



"Prince Albert" hinged lid tobacco can. Patented in 1907

Patent dates are good ways to establish an early date for an artifact. We know that this tobacco tin was purchased and used after 1907. Before cigarettes were mass-produced, smokers rolled their own, buying tobacco in pocket sized tins like this one. The metal tin could be opened and closed many times and kept the tobacco moist, meaning it tasted better, burned slower, and was easier to roll or tamp into a pipe. Many settlers and homesteaders kept tobacco on hand.



The remains of the upper section of a dairy milk container used for transporting dairy products

Although beef cattle were the economic mainstay of the region, some homesteaders maintained dairy cows and sold milk to dairies in Trinidad via the Santa Fe Railroad. This milk can collar was part of a 5 or 10 gallon can, and was probably riveted, which was the practice in can manufacture in the 1920s. Later, in the 1930s, milk cans were welded, which was more leak-proof.



Mimbreno porcelain ceramic plate section

“The ‘Mimbreno’ pattern was produced between 1936 and 1970 by the Onondaga Pottery Co. of Syracuse, New York under its better-known trade name, Syracuse China. The bottoms carried the inscription “Made expressly for Santa Fe Dining Car Service. These distinctive pieces made their debut on the dining car Cochiti in 1937. Used on the Super Chief and other named trains until the end of Santa Fe passenger service in 1971”.



Amethyst pressed glass base for kerosene lamp

Prior to the late 1930s, after the Rural Electrification Act of 1935 paved the way for rural electric cooperatives to run electricity to farms and ranches, few homesteaders had electric light. Kerosene lamps, such as the one shown here, were how people lit their homes. This base supported a kerosene reservoir with the metal collar and cotton wick attached, and a slender glass chimney protecting the flame from drafts. The amethyst color of the glass stems from the manganese content in the glass, which takes on a purple hue with prolonged sun exposure. This indicates that the lamp was manufactured prior to 1914, after which manganese was no longer used in glass manufacturing.



Glazed ceramic knob with iron shank

This knob was likely attached to a drawer or cupboard door. Because it was machine made, rather than made by its user or a local craftsman, it can be seen as representing the increasing connections between rural consumers and the national economy. The furniture to which it was attached may have been purchased in a store, or it may have moved with its owner to the plains of southeastern Colorado.



Aqua-colored glass insulator, modified/worked for use as a tool

Glass insulators were first used in the 1850s on telegraph poles, and as settlement intensified they were a ubiquitous symbol of the electric and telephone lines that criss-crossed the West. Insulators were often salvaged or collected by rural residents, and even broken insulators could be modified for use as a knife or scraping tool, as the one pictured has been.



Remains of an auto body with all removable parts removed. No visible manufacture identification. The body style denotes a ca. pre-1920s design

In 1913, an automotive writer noted that "Fifteen years ago the automobile was only a traveller's tale and the hobby of a few crack-brained experimenters." By 1925, more than 17 million automobiles were registered in the United States. For rural families, automobiles such as the one pictured (possibly a Ford Model T touring car dating to around 1918) offered an easier way to cross long distances to town or to neighboring ranches or farms. When the car no longer ran, it was not practical to pay to have it hauled away, and most often these vehicles served as parts sources for their successors. Today this one sits in place, a skeleton providing a framework for a scrub juniper and likely housing for small wildlife.



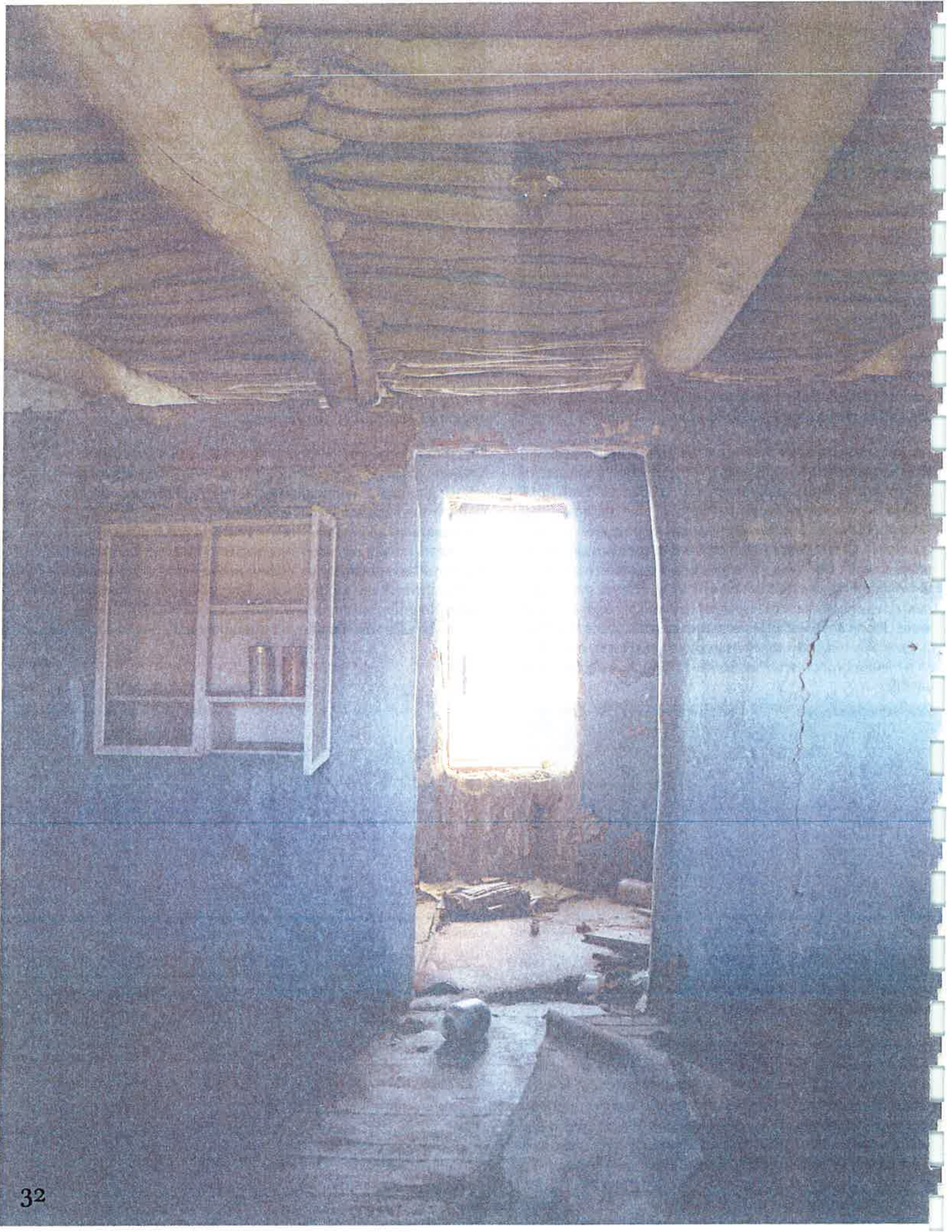
Two square-cut framing nails

Square-cut nails were manufactured beginning in the 1790s and extensively used through the 1890s, when they began to be replaced by wire nails, the type we are familiar with today. Because the shift in nail manufacturing methods occurred as settlement in the American West intensified, nails are one of the artifact types that archaeologists can use to approximate construction dates at a site.

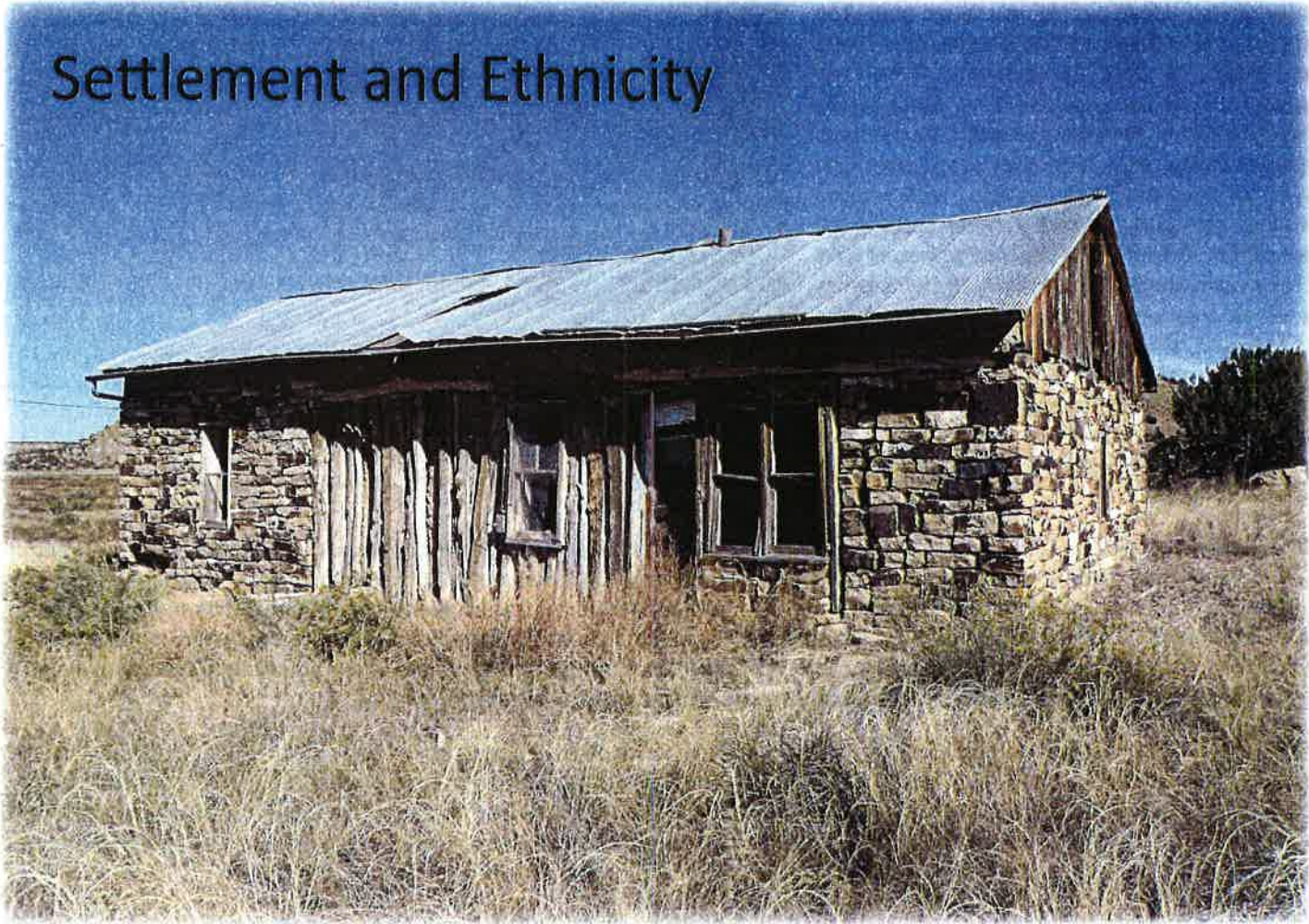


Iron sheep shear, broken in half. Sheep shears are listed in the 1895 Montgomery Ward's catalog, selling for \$2 to \$11 per dozen, depending on the size

Sheep ranching was an important industry in southeastern Colorado during the days of early settlement. Sheep shearing was an annual or biannual event, and skilled shearers were highly valued by woolgrowers. Although most sheep today are sheared with machine shears, shearers still use this type of scissor-like shears when the occasion calls for it. Unlike scissors, these shears were hinged on the back, at the point furthest from the tip of the blade. The shearer squeezed the blades together, cutting the wool as close to the skin as was appropriate for the climate and time of year.



Settlement and Ethnicity



Ethnicity is important to consider when describing the history of a region because it tells us much about the ways culture informs how people create and use the resources at their disposal. Southeastern Colorado is historically a borderland, in which different groups of people have lived and interacted over the course of thousands of years. As these groups encountered one another, they often incorporated ways of living from other cultures into their own, “marrying” such things as building methods, foodways, clothing styles, and each other. The result is the emergence of a cultural landscape marked by a unique diversity and cross-cultural congeniality.

Non-native settlement in southeastern Colorado did not effectively begin until after Mexican Independence in 1821. A revolution in New Spain led to the overthrow of the Spanish government and the creation of the Republic of Mexico, including the southern region of what is now Colorado. Trade routes, particularly the Santa Fe Trail, were established from the United States through Missouri and Kansas territories to accommodate trade with New Mexico. Furthermore, as Americans traveled west, Mexicans began to move north, east and west after the revolution in order to participate in trade across the Santa Fe Trail. With economic changes in New Mexico stimulated by American trade, New Mexicans expanded the northern Hispanic frontier into the future state of Colorado, with the Mexican government encouraging northern migration by providing large tracts of lands to settlers.

Some sporadic European-American settlement along the Arkansas River occurred in the late 1830s, and after the territory became part of the United States in 1848, this increased. But only after 1860 did settlement to the east along the Purgatoire River and surrounding areas begin in earnest. The first permanent settlers along the Purgatoire were Hispanic families from northern New Mexico. Some came with Felipe Baca, a trader from near Mora, who helped establish Trinidad while taking goods from Mora to Denver markets serving the mountain mining camps. Others soon followed. Some scholars believe that the long isolation of the northern frontier of New Spain-Mexico resulted in a culturally distinct “Hispano Homeland,” (Nostrand 1992) wherein Hispanics whose heritage lies in this region (i.e., northern New Mexico and southern Colorado) are culturally distinct from Hispanics who are descended from Mexican immigrants or other Latino groups. For many years the Purgatoire region was largely Hispanic: Felipe Baca and his compatriots moved onto land that had been part of the Vigil St. Train Land Grant, taking advantage of a system of land allocation that encouraged group settlement by requiring the grantees to recruit settlers.

Soon nodes of New Mexican settlers moved along the Purgatoire and established small village-like settlements known as “plazas,” in which an extended family and other associated families occupied a series of rooms and dwellings around a central open area. The plazas of the Purgatoire Valley were large complexes organized in a square to ward off Indian attacks, with smaller adobe houses grouped around a more substantial adobe house for the head patron, or principal land owner. Plaza residents farmed communally, employing a widely varied approach to making a living from the land that included raising sheep and farming melons, beans, pumpkins, and chilies. The New Mexicans of the late nineteenth century settled in prime locations throughout the region, searching out locations that provided water, shelter, and land for subsistence farming.



5LA.11754. With buildings constructed primarily of adobe blocks, today little remains of most of the early plaza settlements. A few stone walls still mark the location of Cordova Plaza near the Purgatoire River

Many of the early New Mexican settlers to the region were sheepherders. The sheep industry in New Mexico dates to the sixteenth century, when Spanish settlers brought herds of sheep to New Mexico from Mexico. Sheep operations were typically large, with herders (pastores) handling 2000 to 3000 sheep. During the summer the flocks would be moved eastward to the grassland and returned to mountain valleys during the winter. Base camps were established by the pastores, who constructed dwellings and corrals of native stone, such as sandstone, when available. The New Mexican sheepherders began to encounter conflicts with Anglo-American cattle ranchers during the 1880s, in a fight over range rights along the open frontier.

The 1870 U.S. Territorial Census shows that of the 4,276 residents of Las Animas County, 78 percent were born in New Mexico, and many others had parents who were. The 1870 census takers notably categorized these residents as “white,” whereas by the 1880 Census, Anglo-American census takers racially categorized the same people as “Mexican,” although this was an unofficial designation within that category. This conflation of race and nationality was used to marginalize people who, in fact, had not moved across a national border—rather, the border had moved over them.

As Hispanic people moved into the area from the south, Anglo Americans and European immigrants arrived from the north and east. The 1860s saw a scattering of Anglo settlers throughout the region, but most Anglos were involved in the fur and trapping industries and trade along the Santa Fe Trail. As the land east of the Mississippi River became more crowded, railroad and land company boosters promoted the vast and open western frontier as a land of opportunity. Once considered the Great American Desert, southeastern Colorado began to attract homesteaders by 1870. Encouraged by boosters’ proclamations that “rain follows the plow,” these homesteaders believed that eastern Colorado held potential for new markets and a climate conducive to agriculture; they aimed to remake the landscape of the Plains. Among the local boosters was Trinidad physician Dr. Michael Beshoar, who lauded the cheap land, mineral resources, healthy climate, and grand opportunities available in Las Animas County and surrounding eastern Colorado.

Here is the country for the crowded millions. Here is the clime for the hardy men and honest women who are looking for future homes. The land is cheap, the mines are plenty, and the prospect, like the scenery, is boundless and grand. . . . If our new society is sparse, it is good what there is of it. In a word, it is ‘God’s Country,’ for capitalists and settlers, as near as you can reach it (Beshoar 1882, 34).

By 1880, at the apex of the first wave of settlement in the Purgatoire River region, Las Animas County’s population had more than doubled, but the number of residents born in New Mexico had dropped to forty-four percent. Colorado-born Hispanic residents still kept Hispanos in the majority, however; in the Purgatoire Valley, they still comprised fifty-eight percent of the population. The influx of non-Hispanics were mostly U.S.-born, but of the 550 county residents who were immigrants, more than half (228) were English, Scottish, or Irish. Germans and other northern Europeans also accounted for the high number of immigrants. But most of the Anglo-American settlers came from the Midwest or Mid-Atlantic states.

Tensions between Hispanic and Anglo-American citizens were more often rooted in conflicts regarding economics or land use than ethnicity, and differences between sheep and cattle ranchers were not unheard of. Ethnicity, to some extent, dictated a homesteader’s approach to livestock raising. Early Hispanic settlers brought sheep into the area, and for many years sheep outnumbered cattle in southeastern Colorado. But more and more cattle were introduced to the area by Anglo-American cattlemen, and Anglo-Americans also bought into sheep ranching. Likewise, Hispanic sheep ranchers sometimes switched to more lucrative cattle ranching or found work as cowboys. The 1880 census for Las Animas County shows that twenty-five percent of those listed as cattle growers were Hispanic (Friedman p. 172, Vol 1).

Archaeologist Minette Church has studied and compared sites related to two families, one Hispanic and one Anglo American, who homesteaded in tributary canyons of the Purgatoire River in the 1870s. Faced with similar means and land and water access that was essentially the same, these families took very different approaches to land use. The Hispanic Roybal family irrigated ten acres, growing wheat, corn, and vegetables, and raised livestock on the remainder of their parcel. The Anglo-American Riley family “deemed the land unfit for cultivation” (General Land Office records 1875, in Church 2002, 228) and instead used their 160 acres as a stock ranch and dairy.

Local demographics, began to change, however, toward the end of the 1880s and into the 1890s; the drought and blizzards of 1886 and 1887 followed by economic depression in the early 1890s, forced many settlers out of the region. Although the census of 1900 shows 58 percent of residents of the region to be Hispanic, these were not the same New Mexican families of the 1860s and 1870s. At the turn of the century, the region was dominated by large-scale ranching operations, including the Prairie Cattle Company, Bloom Cattle Company, and S.T. Brown and Company. New waves of New Mexican settlers also claimed homesteads during the first few decades of the twentieth century, many of whom worked for the large Anglo ranch operations in addition to raising livestock on their own homesteads.

A second settlement boom in southeastern Colorado occurred following the Expanded Homestead Act of 1909 and the Stock Raising Act of 1916. These acts brought a wave of hopeful farmers and cattle ranchers into the area; however, many still found the land too unforgiving and sold out almost as soon as they were given title. By this time, ethnic lines in the area were less starkly drawn than they had been in the early years of settlement. This was in part due to intermarriage between members of different groups, as well as the shared experience of living and working in the unique and challenging environment of the High Plains. Hispanic or Anglo-American methods in areas such as building or agriculture depended less on tradition than on utility and efficiency.

Throughout the history of settlement in southeastern Colorado, settlers of any ethnicity have faced cycles of drought and economic hardship interspersed with years during which agriculture was productive. In time, material culture became more uniform, due to cultural adaptations and standardizations in manufactured goods. Today, historical archaeologists and architectural historians find that, for twentieth century sites, archival records are a much more reliable method of determining the ethnicity of the inhabitants than the material record.

The following table is based on the 135 surveyed homesteads where census data was available.

Homesteader Birthplace	1880	1890	1900	1910	1920	1930	Total
Colorado			5	5	14	13	37
New Mexico			2	6	8	2	18
Texas					9		9
Europe	1				5		6
Northeast (New York, Pennsylvania, Maine, Maryland)		1	2	2			5
Midwest (Nebraska, Illinois, Iowa, Kansas, Oklahoma, Missouri, Ohio)	1	2	1	6	38	1	49
Southeast (Kentucky, Virginia, Georgia, W. Virginia, Arkansas)			1	1	11		13
Canada				1		1	2
Mexico				1	1		2
Other states (N. Dakota, Oregon)					2		2

Breakdown of Homesteaders from Colorado	1880	1890	1900	1910	1920	1930	Total
Colorado with parents from Colorado			1	1	2	4	8
Colorado with parents from New Mexico			4	4	8	1	17
Colorado with parents from other states in the US					3		3
Colorado with parents from Europe					1		1

Settlement and Ethnicity Resources

from the Purgatoire River Region

Most of the historic resources surveyed during the project illustrate trends in the settlement of the Purgatoire River Region, from individual homesteads to larger communities. They also provide physical evidence of the mixing of Hispanic and Anglo-American cultures. Ethnicity can be in the region's vernacular architecture as well as in its communal traditions.

Homesteads

Homesteads display a mix of cultural influences, demonstrating the ways in which homesteaders combined the cultural traditions of their place of birth with adaptations to their new environment.



5LA.11736. The architecture of the Vidal Villareal homestead reflects largely New Mexican building traditions, including the use adobe bricks, vigas and latias in roof construction, and jacal construction. Villareal also incorporated his buildings into the natural landscape, such as incorporating a large rock outcropping into a chicken house. The ability to fully utilize the natural features is seen often in Hispanic homesteads. Coming from a region with a similar climate and landscape, New Mexican homesteaders were better equipped to deal with the challenges of life in the semi-arid Purgatoire River Region.



5LA.11894. Frank Hils and Christina Doll emigrated from Germany in the 1910s and homesteaded near the community of Delhi, CO. Many of the homestead buildings are constructed of horizontally laid logs, a construction method that is common in Germany but much rarer in the Purgatoire River region due to a lack of large timbers. Hils and Doll adapted to the region by substituting logs for old railroad ties and using adobe mortar in their construction.

Community Resources

from the Purgatoire River Region

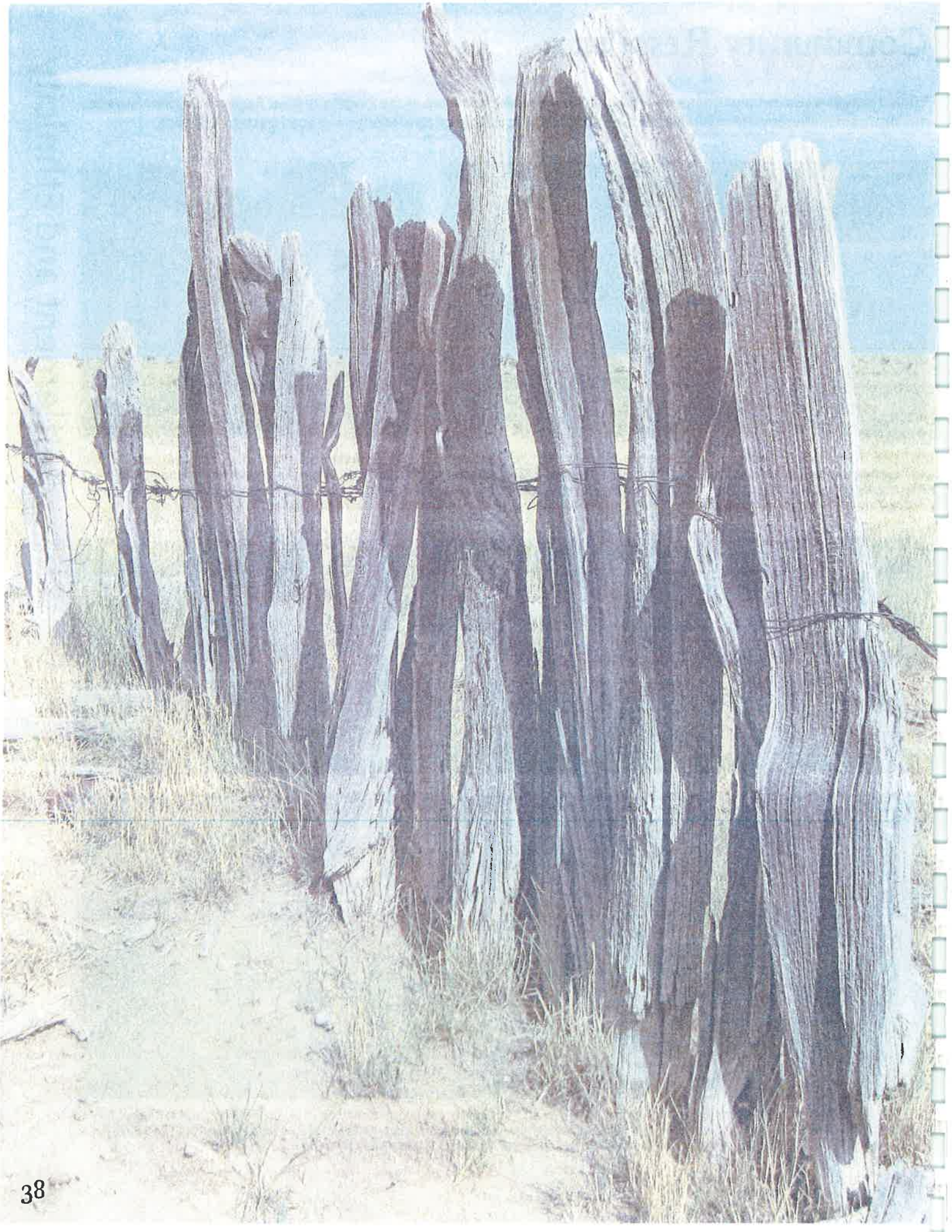
Ethnic heritage is also evident in some of the region's community resources. In the Purgatoire River Region, Penitente moradas and local cemeteries provide clear links between the Hispanic culture of New Mexico and southeastern Colorado.



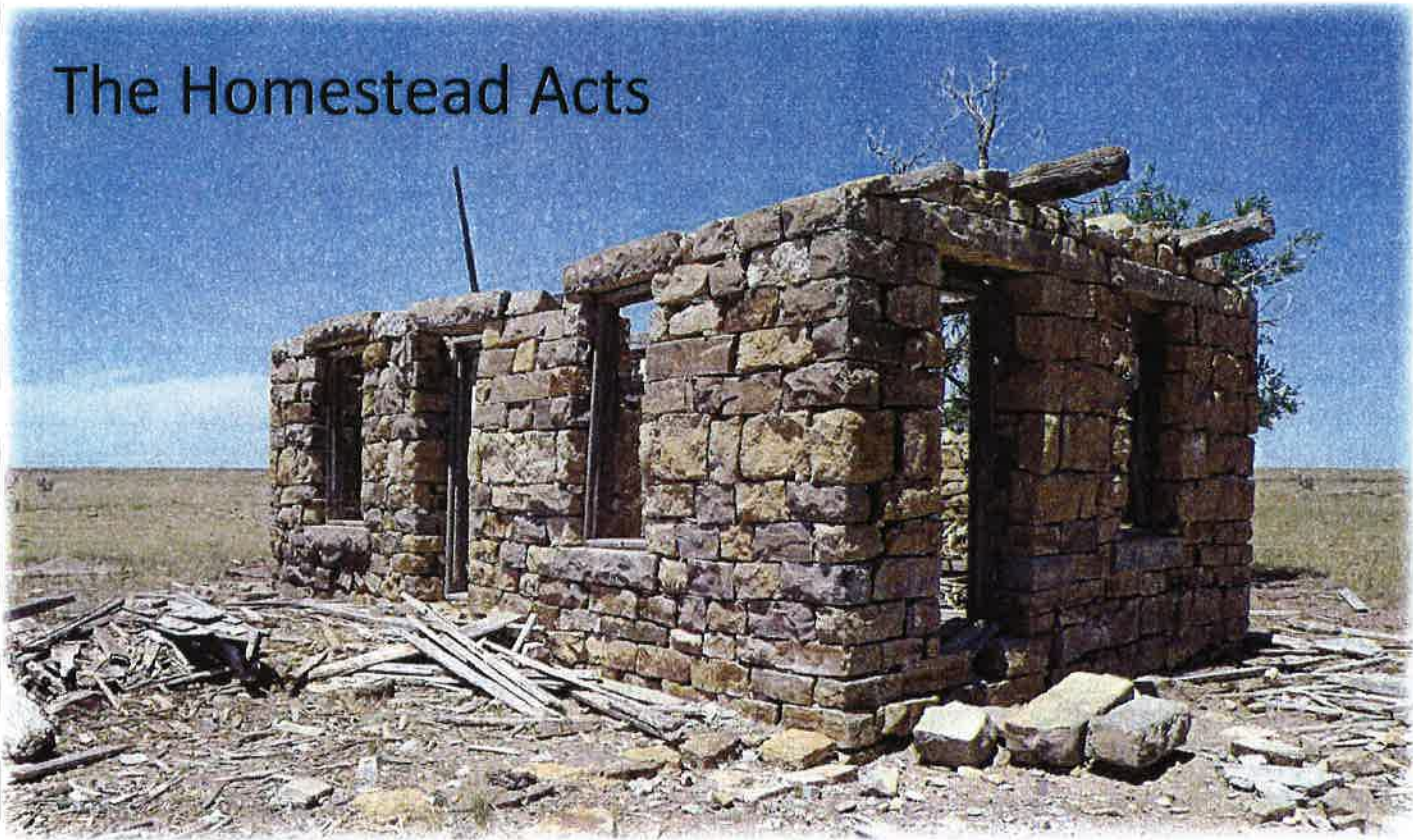
5OT.1166. The morada in Penitente Canyon consists of three rooms in a cruciform plan. The central room contained an altar and space to pray with additional rooms used as staging areas for rituals. Originally, moradas were often a central building in a Hispanic settlement and were often proximate to the village church. Later, particularly after sensationalized accounts of Penitente activities were published and opposition to Penitentes grew, moradas were constructed in more secluded locations such as this remote canyon near Higbee.



5OT.1094. The Martinez cemetery is located in the Higbee Valley near the remains of the community of San Jose. The Hispanic heritage of those buried within is evident not just in the names on the tombstones but also in their decoration. Names include Benancio Montoya (died 1895), Selia I. Cordoba (died 1896), Maria Regina Salazar (died 1899), Bennie Rosales (died 1918), and Alaedad de Alanos (died 1899).



The Homestead Acts



Homesteading was an essential part of the settlement of Colorado, with 107,618 homesteads claimed statewide. Colorado was behind only Montana and Nebraska in the total number of acres homesteaded (22,146,400). Thirty-three percent of the land in the state was settled under the Homesteading Acts.

The Homestead Act of 1862

The Homestead Act of 1862, with its offer of free land for any American willing to make it productive, was one of the key motivators for eager pioneers who dreamed of owning land in the American West. Prior acts had allowed land to be purchased, or allowed special land claims for veterans, but it was the Homestead Act of 1862 that truly opened the American West for settlement in a way no other legislation had before.

The act was signed into law by President Abraham Lincoln, but it was his predecessor, President Thomas Jefferson, who laid the groundwork. Jefferson designed a system known as the Land Ordinance of 1785, which organized the way that unclaimed lands to the west of the newly formed United States would be surveyed. Before 1785, property boundaries in the original colonies had been defined by an English system known as “metes and bounds,” which used general directions, and natural and man-made features, such as rivers, roads or fences, as boundaries. This was often problematic, because features like these sometimes shift, fall down, or are moved or replaced. Disputes over property boundaries were common. Jefferson knew that Americans were eager to settle on lands to the west, and he wanted a system in place that would provide a methodical way of allocating land, with clearly defined property boundaries. Another motive was monetary: the brand new United States Government was not allowed to directly tax its citizens, so by dividing the wilderness lands to the west of the original colonies and selling them to eager settlers, the government could raise the money it needed to function.

The largest square is called a township. Each township was six miles long and six miles wide, and was divided into 36 squares, called sections. Each section was one mile long on each side and contains 640 acres. The

THEORETICAL
TOWNSHIP DIAGRAM
SHOWING
METHOD OF NUMBERING SECTIONS
WITH ADJOINING SECTIONS

36	31	32	33	34	35	36	31
60 Ch.	1 Mile	6 Miles - 480 Chains	6 Miles - 480 Chains	6 Miles - 480 Chains	6 Miles - 480 Chains	6 Miles - 480 Chains	60 Ch.
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6



5LA.11741 Inscription found at the Padilla Homestead

sections could be further divided into quarter-sections of 160 acres each, and the quarter sections are themselves divided into quarter-quarter sections of 40 acres each. The system is still in use today, and is known as the Public Lands Survey System (PLSS). Many county roads and property lines continue to follow the grid established by the PLSS.

In the nineteenth century, the majority of Americans made their livings as farmers, and the ideal of the yeoman farmer was very much at the heart of westward expansion in the United States. But many other factors pushed or pulled settlers westward, the most powerful of which was the availability of free land in the face of difficult economic times in the East. With the passage of the Homestead Act in 1862, settlement west of the Mississippi intensified. Boosters who had purchased land along the railroads with town building in mind published materials that painted an idyllic picture of the West, with verdant valleys in the shadows of breathtaking mountains. While those landscapes could be found, the reality many settlers faced was often quite different, as the settlement patterns dictated by the township-and-range survey often did not take topography or water access into account. Homesteaders were sometimes forced to adapt to new ways of making a living, such as cattle ranching.

In 1862, the Homestead Act offered a quarter of a section, or 160 acres, to any citizen of the United States or person who intended to become a citizen, at least 21 years of age, and the head of a household—that is, single or married men or single, divorced, or widowed women. For young people in areas where most land already had been claimed, or for city dwellers who dreamed of a more pastoral, agrarian life, this offer was irresistible. A hopeful homesteader had to follow these steps: 1) file a claim; 2) build a residence and put the land into agricultural production; 3) reside on the land for five years; 4) file final paperwork including testifying to the land improvements made; and 5) find two witnesses to support your claim.



5LA.11675 Spring house

Homesteaders looked for claim sites with easy access to good water. Understandably, new arrivals had difficulties grasping the water sources and terrain; settlers often paid “locators” to find land for them. Once they decided which land parcels they wanted to file a claim on, they went to the regional land office to register their claims, paying a twelve dollar fee. Claim receipts in hand, the new homesteaders were faced with the task of turning prairie land into farms and building homes.

Homesteaders in the West faced dire conditions as they attempted to establish their new homes. Isolation, extreme weather, crop-eating insects, drought, floods, and other obstacles led to a nearly forty-percent failure rate; many homesteaders abandoned their claims and either returned east or moved on to stake new claims. But by 1934, more than 270 million acres of land had passed into private hands under the Homestead Act.

People of all ethnicities in southeastern Colorado were intent on taking advantage of the Homestead Act of 1862. Unlike the Mexican Land Grant system, in which all available parcels of land had access to water and roads, the Homestead Act made no provision for topography, water, or grazing availability. Instead of occupying land communally, non-Hispanic homesteaders lived apart from one another, establishing farms and ranches as single-family enterprises. The Homestead Act had been designed with eastern farming environments in mind, and settlers soon found that 160 acres was not enough to make a living on the High Plains desert. As Hispanics also began to claim land under the Homestead Act, both they and their Anglo neighbors found ways to circumvent and manipulate the law in order to increase their land holdings. Residents of the plaza settlements, often family members, filed parcels adjacent or contiguous with the plaza, although they often surreptitiously continued to live in the plaza. Anglos also used family members to file on adjacent parcels, although these relatives often lived elsewhere.

Twentieth Century Homesteading in the Purgatoire River Region

In 1909, Congress passed the Expanded Homestead Act, which reacted to the realities of homesteading life on the Plains—where the climate was often too dry, and water sources too few, to allow for productive farms fed by reliable irrigation. The claims of early accounts of Colorado had been shown as hyperbole. The Expanded Homestead Act provided 320 acres to homesteaders in areas where irrigation was not possible, in order to promote dryland farming and to more quickly deed away areas that had previously attracted little attention from homesteaders. The additional acreage, along with high wheat prices during World War I, brought a wave of homesteaders to southeastern Colorado during the 1910s. Many of the new arrivals came from states where no free land was left.

In 1916, the federal government revised homesteading legislation again to allow for 640 acre homesteads. The passing of the Stock Raising Act of 1916, and the subsequent availability of full sections of land to homesteaders, reflected the continued challenges of agriculture in the American West. The land that became available under this act had been determined “chiefly valuable for grazing and raising forage crops, provided they do not contain merchantable timber, are not susceptible of irrigation from any known source of water supply, are of such character that 640 acres are reasonably required for the support of a family, and contain no water holes or other bodies of water needed or used by the public for watering purposes” (General Land Office 1922, 25).



LA.11837 Spring

Establishing the Homestead

The 209 homesteads recorded in this survey project represent settlement from the 1860s through the 1920s and range from single dwellings to large complexes. The architecture of homesteading in southeastern Colorado was shaped by tradition, function, and the natural environment, forces so strong that homestead design changed little from the nineteenth to the twentieth century.

Surveyed homesteads can be divided into three successive chronological categories determined by the passage of three congressional acts: the Homestead Act of 1862, the Enlarged Homestead Act of 1909, and the Stock Raising Act of 1916. The following sections divide homesteading by the periods by homestead legislation, though not all homesteaders took advantage of the latest legislation, some continued to patent land under earlier acts. The periods take into account the fact that homesteaders could not receive title to their land until five years after filing, thus the first homesteads patented under the Enlarged Homestead Act of 1909 appear in 1914.

Original Homestead Act (160 Acres): 1862-1913

Many of the homesteads dating from this period were placed in wide canyon beds or arroyos alongside creeks or springs. One of the earliest identified during the survey, the homestead belonging to Isidro Padilla patented in 1884 (5LA.11739), is located in the valley of the Purgatoire River—presumably some of the most desirable land in the region for its proximity to a reliable water source and subsequent opportunities for irrigation. The northwest corner of Padilla's land abuts the Purgatoire, and the remainder follows the bed of a side canyon leading to the south.

In other examples of homesteads within more narrow canyons (alongside smaller water sources), the blocked patterns of land claims roughly follow the course of the creek or stream that passes through, and they conform as closely as possible to the flat canyon beds in which they are situated. This indicates the desire to claim a homestead with as much stream frontage and as unified a landscape as possible, so that canyon walls could act as natural boundaries for cattle or sheep that may have grazed there.

In terms of the placement of buildings, canyon-bottom homestead complexes identified in the survey generally are not located immediately adjacent to water channels; rather, homesteaders appear to have opted to construct their dwellings, outbuildings, and pens along the nearest canyon wall. Like those homestead complexes built above canyons, these are located on transitional terrain: in these instances, it was likely done to offer protection from weather and flooding. Homesteaders may have also been attracted to these locations in order to use the topography to their advantage, through the integration of exposed rocks into their structures. The complexes were usually placed between 500 and 1,500 feet of the nearby channel or canyon bottom, allowing access to permanent or ephemeral water sources.

Enlarged Homestead Act (320 acres): 1914-1920

The surveyed homesteads patented between 1913 and 1920 include claims of both 160 and 320 acres; those 160 acres in size (approximately 40% of those surveyed properties patented in this period) were likely claimed prior to 1909 but were delayed in patenting (the vast majority of these were patented before 1917). Areas appearing to be best suited for irrigated farming had become less available by the late 1910s, although one site included in the survey—Maximiano Salazar's homestead (5OT.1098), patented in 1920—covers largely flat land in the Purgatoire Valley and straddles the river. (This parcel may have been available, however, only because an earlier homesteader there had failed to prove up.) These quarter-section homesteads are similar in their variety of landscape features and placement of homestead complexes to those patented prior to 1913. Nearly all complexes were constructed near to or within canyons, proximate to springs. The shapes of parcels less often follow the courses of canyons and streams, however, but instead increasingly span across and include land on either side, perhaps attributable to decreased land



5LA.11739 Isidro Padilla Homestead



5OT.1098 Maximiano Salazar Homestead



5LA.11779 Elena Maez Homestead

availability in the region. At this point in the Homestead Era, settlers would have increasingly found themselves choosing land that did not perfectly fit their ambitions but was as close as possible—a parcel of land divided down its center by a canyon was not ideal, but it yet could have provided a possible source of water and protected areas for a dwelling.

The selection of 320-acre homesteads claimed after the Enlarged Homestead Act show greater adaptability to the local terrain. Presumably, these areas were previously sparsely settled due to their apparent distance from reliable sources of water; homesteaders therefore had the opportunity to choose land boundaries that avoided interruption by sharp changes in terrain and allowed continuous use for grazing or dryland farming. Many of the earliest homesteads identified in the survey—patented between 1914 and 1917—are simply rectangular, filling one half of the boundaries of a section; in these cases,

land for the most part consists of even prairie. Other homesteads span across dips in topography, but they are gradual and appear incidental to the placement of the tract. Based on the boundaries of 320-acre homesteads after 1914, the canyons that seem to have been desirable in the early Homestead Era for protection and water were largely avoided for enlarged homesteads. One striking example is Elena Maez’s claim (5LA.11779), which includes largely flat land between Humbar Canyon and the Tobe Canyon. Tobe Creek leads along the western boundary of Maez’s claim, and residents of this homestead would have had access to water on the canyon bed, within their property. The northeast border of the claim, however, steps eastward following the path of Humbar Canyon but largely avoids the canyon. These boundaries indicate a greater emphasis after 1909 on consistently level ground for enlarged homesteads.

As was apparent in the instances of earlier homesteads, dwellings and outbuilding complexes on enlarged homesteads were built on gradual declines into canyons or near springs when available, but these features are less common in enlarged homesteads than in previous examples from the survey. In the absence of these changes in terrain, homestead complexes appear to have been placed somewhat arbitrarily—only most are located on the periphery of their respective parcel. Of the enlarged homesteads identified from this period during the survey, roughly sixty percent had their building complexes within 500 feet of a parcel boundary, and several examples were placed immediately on boundary lines. In the majority of other homesteads, complexes were built off of center. (These correspond most often to notable landscape features within the homestead, such as a topographical shift or a spring.) If dry farming was indeed a main activity on these homesteads—and it’s difficult to tell from the reconnaissance survey, which recorded many collapsed and undetermined outbuildings but did not inspect full homestead parcels for evidence of crop agriculture—a dwelling’s peripheral location would have allowed for a less interrupted use of homestead land. And on homesteads where grazing was a primary activity—evidenced on some sites by stock ponds, animal pens, and corrals—an out-of-the way dwelling may have been intentional so as not to interfere with large areas of grazing land and to keep cattle or sheep removed from the dwelling.

Stock Raising Act (640 acres): 1921-1945

Based on the surveyed homesteads, the 1920s and 1930s still saw the establishment of homesteads of a variety of sizes. Six examples of 160-acre homesteads patented in the 1920s were found, and their characteristics largely resemble those of homesteads claimed prior to 1909. One of the small homesteads—claimed by Allen Mayes (5HF.2335)—actually comprises only 120 acres, with the first 80 acres patented in 1923 and an adjacent 40 acres patented six years later: such a parcel was likely claimed because surrounding land was previously occupied by homesteaders. Another unusual land patent was homesteaded by Thomas Curtis in 1927 (5OT.1175); he received 120 acres in one section and an additional 40 acres three sections away, at a distance of approximately three miles. According to BLM records, the intervening land had been claimed in preceding years, and Curtis’s noncontiguous claim appears to have been the best one possible in the area to gain a full 160 acres.



5HF.2335 Allen Mayes Homestead



5OT.1175 Thomas Curtis Homestead

The 320-acre homesteads patented during the 1920s in some instances show the rectangular regularity that was evident in the first years after the Expanded Homestead Act, but increasingly oddly-shaped parcels were chosen, due to the decreased availability of homestead land in the region. Many of these claims, like those patented before 1920, occupy land without dramatic topographical variation. Very few incorporate canyonlands within their borders; in those that do, canyons typically run along the boundary lines or pass through the corners of claims. Like in earlier examples, dwellings and outbuildings generally were placed on or near the boundaries of their respective parcels.

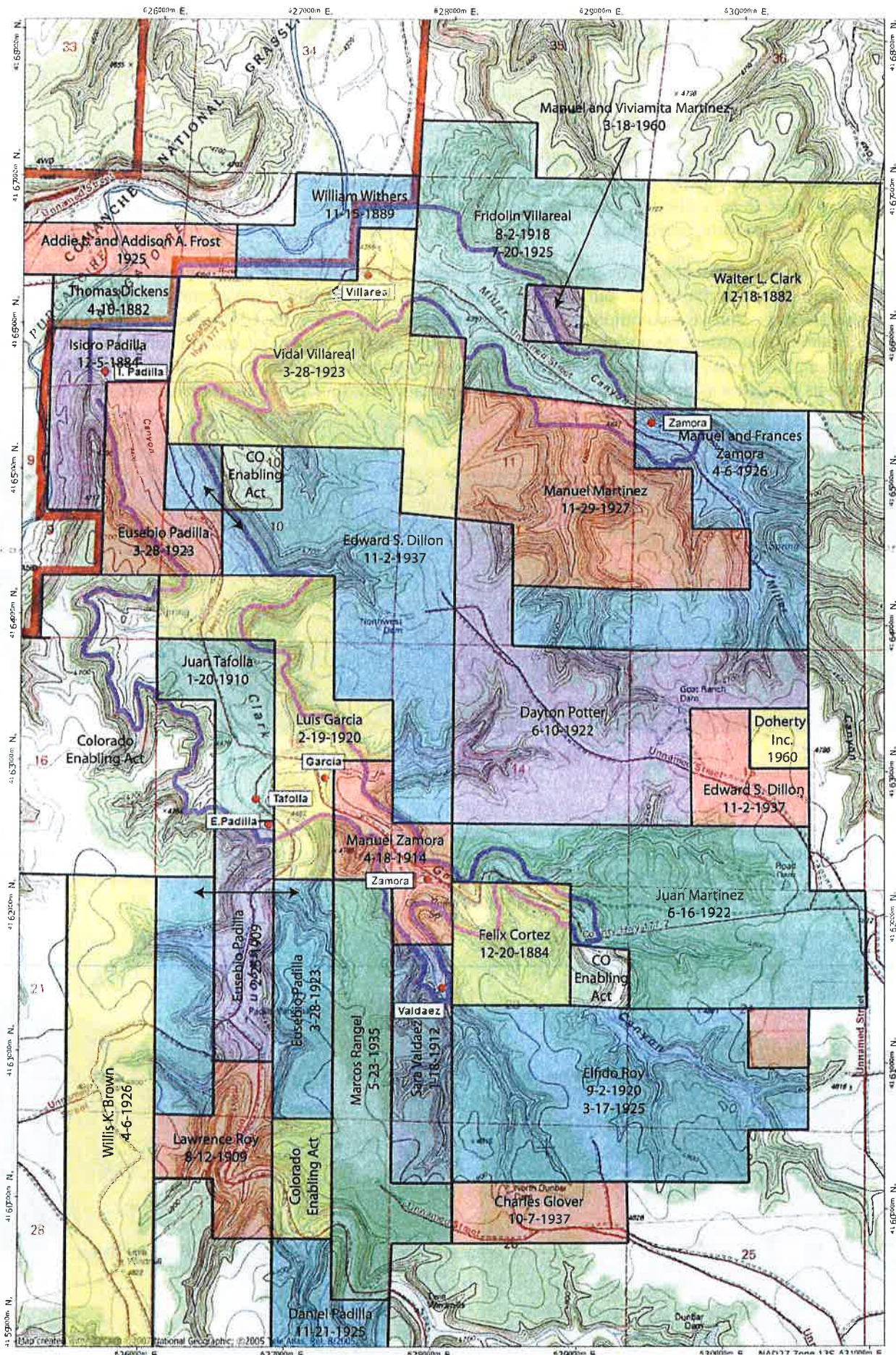
One trend that emerged in homesteading following 1920 is the increasing number of homesteads patented on two parcels on separate dates. Previously, this was evident in some examples of 160-acre homesteads expanded to 320 acres, but over 25% of the 320-acre homesteads patented after 1920 were joined by an additional patented 320 acres, with patent dates separated in some cases by months, and in some cases by several years. A couple of explanations are possible for this. It appears that all homesteads claimed and patented under the Stock Raising Act were patented in two parcels of 320 acres each, but in the healthy majority of cases, they were patented (and presumably claimed as well) on the same date. Therefore, separate patents may be explained by an initial claim of 320 acres that, after a homesteader encountered the unproductive reality of his or her land, he or she returned to the Land Office in Pueblo to claim an additional 320 acres to use for grazing. One further explanation is that the homesteader was not able to make improvements to both 320-acre parcels immediately but instead proved up on both parcels at different times. In either case, any second 320-acre parcel is generally adjacent to the first and represents similar characteristics in topography.

The remaining examples of homesteads patented after 1920 represent 640-acre homesteads (patented in two 320-acre parcels on the same day) claimed after the passing of the Stock Raising Act. The boundaries of these homesteads show the least concern for or adaptability toward existing landscape features out of all homesteads investigated during this analysis. Only a couple of examples are perfectly square and conform to existing section boundaries. Because land available under the Stock Raising Act had proven undesirable and unproductive during earlier periods of homesteading, many of these parcels were most probably shaped around previously homesteaded land. Some of these homesteads occupy flat land and were shaped to skirt steep slopes, but many traverse mesa slopes, canyons, or other significant changes in terrain. As these large homesteads included more topographical variety than the 320-acre homesteads patented earlier, they again include lower areas and hillsides where homestead complexes were predominantly located in order to take advantage of these protective sites, in some instances near sources of water (although likely ephemeral).

It is also worth noting that the latest homesteads identified in the survey—those patented after 1930, such as the J, Claud Claussen homestead patented in 1938 (5LA.11759)—show the greatest degree of topographical variation, perhaps meaning these areas were undesirable but were the best available after the land rush of the 1920s. The boundaries of every one of these homesteads cross steep canyon walls and contain very uneven terrain, and most of them are unusually elongated in shape, indicating they were chosen from whatever odd parcels were available in the area surrounding the Purgatoire.



5LA.11759 J.Claud Claussen Homestead



This map shows a typical pattern of homestead claims. Isidro Padilla's homestead on the Purgatoire River is visible on the upper left.

Homesteading Resources

from the Purgatoire River Region

The Homestead Complex

With most abandoned for seventy years or more, the majority of homesteads surveyed were in various states of ruin, ranging from buildings with walls and roofs mostly intact but missing doors and windows to simple stone foundations surrounded by scattered stones. However, even in ruins there is much that can be learned from the homestead complexes including the methods of construction, materials, workmanship, and layout.

The surveyed homesteads ranged from single buildings to extensive complexes. A typical homestead complex might include a dugout and a stone dwelling along with an outhouse, a multi-purpose outbuilding, a loafing shed, and a corral. Many homesteads also appear to have multiple dwellings, able to accommodate large or extended families or possibly additional seasonal labor. Associated artifacts, building size, building placement, the location and size of openings, and the quality of construction materials all provided clues to a building's function, but it was not always possible to determine the original use or form of a building. The number and size of buildings can often be an indication of the success of the homesteader and how long the homestead was occupied.



5LA.11635 Gerard Homestead complex



5LA.11736 Villareal Homestead Complex

Dwellings

The original homestead dwelling were generally quite small, often only 12' x 14'. An ambitious homesteader might build as large as 16' x 32'. Homesteads were usually started with just one or two rooms, but were often expanded over time. Dwellings can generally be distinguished from other homestead buildings by the larger number of windows, size of windows, fireplace, higher level of craftsmanship seen in the stonework, and associated domestic artifacts.



5LA.11611 Dwelling with fireplace



5LA.11780 Dwelling Interior



5LA.11635 Interior of dwelling



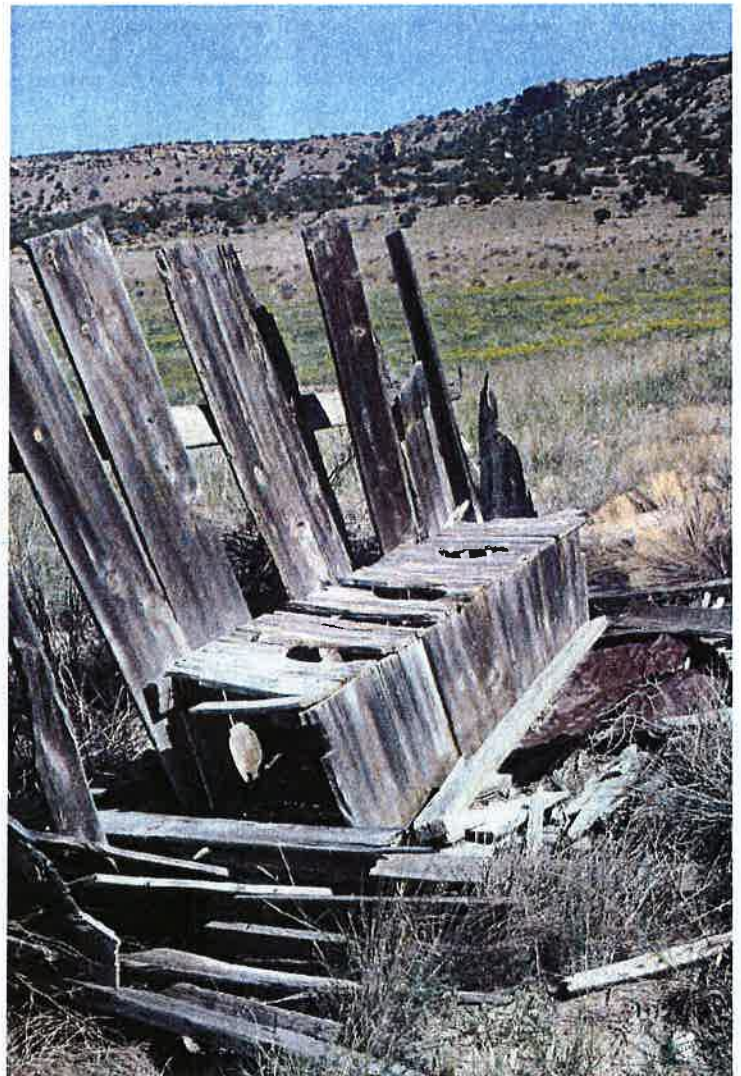
5LA.11761 Dwelling with fireplace

Outhouse

Outhouses are generally located fairly close to the dwelling. Few intact outhouses have survived, generally only a foundation remains. This is likely due to the temporary nature of their construction with homesteaders either moving the outhouse building to a new location after the outhouse hole was filled or building a new outhouse.



5LA.11676 Stone outhouse



5LA.11736 "Three-seater" outhouse

Livestock

Livestock were part of most homesteads, either as an additional source of income and food for farmers or as a primary occupation for ranchers. Many farmers also grazed beef cattle. Others kept some dairy cattle and sold cream to local markets. Homesteaders generally kept horses for work and travel as well as some chickens for eggs. Some also raised goats. Due to the relatively mild climate, homesteaders generally did not need to build extensive structures to house their livestock. Cattle typically had only the shelter of a three-sided loafing side. Homesteads might include a small barn for tack, storage, and to shelter a horse or two in case of bad weather. Those involved in dairying might have a building for milking and cream storage. The presence of particular elements can indicate what type of livestock a homesteader raised such as dipping vats and stone pens for sheep or wooden corrals and chutes for cattle.



5LA.11735 Chicken coop



5LA.11735 Remains of a fence line



5LA.11674 Corral



5LA.11837 Corral



5LA.11837 Well connected to windmill and stock tank



5LA.11837 Sheep pen



5LA.11794 Remains of loafing shed, barn, and corral



5LA.11781 Chicken coop



5LA.11897 Milk house

Water

Water was essential to the success of all homesteads. While some homesteaders were fortunate enough to be located near a spring, many more were miles from the nearest source of water. Some were able to dig wells, but many others relied heavily on cisterns to collect and store water.



5LA.11759 Cistern with filters



5LA.11611 Cistern adjacent to dwelling



5LA.11896 Well



5OT.1104 Corner cistern



LA 11849 Well



5OT.1112 House foundation with corner cistern



Vernacular Architecture: of the Purgatoire River Region



Early settlers brought building traditions with them into the Purgatoire River region but these often had to be quickly adapted to local materials and conditions. The architecture observed during the survey reveals much about the settlers' responses to their geographic remoteness, the necessity for adaptation, their ability to use the landscape and found materials to survive, and the influence of their ethnicities on their ways of building and arranging space. Resourcefulness and adaptability is seen through the use of rock shelters, the quick construction of dugouts, the reuse of found materials such as railroad cars and railroad ties, and the modification of earlier homesteads to meet the needs of later settlers. During the survey, similarities in scale, design, layout, construction methods, and building materials were found across the region's homesteads, defining a clear regional vernacular. Many of the construction methods identified in homestead construction can also be seen in the construction of rural community buildings like schools, general stores, and post offices.

Frontier Building Types

Frontier building generally focuses on shelter more than style. Frontier regions have developed their own traditions influenced by the culture and imported traditions of its settlers as well as the availability of materials in their new environment. Frontier buildings are generally constructed by the settlers with materials found near the homestead. Buildings are utilitarian and reflect the economics and background of the builder. Frontier architecture often reflects the cumulative wisdom of multiple generations.

When homesteaders arrived on the land, they usually began with a temporary shelter, often a tent. Next came a building that could be constructed quickly and simply with minimal technical skill required. Depending on the region, this might be a log cabin, a frame claim shack, or a sod house. In the Purgatoire River region it was most often a dugout or jacal. Within a couple years, these might be converted to another use, and a new dwelling of stone or adobe constructed. One of the unusual features of the Purgatoire River region is that this frontier architecture lasted well into the twentieth century. Additionally, few of the homesteads ever seem to have moved beyond frontier architecture as is seen elsewhere such as the replacement of sod houses with catalog houses a few decades after settlement in northeast Colorado. Many homesteaders did not last more than a decade or two, so they never had an opportunity to move beyond frontier architecture. The general remoteness and rugged terrain of many homesteads and often subsistence-level agriculture also played a role.

Dugouts

About half of the homesteads surveyed included a dugout. These ranged from holes in the ground covered with some branches to multi-room buildings lined with sandstone and covered with gable roofs. With limited building materials available, especially few large trees, digging into the ground was a simple solution to the immediate need for housing. Dugouts provided warmth in the winter and comfort in the summer heat. However, infestations of insects and prairie dogs, poor lighting and ventilation, and flooding typically made dugouts temporary accomodation rather than permanent dwellings.

Dugouts were generally not completely underground, generally part of the structure extended above ground level. Dugouts might also take advantage of natural topography and be constructed into hillsides. Interior walls were dampened with water and packed hard to help prevent the dirt from eroding. More elaborate dugouts were lined with sandstone and include superstructures of stone or log. Roofs were usually supported by log beams and covered with smaller timbers. Dugouts were normally small due to the effort required to excavate them; eight feet deep and twelve feet was typical.

Typically, homesteaders soon replaced simple dugouts with more substantial above ground dwellings. The original dugout might be incorporated into the new building, become a cellar, or continue as an additional living/sleeping space. Some homesteads never seemed to evolve beyond the simple dugout stage. It is presumed that these were sites where the homesteader either abandoned the homestead before proving up or sold the land shortly after.



5PE.6945 Dugout built into slope



5LA.11778 Dugout with later addition



5LA.11695 Dugout



5LA.11853 Dugout with later addition



5OT.1142 Dugout



5LA.11895 Dugout constructed with stone and a roof of railroad ties



5OT.1172 Dugout



5LA.11896

This extensive dugout was built by Luy Lakner, who immigrated to the region from Yugoslavia and homesteaded in the 1910s. He built a substantial, multi-room dugout for his wife and large family, and left them to run the farm while he worked at a steel mill in Pueblo.

Jacal

Utilized by Hispanic cultures as well as by Native Americans, the origins of jacal construction are unclear. Easy to construct and incorporating local materials available at no cost, jacals appear to be used most often in the Purgatoire River region as temporary housing on new settlements and for outbuildings including storage and animal pens. A key to the success of the jacal as a frontier building was that it could be built with limited construction knowledge, using a variety of materials and requiring few tools. The walls of the jacal were formed by placing a row of upright posts into the ground, usually into shallow holes dug specifically for each post. Larger posts might be placed on either side of openings for additional stability. Jacals were often makeshift buildings, and various elements could be used to help keep the posts in place including horizontal supports, sills or lintels, or wire. The space between the vertical posts was filled with small rocks, mud, or lime chinking and then plastered over with adobe. This construction method was well-suited to the climate since it worked well with the slim trunks of pinon or juniper as opposed to the larger logs used for horizontally laid log buildings. The height of the trees determined the ceiling height. Jacals were typically composed of a single, rectilinear room. They could be covered with a gable roof or flat roof composed of vigas and latias.

Jacals are found in combination with stone and adobe architecture, either as the original structure or as an easy addition. Interior partition walls utilizing jacal-style construction were found on several homesteads. Intact, free-standing jacals were identified on fifteen of the surveyed homesteads. These likely represent just a small percentage of the jacals originally built by homesteads, but these buildings have survived in small numbers due to the temporary nature of their construction.



5LA.11681 Few intact jacals were located during the survey, but collapsed jacals like this one were more common.



5LA.11779 Dwelling with interior jacal style wall



5OT.1104 Jacal chicken coop



5LA.11736 Interior of jacal structure

Construction Materials

Since most buildings were simple with few decorative elements, materials and craftsmanship became primary defining features. The selection of materials was influenced by what was available as well as what was familiar.

Sandstone: The dominant construction material of homesteads in the region was sandstone, with more than sixty percent of the homesteads including sandstone buildings. With natural sandstone outcroppings throughout the area, it had the advantage of being easily accessible as well as strong and durable. Though quarrying and finishing stones was labor intensive, stone was readily available and could be quarried by homesteaders at no cost. In many areas, enough fieldstone is available that quarrying is not needed. The quality and size of sandstone blocks used in constructed varies widely. Some dwellings used narrow, rectilinear stones, while others incorporated larger square stones with small stone chinking in between irregular coursing. Sandstone walls in the region are typically double-coursed, with a layer of adobe and chinking in between the exterior and interior layers of the wall.

The majority of stone buildings surveyed featured double laid walls with an interior fill of rubble chinking and adobe. Adobe is the primary mortar used through the 1920s and was also used as an interior and exterior stucco coat. The presence of concrete mortar generally appears to be a later addition. This concrete mortar patching seems to indicate a building that was in use longer than the average homestead building, with these buildings continuing to be used into the 1940s, 1950s or later.



5LA.11840 Building of mostly fieldstone



5LA.11626 The construction methods employed for rural schools like the Goodwill School, were the same used to construct homestead buildings.



5LA.11745 Typical stone homestead construction



5LA.11853 Stone detail



5LA.11809 the exterior of this dwelling has been repointed with concrete but the original adobe mortar is still visible on the interior



5OT.1105 Double stone wall construction



5LA.11676 Double stone wall construction

Adobe: Used as mortar for stone buildings, applied as stucco, or shaped into blocks and dried under the sun, adobe was a common building material throughout the region in the late nineteenth and early twentieth century. Adobe construction techniques in the southwestern United States combined Native American (Pueblo) and Spanish traditions. Brought to the Purgatoire River region by New Mexican settlers, adobe soon became a common building material for all of the region's residents. Adobe was cheap and durable (if kept dry) and did not require skilled craftsmen. A total of thirty-one buildings featuring adobe block construction were identified in the survey including homesteads as well as commercial buildings, schools, and a post office. An additional twenty-three stone foundations that appeared to have once had adobe superstructures were identified. Adobe block construction was likely as prevalent as sandstone construction within the region, but less has survived due to its fragility.

Adobe is a natural building materials made from mix of sand, clay, water and some kind of fibrous or organic material, commonly straw or sticks. Wooden molds are used to create uniform adobe bricks. After shaping, the wet adobe is left in the sun for a couple weeks to dry and is then ready to use. The availability, durability, and warmth of adobe structures made adobe an attractive choice for settlers. If poorly maintained or neglected, adobe will melt and deteriorate, leaving many entirely adobe dwellings only mounds of dirt. If properly cared for with regular repair and re-plastering, however, adobe structures can stand for hundreds of years.

Adobe was not exclusive to New Mexican building tradition; it was also adapted by Anglo-Americans. Adobe was even promoted through an Agricultural Experiment Station bulletin in 1910:

An adobe house, if properly built, will cost no more than a sod house and yet be as permanent, attractive, and comfortable as it is possible to build a house. They do not settle after they are dry. Mice do not work in them if they are protected at the foundation. They are superior to concrete or cement block houses in that they are non-conductors of heat and cold. They never sweat or become frosty on the inside, and rain does not wet the walls through as it does in many concrete houses. The labor required to build an adobe house is no more than that required to build a similar house of sod or concrete (Adams 1910, 3).



5LA.11791 Once exposed to moisture, adobe blocks rapidly deteriorate. Surviving uncovered adobe walls like one were rare. The all stone foundation has likely helped to preserve it



5OT.1177 Many of the region's schools also featured adobe block construction, such as the Higbee School



5LA.11897 Adobe block construction



5LA.11913 Adobe block construction was also used for commercial buildings such as the Tyrone Store.

Wood: Large trees are scarce in the region, which limited the ways wood was used for construction. While large cottonwoods (found in the canyons) were often utilized as roof beams, the primary wood material available were the much smaller pinons and junipers. These were suited for use as roofing material or for jacal construction but not for the log cabins characteristic of frontier areas in western Colorado. In areas located near the railroad, old railroad ties became a replacement for logs.

While milled lumber would have been difficult to obtain for the region's earliest settlers, twentieth century homesteaders could purchase it locally. However, due to the expense and the difficulty of transportation to remote homesteads, the use of milled lumber was typically limited to window framing and doors. Scatterings of milled lumber found on homesteads suggest that small outbuildings may also have used milled lumber.



50T.1172 Barn constructed with stone and railroad ties



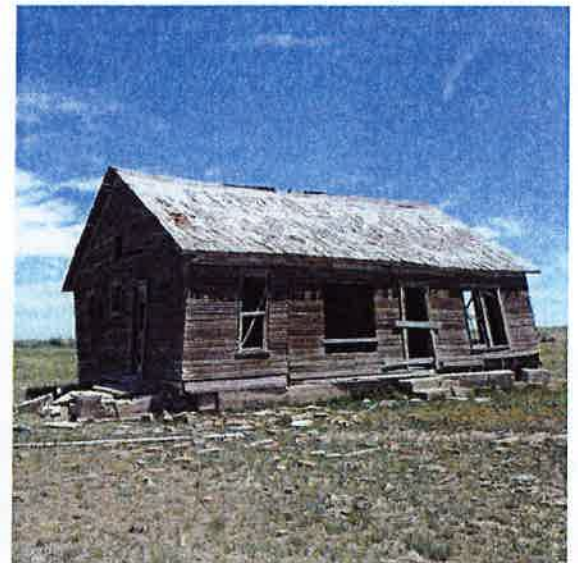
5LA.11781 Window frame of milled lumber



5LA.11695 Log buildings such as this one were rare within the survey area.



5LA.11880 Homestead showing roof beam and window framing

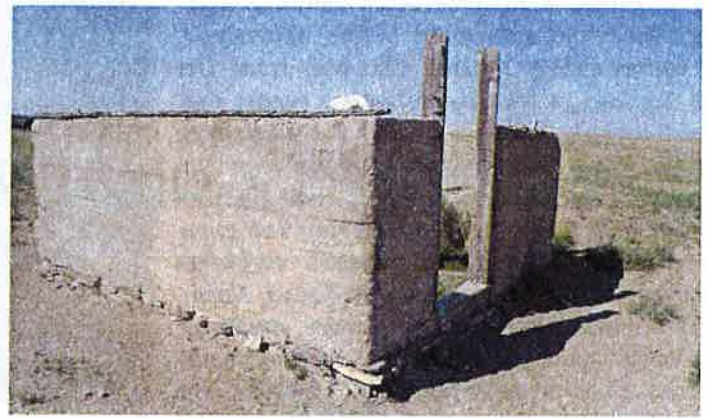


5LA.11833 Frame house

Concrete: Concrete gained widespread popularity as a building material in the early twentieth century. Considering that the majority of surveyed homestead date from the early twentieth century, the relatively rare use of concrete in construction was surprising. Concrete was present on roughly twenty-five percent of the homesteads. The most commonly observed use of concrete was to line cisterns and wells. Interestingly, homesteaders continued to use adobe mortar for building construction rather than concrete. The primary use of concrete mortar appears to be for patching and repairing building. Concrete was sometimes used for building foundations, though it is less common than stone. A few twentieth century homesteads constructed entirely of concrete were also observed; these appeared to be in areas with less readily available sandstone.



5LA.11860 Remains of a concrete house



5OT.1119 Concrete house

Incorporating traditional New Mexican architecture: Homesteaders brought cultural traditions with them from their birthplaces. The introduction and combination of these cultural traditions into the Purgatoire River Region influenced the development of its communities, agriculture, and built environment. The strongest cultural influence can be seen in the New Mexican traditions brought to the region. Traditional features brought by homesteaders include adobe construction, jacal construction, and flat roofs composed of vigas and latias. These architectural traditions had been developed in an environment similar to southeastern Colorado, and were already adapted to the climate and limited natural resources of the area.

Adopted from Pueblo and Hispanic traditions, flat roofs were constructed by laying vigas (large, round wood beams) horizontally to support the roof; latias (commonly long, thin peeled tree limbs or sticks) were laid over the vigas. The vigas, typically hand-hewn ponderosa or cottonwood were typically six to twelve inches in diameter and laid about three feet apart. The horizontally laid latias form the roof surface and were commonly covered with a thick layer of mud as well as gravel and dry earth for protection from the elements. The relatively simple construction, as compared to gable roof types, made this New Mexican roof type a common feature among southeastern Colorado architecture. Although simpler in construction and incorporating local materials, the flat roof was not waterproof and often leaked; in addition, latias were susceptible to rot. Many homestead sites throughout the region lack intact roofs; large hewn logs lay across the standing walls or, if fallen, lay near the former building as evidence of roof beams, with smaller limbs scattering the site.



5LA.11761 Viga and latia roof construction

Another feature of New Mexican design is the corner fireplace, or fogon. Placed at an angle between adjoining walls and often constructed of stone and adobe, fogones are traditional to New Mexican architecture, and even today corner fireplaces are sometimes constructed in houses that incorporate Pueblo or Spanish revival elements. More efficient than the traditional Anglo-American fireplace, which was usually centered on an exterior wall, fogones radiate heat to all corners of the room and lose less heat to the building's exterior, since the fireplace's mass is concentrated inside the room. Many homestead dwellings throughout southeastern Colorado have evidence of fogones, sometimes fully intact but other times indicated by mounds of adobe piled at the corner of two walls or by bits of ash staining the corner of stone walls in a deteriorated dwelling.



5LA.11676 Corner fireplace

While General Land Office records and census records indicate that these features are most frequently associated with Hispanic homesteads, traditional New Mexican features have been found on homesteads that records show to have belonged to Anglo-American homesteaders. There are likely several explanations for this. The buildings with New Mexican features may have been constructed before or after the Anglo-American settlement of the homestead. In the homesteading records obtained from the National Archives, a few homesteaders report that there were already buildings on the site when they claimed the land. These could have belonged to homesteaders who failed to prove up their claim or to squatters. Additionally, the artifacts found on some sites seem to indicate use of homestead complexes by sheepherders after they were abandoned. Anglo-American homesteaders may also have employed Hispanic ranch hands or laborers to help with the construction of homestead buildings. However, the most probable explanation seems to be that Anglo-American homesteaders adopted these features from their Hispanic neighbors. The surveyed homesteads show an almost universal adoption by homesteaders of adobe for use as a mortar and stucco. So it seems quite possible that they also adopted other traditional New Mexican features, which by the early twentieth century had become an integrated part of the region's vernacular architecture. In *The Architecture and Art of Early Hispanic Colorado*, Robert Adams states that: "Hispanic pioneers built modestly and effectively. Their attention never strayed for long from a fundamental concern, the geography. From the land they extracted their prime building materials at little cost; then, because construction did not require highly specialized skills, they were at liberty, independent of banks and commercial builders, to shape their homes to the imperatives they actually experienced, those of the weather and of their social patterns" (Adams 1974, 42). In the survey area, this description fits not just Hispanic homesteads, but the region's vernacular architecture as a whole.



5LA.11736 Interior view of viga and latia roof construction



50T.1122 Corner fireplace



5OT.1104 Interior of jacal chicken coop



5LA.11675 The Coy homestead is an example of an Anglo-American homestead that incorporates construction methods commonly associated with New Mexican traditions including adobe block construction and the incorporation of natural landscape features. Charles Coy came from Missouri in 1915.



Transportation



Transportation across the vast expanse of the High Plains desert in southeastern Colorado has taken a variety of forms since humans first traversed the region. The Purgatoire River region was first crossed by prehistoric groups, who migrated through following game and seasonally available edible plants. In the Late Prehistoric period, groups repeatedly occupied shelter sites, where they established semi-permanent dwellings to which they would return on a seasonal basis as they traded with groups to the south. Protohistoric groups, in particular the Apache, later moved along the paths and trails left by their predecessors.

The earliest Spanish exploration in the area took place in 1594, when the Bonilla Expedition, from which the Purgatoire River's name is derived, traveled along the river. The Spanish explorers encountered the Apache as they first moved across the area. By 1750, however, the Comanche—who had acquired horses from the Utes—had moved into the eastern Plains region of Colorado from the north and pushed the Apache south from the Purgatoire region. The Comanche were the dominant Native American group in the Raton Basin at the time European settlement began in the early 1800s, although they themselves were later pushed south by the Arapaho and Cheyenne.

The Santa Fe Trail

The Mountain Branch of the Santa Fe Trail evolved into a foundational transportation route in southeastern Colorado over which nearly all subsequent major modes of travel were overlain: as settlement developed, stagecoach lines, railroads, and asphalt-paved highways followed the route between Bent's Fort and Trinidad, and south from there over Raton Pass to Santa Fe.

From Santa Fe's designation as the capital of the northern province of Nuevo Mexico in 1610 until the opening of the Santa Fe Trail in 1824, little commercial trade to and from the town took place. A supply train traveled to Santa Fe from Mexico City every three years, primarily to supply missions in the region. Return caravans between Santa Fe and Mexico City ran approximately annually, although not reliably. French traders, in violation of Spanish law, increasingly managed to accomplish commercial trade between St. Louis and Santa Fe until Mexican independence in 1821. The evolution of the Santa Fe Trail in the 1820s allowed Santa Fe to become a trade destination in ongoing commercial exchanges between the United States and Mexico, which to some extent alleviated the isolation of the province of New Mexico, which had been neglected by the Mexican government. More important to southeastern Colorado, the Santa Fe Trail served as a route around which settlement developed. The Mountain Branch of the Santa Fe Trail followed the Arkansas River upstream to the west, breaking from the Cimarron Cutoff at Caches, Kansas. At the confluence of Timpas Creek and the Arkansas (now La Junta), it descended southwest, following Timpas Creek (roughly paralleling the Purgatoire River, although at a distance of many miles), and

continued over Raton Pass and into New Mexico. The Santa Fe Trail accommodated the commercial development of the Arkansas River Valley in southeastern Colorado, beginning with the establishment of the Bent & St. Vrain Company's Bent's Fort in 1833. Bent's Fort permanently established an American presence in the area and laid the groundwork for further development along the trail in the years to come.

Stage Lines and Roads

In 1850, following the United States' acquisition of New Mexico Territory, Waldo, Hall & Company was awarded the mail contract between Independence, Missouri, and Santa Fe. David Waldo, a trader well familiar with the Santa Fe Trail, preferred the slightly shorter Cimarron Cutoff to the Mountain Branch of the trail and bypassed southeastern Colorado. In 1860, however, the Missouri-Santa Fe mail contract was reassigned to the Missouri Stage Company, which changed the mail route to the trail's Mountain Branch. By 1860, the building of Fort Wise on the Arkansas and the continued pressure on Comanche and Kiowa peoples to move south gave the Mountain Branch the reputation of a safer route. The Missouri Stage Co. held the mail contract for only a couple of years, but in that time they made several improvements: they converted Bent's Fort to a stage station, and they established branch lines running from Bent's Fort northwest to Fairplay and southwest to Iron Springs Station and then over Raton Pass toward Santa Fe.

In 1862, the mail contract was awarded to Cotrill, Vickroy, Barlow, Baile and Barnum, the company that would become Barlow and Sanderson. The company ran coaches from Pueblo to Trinidad, Fairplay, and Denver, and also between Bent's Old Fort and Pueblo, Russelville, and Denver. After Cotrill's death, the company was renamed the Santa Fe Stage Company, and Jared Sanderson held a prominent role in the business. In 1866, Sanderson and his partners Bradley Barlow and Thomas J. Barnum—now calling their operation Barlow and Sanderson and Company—acquired the contract. The same year, Richens "Uncle Dick" Wootton acquired the rights to build a toll road over Raton Pass, which greatly enhanced the efficiency of commerce and travel between Colorado and Santa Fe. Wootton relied on Ute laborers to build the road and thereafter allowed the Ute and members of other tribes to use the road for free. Others were charged \$1.50 per wagon or twenty-five cents for a horse and rider.

The following year, the Denver and Santa Fe Stage and Express Company, which ran the mail between Denver and Pueblo, established a line from Pueblo south to Trinidad. Settlement intensified greatly following the Civil War, and Barlow and Sanderson made immediate improvements to accommodate the increasing traffic through southeastern Colorado. The establishment of a Kansas Pacific railhead at Kit Carson shortened the distance the mail was carried by stagecoach, allowing the company to pour its resources into adding stations and lines to accommodate travel to and from new settlements in Colorado. Stations along the line between Bent's Fort and Trinidad included Hole-in-the-Prairie (near Model) and Hole-in-the-Rock (now Thatcher). In 1870, Barlow and Sanderson bought out the Denver and Santa Fe Stage and Express Company, furthering their control of local stage traffic in southeastern Colorado. Historian Morris F. Taylor has noted that, as the Kansas Pacific Railroad was at that time approaching Denver, Barlow and Sanderson were concerned how their stage lines would respond to and interact with incoming railroads. Partly in response to the Kansas Pacific's unrealized plans to build south toward Trinidad, and also in response to increasing settlement along the Purgatoire River, Barlow and Sanderson decided in 1871 to move a segment of the Kit Carson-to-Trinidad leg of the Southern Overland Mail and Express Company route to more closely follow the Purgatoire. The company added stations along the Purgatoire at the Steven Conroy Ranch (aka the Bent's Canyon Station), Lockwood Canyon, and the W. R. Burns Ranch (later known as the Hog Back Station). The new stage route then rejoined the old line at a point northeast of Hoehne.

Travel by stagecoach was hardly luxurious: travelers endured antagonistic weather, rough roads known to topple coaches, bandits and hostile Native Americans, and station food that could be nearly inedible. Barlow and Sanderson's Southern Overland Mail and Express Company was severely affected by the "epizootic of 1872," a respiratory disease that attacked horses and mules throughout the United States. As these animals were still the primary mode of transport, the epizootic's impact on transportation infrastructure was profound, hindering the functions of many businesses and service agencies, such as city fire departments. Historians now consider the epizootic to have been a contributing factor to the financial panic of 1873. In the more sparsely populated areas of the American West, the epizootic was less severe, but nevertheless it affected stage companies, who were forced to delay or interrupt service to rest healthy animals, instead of swapping out teams of horses or mules at designated stations.

The Panic of 1873 slowed the progress of the railroads, allowing stage lines (once horses and mules were again healthy) a few more years as the primary mode of long-distance transport in southeastern Colorado. But railroads increasingly replaced stage lines as the preferred mode of transport for the mail, passengers, and commercial goods.

Railroads

In the nineteenth-century American West, the railroads were the primary agents of modernity, forever changing the ways the citizens of the new country lived. The relationship between railways and settlements was reciprocal: railroad companies fed the growth of existing settlements by bringing goods and services, but they also platted and named towns where previously there were none in order to serve their stations. Railroads immediately replaced stage companies as the preferred carriers of the mail, which ensured more reliable delivery for the postal service. By bringing large quantities of lumber from distant mills to the treeless expanses of the

High Plains desert, railroads also ensured a new level of standardization in the built environment; window styles and sizes, for instance, were no longer dictated by the quality and quantity of materials on hand, but by the range of pre-made window units available for purchase through builder's supply catalogs or local lumberyards. Changes weren't confined to the built environment, either; by increasing the possibility that goods could be shipped more economically and in greater quantities, communities saw greater standardization in nearly every avenue of material life, including their foodways, clothing, and home furnishings.

In the late 1800s, rail transport in southeastern Colorado was served by two close competitors: the Denver and Rio Grande (D&RG) and the Atchison, Topeka and Santa Fe (AT&SF) railways. The D&RG was first established by Colonel William Palmer, who completed a north-south line from Denver to Pueblo in 1872. Palmer's vision was to build a north-south line over Raton Pass and on to Santa Fe. In 1876, the D&RG line reached El Moro, a coal-mining settlement north of Trinidad, but Palmer stopped short of the larger commercial center. Although curious, this move was consistent with Palmer's method of realizing the most money from his endeavor by skirting established settlements in favor of towns platted by D&RG company subsidiaries. While lucrative, this practice angered locals and cost Palmer dearly in the long run: he lost the right to build over Raton Pass to the AT&SF.

The AT&SF was begun in Topeka, Kansas, in 1868. The brainchild of Colonel Cyrus K. Holliday, a Kansas entrepreneur and politician who established himself as an ardent abolitionist before and during the Civil War, the AT&SF closely followed the established Santa Fe Trail. Holliday and his company first planned to follow the Cimarron Cutoff but later changed their plans and followed the Mountain Branch, in order to better establish shipping points for large cattle operations in New Mexico and Colorado. The AT&SF reached the Colorado border and the new railroad town of Grenada in 1873. Plans to build further were temporarily stalled by the Panic of 1873, but in 1875 the AT&SF built toward Pueblo and reached La Junta in 1876. Turning southwest and following Timpas Creek, the line first reached Trinidad in 1878 and established small stations along the way at sites like Hole-in-the-Rock (Thatcher) and Hole-in-the-Prairie (Model). That year, the AT&SF acquired the rights to build track over Raton Pass along "Uncle Dick" Wootton's toll road. Wootton, who like many in the area had little love for William Palmer and the D&RG, happily sold the rights to the AT&SF.

The AT&SF provided a critical link for cattle ranchers to move livestock to distant eastern markets. Texan ranchers like Charles Goodnight had driven their herds of longhorns along established trails through the area years before, toward the Kansas Pacific railhead in Abilene, Kansas. By building a line south of the Kansas Pacific line, the AT&SF gave the cattlemen a closer shipping point that enabled them to save time both on the trail and in the feedlot, where beef cattle were fattened up before being shipped by rail to market.

In 1888 the Fort Worth and Denver (also called the Denver, Texas and Fort Worth) Railroad completed a line from Fort Worth to Denver. The line ran through what is now Branson (to the east of Trinidad). Acquired in 1899 by the Colorado and Southern Railway, the Fort Worth and Denver eventually built a depot at Branson in 1918. Although farmers immediately began immediately to use the rail line at Branson to ship their crops, a stockyard for loading cattle was not built in the town until 1935.

The rail lines and depots in the area did good—sometimes even booming—business until World War II, after which better roads and increased truck transport weakened the reciprocal relationship between small towns and their railroads. Eventually, passenger travel dropped so much that the railroad companies ceased service to many small depots.

Roads & Highways

As settlement increased, so did the demand for decent roads. Early roads, such as the Santa Fe Trail and "Uncle Dick" Wootton's toll road, were dictated by topography, following and conforming to contours and physical features of land and water. Wagon roads served nodes of settlement by allowing for freight and goods to move between ranches, farms, mining areas, and towns and villages. As homesteaders claimed land in parcels dictated by the township and range system that ignored topography in favor of strict uniformity of parcel size, new roads often bounded properties and were built along section lines. As a result, many highways are long and straight, running from north to south or from east to west with little diagonal variance.

State Highway 350 is a good example of a highway constructed to follow a historic feature. Running seventy-three miles southwest from US 50 at La Junta to Hwy 160 near Trinidad, Highway 350 follows the Santa Fe Trail through the area. Highway 109 between La Junta and Higbee is shown on maps from the late 1800s as a historic stage and wagon route, but later settlement lengthened the road along section lines. Much of it runs directly from north to south, but it turns 90 degrees at Kim—a town established on land homesteaded as late as 1915—to run from east to west.

Although rail lines moved freight through the area, in the mid-twentieth century, trucks increasingly served this function and replaced team-drawn wagons to deliver commercial goods in areas the railroads did not reach. As motor vehicle travel

became more and more prevalent, rural residents demanded counties pave the major arteries of their areas. In 1949 a new paved section of Highway 109 opened from Kim to Trinidad after the residents of Kim and the surrounding area threatened to secede from Las Animas County and attach their district to Otero County. The new road, which featured a steel span bridge over Trinchera Creek, addressed the need for a farm-to-market road serving eastern Las Animas County and connected points in the southeastern corner of the state with Trinidad, the county's commercial center.

Transportation Related Resources

from the Purgatoire River Region

Historic trails and roadbeds

Historic patterns of movement through the region can be traced through the observation of historic trails and roadbeds. Most well-known is the Santa Fe Trail, whose path can still be seen cutting across the landscape in many locations. There are also many smaller wagon roads and horse trails used by homesteaders; some of these are still used as ranch roads while others are just faint paths across the landscape. The major automobile routes through the region, Highways 350 and 160, have not always followed their current paths and sections of their original alignments were also surveyed.



5LA.11859. The original path of the Trinidad Highway (now Highway 160) can still be seen south of the original route.



5LA.11597. In 1908, the Daughters of the American Revolution laid commemorative stones along the route of the Santa Fe Trail.



5LA.11771. Homesteaders created improved horse trails like this throughout the region.

Bridges and Culverts

Numerous historic bridges and culverts are located on the region's paved highways as well as its dirt roads. Though the creek beds and arroyos are dry most the year, with a hard rain they can quickly flood and wash out roads. During the 1930s, the government carried out major improvements to the region's roads under the Works Progress Administration and Civil Works Administration, constructing more than a hundred bridges and culverts, mostly of locally quarried sandstone. Previously surveyed, the New Deal road projects were not included in this survey.



5LA.11788. Bridge located on the original route of the Trinidad Highway (now Highway 106)



5HF.2336. The roadbed of the Denver & Rio Grande Railway, a cistern for water storage, and a frame depot mark the location of Capps Station. It was a flag stop on the route from Cucharas Junction to Trinidad.

Railroad resources

Railroad corridors were often followed earlier transportation routes, such as the Santa Fe Trail. Selecting and laying the train's roadbed was important not only to the development of communities along the route but also to the operation of the railroad. Trains needed steady grades and gentle curves for the most efficient operation. Most tracks were laid on ballast beds designed to distribute the train's weight and drain moisture away from the ties. Even after rail lines have been discontinued and tracks ripped up, graded roadbeds often remain to mark path of a former rail corridor.

Railroad resources include rail corridors as well as the various facilities constructed by the railroad along the route. AT&SF constructed facilities between La Junta and Trinidad included depots, bunkhouses, section houses, boiler houses, tool houses, water tanks, and stock yards. Though trains continue to pass through the region, few traces of these extensive rail facilities have survived, with buildings demolished or moved after the railroad eliminated these stops from its route.



LA.11600. The AT&SF constructed this dam across Timpas Creek near Thatcher in 1895 in order to collect water for use by its steam engines. The locomotives' boilers required a large amount of water and water stations were located every five to twenty miles. The water from the dam was piped to an elevated water tank located adjacent to the railroad tracks.

[Mirrored bleed-through text from the reverse side of the page, including the word "Cattle" and other illegible words.]



Cattle Ranching: From the Open Range to the 21st Century



While ranchers in southeastern Colorado have consistently made a living by providing beef to a meat-hungry public, the practice of cattle ranching has changed enormously over a century and a half. Between the cattle drives that traversed hundreds of miles to modern-day scientific methods of raising cattle, the conditions and constraints under which these ranches function have changed a great deal.

Cattle ranching in southeastern Colorado began with the “open range,” a term that refers to the practice of running cattle herds on the unfenced open public lands of the prairie. Cattle were driven into and kept in southeastern Colorado almost as soon as non-Native settlement began to take place in the 1820s. But open range cattle ranching as a specific method of livestock production in the Purgatoire River region came later, beginning with the movement of cattle through the area as they were driven from Texas to railheads in Abilene, Kansas, in the 1860s.

The systems and methods of open range ranching were imported to the New World by the Spanish, and this form of cattle ranching—which gave rise to the romantic archetype of the cowboy in the history of the American West—was practiced in southeast Texas and southwestern Louisiana beginning in the late eighteenth century. Southern Anglo-Americans and Mexicans influenced one another’s methods of raising cattle; the intersection of cattle raising with horse culture, for instance, was adopted from Mexican and Spanish cattle ranchers. However, Texan Anglos rejected many elements of Mexican culture, and racial and cultural prejudice prevented a greater Mexican influence than might otherwise have happened (Jordan 1993). Anglo-American cattlemen disliked the Mexican technique of raising cattle and sheep together, which exacerbated tensions between cattlemen and sheep ranchers in other parts of the West later in the nineteenth century. Nevertheless, many of the words that comprise the language of cattle raising—words like lariat, corral, and remuda—originated with the vaqueros who brought them from Mexico.

The success or failure of open range ranching depended on the ability of cattlemen to transport and sell their cattle to markets in cities or regions that demanded beef. The earliest urban market for beef cattle raised on the plains of southeast Texas was New Orleans, in the eighteenth century. In the 1840s and 1850s, as the industry in the western Gulf Coast region developed, Texas cattlemen drove herds of beef cattle to railheads in Kansas City and Sedalia, Missouri, for shipment to eastern markets. As farm settlement in Missouri and Kansas increased, however, open land became dotted with fenced farms, forcing cattlemen to push west and trail cattle over greater distances. The cattle, fat and ready for market at the beginning of the drive in Texas, ultimately lost so much weight by the time they reached the railhead that the cattlemen were forced to “finish” the beef by fattening the cattle in nearby feedlots. It was an inefficient and expensive process. The solution was to find new ranges and markets closer to the trails.

Fortunately for cattle ranchers, in 1859 the Colorado mountains west of the new city of Denver filled with gold prospectors and miners hungry for beef. In addition, the newly established Indian agencies in the Dakota Territory were also buying beef cattle. In 1860, cattleman Charles Goodnight trailed longhorn cattle from New Mexico over Trinchera Pass into southeastern Colorado, up through Pueblo and Denver, and on into Wyoming. In 1868, Goodnight established a semi-permanent trail camp about forty miles north of Trinidad on the Apishapa River, and in 1870 he founded the Rock Canyon Ranch on the Arkansas River at Pueblo. Today, the two-story stone barn Goodnight built at the site is all that remains of the ranch.

Goodnight's and others' early cattle drives from Texas helped establish more local cattle operations in the Purgatoire River region. Ranchers like Eugene Rourke bought longhorns from the Texas drovers as they passed through. In order to keep the herd moving at a faster pace, the drovers were willing to sell stragglers at a price well below what they might have gotten in Denver, and Rourke and other small ranchers took advantage of this to build their own herds.

One of the most notable of the early cattle operations in the region was begun by Scottish brothers Stephen, Peyton, and James Jones. Establishing a ranch headquarters in the Nine Mile Bottom at Higbee, the Jones brothers' enterprise was known as the JJ Ranch. The brothers had come to the Purgatoire River region from Texas, and their ranch was typical of early large cattle operations, in which ranchers controlled a great deal of the public domain by filing only on parcels that contained access to water. Founded in 1869, the JJ Ranch controlled about 960,000 acres of land after ten years, although the brothers held title to only about 18,000. By fencing the water sources on the land, they prevented their competitors from using them. For the cattlemen, this practice had an added benefit: it discouraged sheep ranching. Although sheep had been on the range in the Purgatoire River region for as long as cattle, the cattlemen erroneously believed that cattle would not use a water source if sheep had been there. Tensions between cattlemen and sheep ranchers and herders were common, although violence was less severe in the range in southeastern Colorado. Cattlemen were known to illegally fence public lands—the Prairie Cattle Company, which bought out many smaller ranches, including the JJ Ranch in 1882, was an egregious offender—until President Grover Cleveland ordered illegal fences removed in 1885.

On the lands of the public domain, it was not uncommon for cattle from various operations to mingle. To distinguish them, cattlemen used a system of brands, in which a symbol specific to each ranch was burned onto the hides of that ranch's cattle. Brands were designed so that reading them was a specific skill: It was said that in the early days of the open range, cowboys who could neither read nor write could nevertheless read brands. In the spring, cowboys convened their herds and branded the steers and heifers that were no longer small enough to be identified with their mothers. Steers were also castrated at this time, making them easier to handle. Ranches became known by their brands. The Circle Diamond Ranch, owned by Frank G. Bloom's Bloom Land and Cattle Company, was one of the largest in the area.

As large cattle operations came to control more and more acreage of the American West, the "cattle barons" who owned them increasingly lived elsewhere, leaving the day-to-day management to foremen. British interests owned many of the large operations, including the Prairie Cattle Company. The industry spread quickly and earned enormous amounts of money for speculators and owners of large ranches—which, as geographer Terry G. Jordan observed, "[were] in effect, an agribusiness, one fully in harmony with the Industrial Revolution, with all the attendant benefits and curses" (Jordan 1993, 236.)

Had open range ranching continued even until the end of the nineteenth century, the face of agriculture in the American West would be very different today. But it collapsed in the mid-1880s, giving way to systems of cattle raising that relied more heavily on haying in winter and on the use of British-derived breeds of cattle that required less range than Texas longhorns. Although the winters north of Texas were not generally severe enough to kill cattle, in the mid-1880s a series of extremely harsh winters, in combination with drought, proved to be exceptions. In particular, the calamitous winter of 1886-87 resulted in the death of approximately ninety percent of the cattle on the open range, an event known as the "Great Die-Off" or the "Great Die-Up." The country north of Texas was no longer the wide-open cattleman's dream that Charles Goodnight, the Jones Brothers, and others had envisioned it to be a decade before.

The harsh winters were not the only factor in the collapse of open range cattle ranching. The lack of control over public grazing lands led to widespread over-stocking, and ranchers grazed many more cattle than the range was able to support. The depletion of pasturage led cattlemen to dump their livestock on the market, quickly depleting prices. Finally, the Panic of 1893 drove the price of beef down and drove the cost of producing it up. Even if the hard winters of the 1880s had not come, the open range system would likely not have continued.

But open range cattle ranching left one enduring legacy: the archetype of the cowboy. As a symbol of the free and rugged Westerner, the cowboy endures today, although the open range cattle rancher is long gone. Genuine cowboys, the laborers on cattle ranches, adapted with changing climates and systems and still are much of the backbone of the beef cattle industry in the United States today.

In the twentieth century, cattle ranchers realized that if their way of life were to survive, they had to change their ranching methods. Although not overnight, they came around to the idea that a profit from raising livestock depended on managing the land in such a way to maintain its ability to sustain cattle grazing. Two inventions, barbed wire and the windmill, were critical to this. Barbed wire, invented in the early 1870s, was an efficient way of fencing in areas where wood posts and rails were too expensive or largely unavailable. Although in the days of the open range, ranchers had understood barbed wire as "the Devil's Rope," used by homesteaders to fence cattle out of their crops and thus divide the range, they later fenced their own holdings, not just their water sources, in order to keep their privately held grazing land to themselves. The second innovation, the windmill, allowed ranchers to access underground aquifers and fill stock ponds and tanks with which to water livestock.

To offset the diminished access to and reduced viability of public lands, some of the more successful ranchers expanded their

holdings by buying out failed farmers and smaller ranchers. Changes to homesteading laws in the early twentieth century better took the soils and climate of the West into account. Finally acknowledging that it was difficult, if not impossible, to make a living on only 160 acres in the arid West, Congress passed the Enlarged Homestead Act in 1909, which allowed homesteaders to claim 320 acres on lands that could not be irrigated. After the passage of the Stock Raising Act of 1916, homesteaders were able to file 640-acre claims on lands considered suitable only for grazing. Nevertheless, overstocking on grazing lands remained a widespread problem. Wet years of plentiful grass again gave way to drought in the early 1930s, and the land was unable to sustain the number of cattle grazing on it.

Under the Roosevelt administration, New Dealers sought ways to restore the land through a more active federal involvement in land use. For the semi-arid plains of eastern Colorado, New Dealers supported ranching over farming as the more environmentally suitable land use. Under the Land Utilization Program, the government offered to buy out farmers on marginal lands. Under federal ownership, these lands were taken out of cultivation, restored to prairie grass, and offered to ranchers for leased grazing. The Taylor Grazing Act of 1934 created public grazing districts, allowing local ranchers to lease public lands by purchasing permits. The Taylor Grazing Act's regulations aimed to restore the depleted range by dictating grazing seasons and pasture rotation. It also stipulated that public grazing leases preferably should be given to ranchers who owned, homesteaded, or leased privately held land contiguous with the public land, thereby preserving public lands for use by local ranchers. Although some ranchers opposed the idea that the federal government could regulate their use of public lands, many western ranchers themselves were the strongest supporters of the Taylor Grazing Act. They knew that sustainable use depended on controlled access to the public domain, ranching had no future without stewardship of the land. Since the Taylor Grazing Act, subsequent legislation has reinforced the ability of the federal government to regulate cattle ranchers' use of public grazing lands. In 1960, the federal government organized the lands acquired by the Land Utilization Program into National Grasslands, such as the Comanche National Grasslands, and placed them under the management of the U.S. Forest Service.

Whether land is publicly held or private, ranching depends on access to large tracts usually considered too marginal for other agricultural uses, due to aridity, rough terrain, or other factors. Yet today's cattle ranchers in southeastern Colorado have worked hard to restore sustainability and profitability to the land upon which their livelihood depends. There is a constant challenge to increase productivity without overtaxing the land's resources. Ranchers' profit margins are affected by the public's demand for sustainably produced, healthy beef, as well as by the demand for low prices.

As in other parts of the West, cattle ranching in southeastern Colorado is multi-generational, with ranches that have been run as family businesses since the Homestead Era. But more than their predecessors, ranchers in the region today understand that land stewardship is the key to their future. Increasingly, ranchers put into practice such innovations as rotational grazing, allowing pastures to rest and regenerate by excluding livestock for set periods of time. More stock tanks are in place, letting cattle water more frequently and reducing the wide swaths of devegetation that surrounded the water sources in the past. Another notable change is ranchers' increasing use of solar-powered water pumps in place of windmills.

Las Animas County rancher Steve Wooten, owner of the Beatty Canyon Ranch founded by his great-grandfather in 1929, rotates his herds through a system of twenty-seven pastures. Wooten notes that fewer cows per acre actually allows for greater profitability, since the calves are both bigger and healthier by the time they're weaned. Like most other ranchers in the region, Wooten sells most of his cattle—largely Red Angus, with some Herefords—to middlemen, who resell it to larger markets. But he reserves some of his beef for local sale, noting that grass-fed beef has much higher levels of “good” (HDL) cholesterol than grain-fed, feedlot beef, which is higher in “bad” (LDL) cholesterol. Wooten inoculates his cattle, but eschews the steroids used by some ranchers to increase weight. In addition, Beatty Ranch cattle are given antibiotics only if circumstances necessitate it, and those cattle are separated from the others at market.

The cycle of the cattle ranch is one of birth and growth, culminating in the sale of steers and heifers at different times of the year. Cows are bred in the summer, and most calves are born beginning in late February. At about two months of age, in April, the calves are inoculated and branded, and the female calves' ears are tagged. As with past generations of ranchers, spring branding is a community event, with neighboring ranchers gathering to help one another. Calves are kept with their mothers until they are weaned in the fall. After weaning and further grazing, ranchers negotiate their sale via satellite internet, with about 20 percent of the heifers reserved for future breeding purposes or to be sold in the spring.

Today, cattle ranchers' lives are very different from their predecessors'. The days of the bedroll by the chuck wagon are largely gone, and yet the cattle receive much more hands-on management than did cattle of a half-century ago. Encroachment by homesteaders is no longer an issue, but encroachment by development has become a concern for ranchers across the state, as ranches lose the equivalent acreage of Rocky Mountain National Park each year to housing subdivisions and “Ranchettes.” But for southeastern Colorado's cattle ranchers, their connections to the land remain constant, and they continue to find ways to improve their ability to raise cattle over the long term, on land that is uniquely suited to that purpose.

Cattle Resources

from the Purgatoire River Region

Resources related to cattle ranching are found throughout the project area, associated with the 20th century cattle ranches as well as earlier open range operations. Historically, a cowboy's essential equipment was a good horse and a lariat rope. Today, many ranchers still rely on horses to manage their cattle though vehicles are also used. The following resources are also a vital part of ranching operations.

Corrals

Enclosures for confining cattle or horses, corrals are an essential part of any livestock operation. Corrals are located anywhere livestock needs to be gathered or managed including homestead complexes, ranch headquarters, pastures, and adjacent to railroad shipping points.

A variety of corral construction methods are found in the region. With limited access milled lumber, most corrals utilized unfinished juniper or pinon logs.



5LA.11715 A simple circular corral of stacked brush



5LA.11582-4 A corral constructed of closely placed unfinished logs sunk vertically into the ground and held in place with wire tying them to a horizontal log



5LA.11836 A corral composed of horizontally placed logs slid between paired upright posts

Many ranchers have continued to use corrals located on abandoned homesteads such as the corrals on the Padilla homestead which are used by the Wooten family.

Larger corrals may include multiple pens and structures to assist with working cattle including branding chutes, scales, and loading ramps.



5LA.11741 Corrals on the Padilla Homestead



5LA.11836 Branding chute



5LA.11582-4. Scale and scale house



5LA.11897 Loading ramp

Loafing Sheds and Barns

Loafing sheds, three-sided structures generally covered by a shed roof, were found on the majority of homesteads in the region. Loafing sheds are attached to a corral or pen, allowing cattle or horses to wander in and out of shelter. Loafing sheds are generally placed to open away from prevailing winds. In the western U.S., loafing sheds are generally the only shelter provided for cattle, with barns considered unnecessary. In the Purgatoire River Region, the natural environment also provides shelter, with canyons providing cattle with protected areas to wait out bad weather.

Since they didn't need to hold cattle, barns in the region are generally small, often simply a room to store tack and other supplies located adjacent to the loafing shed. A slightly larger barn might also include a couple stalls for horses or a dairy cow.

Line Camps

Largely ranching operations like the JJ Ranch established outposts or line camps for cowboys working cattle in distant pastures. A line camp generally included a bunkhouse, corral, and a water source.

Windmills and Stock Tanks

The introduction of mass-produced, steel blade windmills in the 1870s enabled ranchers to water livestock without access to springs. The rotation of the windmill blades powered a pump system, bringing water up from a well sunk into an aquifer. Ranchers used a windmill to fill an adjacent galvanized steel, concrete, or stone stock tank.

Ranch Headquarters

Ranch headquarters are the center of operations for a ranch operation and include living quarters as well as livestock facilities. Ranch headquarters in the region include the remains of historic ranch operations like the Bloom Land and Cattle Company as well as modern ranch operations. Many of current operations originated during the homesteading period. They have been passed down through multiple generations, with land holdings gradually expanded to include many former homesteads. Some ranchers have located their headquarters within historic homestead complexes while others have chosen new locations for their headquarters, seeking a central and favorably situated site for new construction.



5OT.1096 Loafing shed



5LA.11897 Barn



5LA.11832 A spring located adjacent to the remains of a JJ Ranch line camp



5LA.11833 Windmill and remains of stock tank



5LA.11582 Barn at the Thatcher headquarters of the Bloom Land and Cattle Company



5LA.11872 A stone house dating to the 1910s is part of a modern ranch headquarters



Sheep



Although no longer as substantial a part of the agricultural economy as in the early days of settlement, sheep ranching is significant to the historic heritage of southeastern Colorado. Before cattle were introduced from Texas in the era of open range ranching, Hispanic farmers moving north along the Purgatoire brought with them the Churros descended of the sheep shipped to the New World by Spaniards in the 1500s. Although Merino sheep—which came later into the region with Anglo settlement—were also found in Spain around that time, they were the property of the aristocracy and considered too valuable for export. Churros, on the other hand, were known as the sheep of the common people and therefore safe to ship to settlements in New Spain.

It was this breed that came north into what is now the American Southwest during Spanish colonization; in 1598 Don Juan de Onate reportedly trailed around 2,900 sheep as part of initial Spanish settlement of the region. Puebloan peoples, originally forced to work as enslaved shepherds and weavers, incorporated sheep into their subsistence practices over time, and this adaptation spread to the Navajo, who lived on the edges of the Spanish settlement region. Both groups expanded their sheep holdings in the Pueblo Revolt of 1680-1692; the Navajo in particular developed wool and weaving into an economic mainstay. Today the Navajo still raise a related variety of sheep, the Navajo-Churro.

Although early attempts on the part of Mexican settlers to settle along the Rio Grande region were thwarted by the Ute and Navajo, political changes brought about by the acquisition of the territory by the United States in 1847 made successful settlement possible. As Hispanic farmers moved north into the San Luis Valley, sheep were integral to their subsistence strategy. In the Raton Basin and Purgatoire River region, settlement was slower, due to the presence of unfriendly Comanche and also due to the nature of the land, which was semi-arid High Plains desert.

In the early years of the Gold Rush, Anglo cattlemen trailed herds through the area to feed the hungry metals miners in the mountains, but the area surrounding the Purgatoire River would not be settled in earnest until the early 1860s. Settlements built most commonly in the plaza form, were the product of Hispanic migration into the area from parts of northern New

Mexico. These settlers, moving northeast along the Purgatoire, brought the Churro variety of sheep. Felipe de Baca, who first brought Hispanic settlers over the Raton Pass and into the Trinidad area from Mora County in 1862, settled on land that had, two years earlier, been used as sheep pasture by the New Mexican Juan Gutierrez. As Hispanic plaza settlements spread along the Purgatoire, and with markets for wool and mutton ready in the mountain mining regions and in the coal fields of the Raton Basin, sheep ranching became a lucrative endeavor. Anglo sheep ranchers like Thomas Boggs, Alexander Hicklin, and Albert Boone Jones established ranches in the Raton Basin as well and introduced Merino sheep to the area: the sheep industry in the area, however, remained dominated by Hispanics.

From the beginning of the area's settlement, sheep competed with cattle for range, although in general less violence characterized the sheep-cattle tensions in the Purgatoire region than in places like Wyoming, where range wars became legend. However, as homesteaders claimed lands that had been part of the public domain, competition increased for land. In the early 1880s, many Hispanic shepherders were killed or driven out of the state by Anglo cattlemen who saw sheep as agents of destruction on the land, and who saw Hispanic shepherders as somehow foreign, although at that time Hispanics established successful cattle operations and worked alongside Anglo cattlemen throughout the region. Cattle ranchers also attempted to limit sheep grazing by posting restrictions on public grazing lands. Sheep ranchers stood their ground, however, and in one example published a letter in the August 9, 1873 *Las Animas Leader*:

A meet of woolgrowers held at Walsenburg in the County of Huerfano on the 20th ultimo, protesting against any organization formed in the County of Pueblo [for the] purpose of a united effort on part of "Cattlemen" to limit the range of all persons who have sheep and to dictate the extent of woolgrowers' pasture.

Let these understand it is not the design of parties engaged in sheep raising to be aggressors ... but they ...are entitled to enjoy equally the advantages of pasturage on the public domain. If you have not already learned you are now made to understand that wool and mutton are a necessary as beef and broad brimmed hats and revolvers (Paul 1976, 48).

The sheep raisers' persistence, combined with steady markets and the compatibility of sheep with the native grasses on the range, kept sheep raising strong in the area. Sheep proved more likely to survive the extreme weather conditions than cattle, and the industry persisted even after the harsh winters of 1886 and 1887 that brought the end of open range cattle ranching.

The sheep industry was hampered by the depression of wool prices in the late 1880s and early 1890s, due first to an economic downturn and later to the 1894 lifting of wool tariffs. After the turn of the twentieth century, the sheep industry—although still viable—experienced a long lull in growth. Nationally, the number of sheep dropped from a high of 54 million head in 1884 to 37 million head in 1923. The industry bounced back, however, and an all-time high of 56 million head nationally was reached in 1942, in response to the United States military's demand for meat to feed the troops during World War II. Following the Second World War, however, a confluence of events led to the decline of the sheep industry and by 2007 the national sheep inventory was only 6.2 million. This loss has been attributed to many factors, among them shifting consumer trends and preferences, increased competition from foreign wool production, and changes in subsidy and incentive payment programs. Locally, many ranchers abandoned sheep because of difficulty finding herders.



5LA.11837 Sheep pens

Sheep Resources

from the Purgatoire River Region

Sheep pens

Many sheep men used no buildings for their flocks, instead relying on natural protected areas where sheep could be sheltered in storms or during lambing. Sheep men used large corrals to collect sheep at night or during lambing. They utilized the local sandstone along with natural rock outcrops and favorable topography in their construction. Pens were constructed of stacked sandstone, most often fieldstone, but sometimes more finished stone were used.

Lambing pens or sheds

Sheep herders commonly removed ewes and their lambs from the larger flock immediately after birth, placing them in a lambing pen or a lambing shed. Lambing pens were located adjacent to sheep pens, constructed of stone, and just large enough to hold a ewe and her lamb. For larger operations, lambing sheds were constructed. These were generally low buildings and cheaply constructed since they were only used seasonally. Sheep were kept in a fenced yard next to the shed, and after birth, the ewe and her lamb were moved to a pen in the shed.

Dipping vats

Dips were used kill fleas. After shearing, herders led sheep to long vats or tanks, compelling them to swim through the treatment solution.

Sheep camps

Unlike cattle that can be left to pasture alone, sheep need more constant attention. Thus, sheep herders stayed with their flocks as they led them to new pastures. Herders might return to the same camp year after year. Camp sites may include artifacts as well as rough sandstone shelters, fire pits, rock inscriptions, and sheep pens.



5LA.11837. Margarito Varros constructed several large stone sheep pens on his homestead where he raised around 700 sheep



5LA.11673. Sheep herders often took advantage of natural rock formations and canyons, adapting them into sheep pens with the additional of dry laid stone walls



5LA.11717. Lambing shed



5LA.11791. Dipping vat



5LA.11595. Crosses carved into a rock wall at a sheep camp



Farming



In 1823, explorer Stephen Long labeled the Great Plains “The Great American Desert.” For the next several decades, Americans believed that the absence of wood and water in the region was a barrier to settlement, viewing the lack of trees on the prairie as a sign of unfertile soils. But as lands further east were snapped up by eager homesteaders, people began to reconsider the farming potential of the High Plains. Americans kept moving west in search of places with fewer people, open land, and greater opportunities.

Although the idea that rain follows the plow may sound far-fetched, many people legitimately believed that settling the Great American Desert would cause more rain to fall. Josiah Gregg recorded his experiences traveling along the Santa Fe trail in the 1830s in *Commerce of the Prairies*:

The high plains seem too dry and lifeless to produce timber; yet might not the vicissitudes of nature operate a change likewise upon the seasons? Why may we not suppose that the genial influences of civilization—that extensive cultivation of the earth—might contribute to the multiplication of showers, as it certainly does of fountains? Or that the shady groves, as they advance upon the prairies, may have some effect upon the seasons? At least, many old settlers maintain that the drougats are becoming less oppressive in the West. The people of New Mexico also assure us that the rains have much increased of latter years, a phenomenon which the vulgar superstitiously attribute to the arrival of the Missouri traders. Then may we not hope that these sterile regions might yet be thus revived and fertilized, and their surface covered one day by flourishing settlements to the Rocky Mountains? (Gregg 1944:202-3)

The profile of the Purgatoire River region varied among accounts of Colorado published following the Homestead Act. Most descriptions of Colorado emphasized the territory’s Rocky Mountain spine, which provided mining opportunities and, later, became a tourist destination in its own right. The vast differences between mountain and plains regions were acknowledged, but more localized variations in landscape and climate received less attention, and southeastern Colorado was not often well

represented. In some cases, political boundaries dissolved altogether to make way for vast generalizations that reinforced romantic conceptions of the American frontier. The “New West”—an area encompassing all Rocky Mountain states and territories, as well as the western portions of North and South Dakota—is one example of an enormous region broadly categorized despite its diversity of natural landscapes.

Even in instances where southeastern Colorado earned attention in its own right in these accounts, the Purgatoire River region received little mention. The remote areas of the Purgatoire valley are located in the hinterlands of Las Animas and Otero counties—to the east of Trinidad and the Sangre de Cristo Mountains, and to the south of La Junta and the Arkansas River valley; subsequently, descriptions of these counties frequently devoted more space to describing the potential for mining near Trinidad and the easily irrigated farmlands along the Arkansas. It remains unclear how thoroughly Anglo settlers from the eastern or Midwestern United States understood the local conditions of the Purgatoire River region before they arrived to claim homesteads.

We cannot determine what brought each Anglo-American homesteader to the region from areas east or the precise reasons they chose one portion of the region over another—but many published accounts of Colorado’s landscape, climate, and settlement and investment opportunities reached far audiences in the United States, illustrating in hyperbolic language the splendor, productive land, and profits to be made in the “New West.” According to a pamphlet produced by the Territorial Board of Immigration in Colorado in 1872, for instance, the Platte and Arkansas rivers—along with their tributaries, which include the Purgatoire—provide valleys “which offer homes for thousands of immigrants as good as can be found in the west” (Colorado: a Statement of Facts 1872: 8) Ten years later, the book *Colorado as an Agricultural State* offered an equally promising prediction: “It is probable that as the country becomes more thickly populated, the great grazing ranges will become reduced in size, fenced farms will become more frequent, and the ‘Valley of the Spirits,’ as it is sometimes called, be gradually filled with thriving farms” (Pabor 1883, 119).

Numerous settlers’ guides were published in the late nineteenth and early twentieth centuries. They included descriptions of the land available for homesteading and their agricultural potential. The Pueblo land district (within which the Purgatoire River region is located) was described as follows:

Nearly all of the district lies on the great plains, the western portion being more hilly and partially mountainous. It includes the fertile valley of the Arkansas River and also a large area of lands that could be cultivated without irrigation, but which are unsettled and unused except by the stockmen. The Pueblo district has good railroad facilities and a large market for everything it can produce [...] The amount of vacant land in this district is simply enormous. Much of it is close to railroads and there is no apparent reason why it should not be desirable (Clason 1916: 26).

According to a guide published in 1916, there were 1,672,796 acres still available for homesteading with Las Animas and Otero Counties. The Purgatoire River region was described as “sparsely settled . . . composed of rolling prairie and high grass. Most of the drainage runs in canons or deep ravines. . . . There is still a good deal of land open for settlement that can be cultivated without irrigation” (Clason 1916, 165).

Colorado was also promoted for its healthful climate. According to a settlers guide from the 1910s:

Colorado has over 300 sun-shiny days each year. Those who lived in damp, foggy countries can appreciate the desirability of this. Unquestionably it is one of our greatest assets and combined with clear, bracing atmosphere, gives a vim and enthusiasm to our citizens that accounts for their physical and mental activities. It is rare indeed to find anyone with whom the climate of Colorado does not agree (Clason 1916, 12).

Dry Land Farming

With average annual precipitation between eleven and sixteen inches, it was impossible to practice the same type of agriculture in the Purgatoire River region as in the eastern or midwestern United States. There were two options for agricultural development: develop new crops and/or farming methods that were suited to the dry climate or develop irrigation systems to bring water to the farms.

The term dryland farming refers to crops grown in semi-arid regions without the aid of irrigation, typically by employing drought resistant crop varieties and methods to conserve moisture. The first task of the dry land farmer was to prepare the soil. Most the rainfall ran off the surface of the prairie rather than being absorbed. In order to get rain into the soil, dryland promoters recommended breaking the soil to a least a foot deep. The farmer should then cover it with earth mulch to keep the water from evaporating. Dry land farming required more land than farming in wetter climates since the land could not be farmed as intensively. For a 360 acre farm, the Agricultural Experiment Station recommended a combination of farming and livestock raising with 80 acres devoted to growing crops, 80 acres in summer fallow, and 160 acres in grass, which could be used for pasture (Cottrell 1910, 5).

Dry land farming, however, was not as easy as promoters led settlers to believe. The semi-arid climate and unpredictable weather of

eastern Colorado posed serious challenges. With such limited amounts of rain, just a difference of a few inches could determine the success or failure of a wheat crop. A Colorado extension bulletin described dryland farming as “a continual fight against relentless, unfavorable conditions.” The bulletin warned that even with the best seed varieties and recommended tillage methods, there would be years of reduced crops or complete failures and that dryland farmers needed to plan accordingly (Cottrell 1910, 4).

There were many farming failures in the early years. While drought was one cause, a major factor was the use of seeds and methods suited to a wetter climate. Additionally, many early settlers did not have the savings needed to carry them through the bad years. The Colorado Agricultural Experiment Station recommended that anyone unfamiliar with dryland farming “should not settle on the Plains unless he has sufficient capital to erect the buildings that are absolutely necessary, to buy the needed teams and implements, and after making these expenditures, have sufficient money left to pay for seed, feed and living expenses for two years” (Cottrell 1910, 4). The homesteaders arriving from New Mexico had an advantage over those from the eastern United States since they were already familiar with farming in drier conditions as well as with growing the winter wheat well-suited to this climate.

The testimonies of settlers recorded in homestead patent records paint a clear picture of the challenges of farming. Most had planted no more than fifty acres and reported frequent crop failures due to drought. Corn, beans, cane, milo, and wheat, were the most commonly grown crops but homesteaders tried to plant a wide variety of crops including rye, millet, potatoes, barley, broomcorn, oats, melons, pumpkins, peas, flax, and fruit trees. The testimony of Francisco Pequete from 1912 is typical: “I have cultivated each year since going there to live, beginning with about 3 acres and adding a little thereto each year, until at the present time I have about 40 acres under cultivation, planting corn principally, together with beans, melons, and other garden truck, but on account of the drought, I never have raised or harvested any kind of a crop; this year the prospects for a good crop are very fair. I have no more than 40 acres broken” (National Archives).

World War I placed renewed emphasis on dryland farming. The prices of agricultural goods increased with the demand for food for European markets, and grain production was considered patriotic. After World War I, agricultural price supports were removed and overseas demand declined as European nations rebuilt their agricultural economies. In order to sustain cash flow, Colorado farmers had to further expand acreage and cultivation. Most productive farm land was already under cultivation, so Colorado farmers pressed into more marginal lands; additionally, a majority of the farmers now relied on cash grain crops. With less pasture land, ranchers overgrazed cattle in the remaining areas. The number of tenant or “suitcase” farmers, who were often less concerned about soil conservation, also rose. If a wheat crop failed, these farmers could simply abandon barren fields to the wind.

In 1930, in spite of record harvests, Colorado farmers received less payment for their efforts than during the boom years of World War I. As prices continued to drop, they were unable to repay loans for their land, machinery, and seeds. Title buyers began swarming into eastern Colorado to buy land from farmers in default. Neighbors tried to keep bids at mortgage sales low to allow farmers to repurchase their properties. Farm prices and wages continued to drop to record lows in early 1933, and threats of violence and demands for government action increased. All aspects of rural community life were affected, as bankruptcies hurt rural banks and tax delinquencies affected all types of community services, including schools, roads, and other public works.

Irrigation

The development of agriculture in the region has been shaped by the availability of water. With an average annual rainfall of only twelve to fourteen inches a year, irrigation has been an essential part of farming. The corridor along the Arkansas River is characterized by fertile farm fields producing a variety of vegetables as well as melons. The success of farming depends on a series of canals and ditches that carry water from the Arkansas River to the fields. Many efforts have been made to recreate the success of farmers along to Arkansas in the southern part of the county by building reservoir and ditch systems. However, few of these attempts succeeded, largely because the Arkansas, tributaries, the Purgatoire River and Timpas Creek, have unreliable water flows with raging floods in wet years and no flow in dry ones.

rrigation in the region has ranged from simple hand dug ditches that directed flow from a river to the land along its banks to large reservoirs connected to miles of irrigation ditches. Simple ditches were built by landowners while more extensive systems were often constructed by investors who hoped to make money on the project by charging local farmers to connect to the system as well as collecting fees for water delivery. Early irrigation and farming took place mainly in river valleys and basins, such as those along the Purgatoire and Arkansas Rivers. Small scale irrigation attempts along the Purgatoire River through the Higbee Valley began as early as the 1860s. Water rights were officially granted in 1887.

Two early twentieth century irrigation projects illustrate the challenges of distributing water in the region.

The Apishapa Consolidated Irrigation Company

In the late 1910s, a group of eighty residents in the White Rock vicinity came together to form the Apishapa Consolidated Irrigation Company. Their goal was to construct a reservoir on the Apishapa River along with irrigation ditches to transport the stored water to their farms. In 1919, the company contracted with J.V. Stryker, a Denver firm, to build the new dam. In order to raise the money needed for construction, the eighty stockholders mortgaged their land to the Supreme Camp of American Woodmen.

The dam was designed to hold 20,000 acre feet of water and was located about twenty-five miles south Fowler. The dam was constructed across the Apishapa River between canyon walls. The dam consisted of a 14' foundation topped by a 36' dirt embankment. The dam stretched 600' across the canyon; it was 500' thick at the base, tapering to 75' at the top. A tall concrete tower was located on the west bank beneath which a release tunnel extended through the sandstone canyon wall and out on the downstream side of the dam, allowing water to be released from the dam into the irrigation ditch system. The tunnel was 12' by 10' and 700' long. When completed, the stockholders held a dance in the tunnel to celebrate.

The dam was completed in 1921. In 1922, all went as planned with irrigated water turning formerly unproductive land into green farm fields. Farmers harvested wheat, corn, and alfalfa and planned to put more land under production the following year. In July 1923, however, disaster struck after hard rains to the west caused the Apishapa River to flood. Water was backed up for seven miles upstream of the dam. The dam started to show signs of weakening and local residents tried to patch it. But on August 23th, a crack in the dam blew open and the dam collapsed. A wall of water was released and caused severe damage for miles downstream including washing out part of the AT&SF tracks and Highway 50.

There was talk of rebuilding the dam, but no funds for reconstruction since the dam company first had to repay all those whose property was damaged following the dam failure. Unable to farm, local residents were also unable to pay their mortgages, and the American Woodmen foreclosed on 9,925 acres. This was the last time that farming was attempted in the vicinity. Large ranches replaced small farms, and the Woodmen leased their newly acquired land for stock grazing.



5LA.11666 Remains of the Apishapa Dam

Timpas Creek Reservoir Ditch and Land Company

Another irrigation project was built in the Timpas area, using water from Timpas Creek. The community of Timpas developed at end of first decade of the twentieth century, with the town plat filed in 1908. By 1914, the county directory listed forty residents in the Timpas area, as well as a telephone operator, the agent and section foreman for the Santa Fe, a postmaster, a general store, and a lumber yard (Keck 1999, 228).

In the early twentieth century Hannibal Brannon, who had come to Otero County in the 1870s, established the Timpas Creek Reservoir Ditch and Land Company, seeking to bring the success of irrigated farming along the Arkansas River to lands further south. Brannon planned to irrigate 10,000 acres in the vicinity of the new town of Timpas. Between 1908 and 1911, two reservoirs, eight miles of supply ditch, and twenty two miles of laterals were constructed to store flood water from Timpas Creek. The first reservoir was located roughly fifteen miles west of Timpas and the second was three miles north of the first. Water delivery began soon after. However, local farmers quickly realized that the creek's water flow was not reliable enough for farming. Brannon sold the project to Timp-Otero Farms, a Denver company. They built a diversion dam across Timpas Creek to force more water into the reservoir and irrigation continued. By 1920, the population of Timpas had reached 300. Businesses included two hotels, two garages, a filing station, a bank, a school, a church, a café and a pool hall. In 1921, flood waters washed out the dam. The first reservoir was abandoned, but the second reservoir continued to collect and hold water until 1936 when it also washed out. The system was then abandoned. As irrigation failed, many homesteaders left the region. As the surrounding area was depopulated, businesses in Timpas closed and by the mid-1930s the town had only forty-five residents (Keck 1999, 229; 249-250).



50T.1120 Part of the Timpas Creek diversion structure

Farming-related Resources

from the Purgatoire River Region

Dams, diversion structures, and irrigation ditches

Dams: Dams are constructed across a waterway to control the flow or raise the water level. There are two primary types of dams within the region: reservoirs which are designed to store water at times of high flow so that it will be available when needed and diversion dams which divert all or part of a river's flow from its natural course. Dams within the region have been constructed of earth, concrete, and stone.

50T.1101 The Nine Mile Dam is a diversion dam, raising the level of water and directing it into the Nine Mile Canal. Residents of Higbee Valley have been using the Purgatoire River for irrigation since the 1860s, with water rights for an irrigation canal filled in 1887. The first dam was constructed in 1923. It was replaced with the current dam in 1956 after a flood washed out the first dam.



Diversion structures

Diversion structures are located at the connection between a river and a ditch system. The primary diversion structures are diversion dams and headgates. Diversion dams direct and regulate the flow of water into the headgate. The headgate is located at the mouth of the ditch and controls water flow into the ditch. Headgates also block debris from entering the ditch and can shut off the ditch when ditch users do not have a right to the water.

50T.1120 This headgate once controlled the flow of water from Timpas Creek into an irrigation ditch.



Irrigation ditches

Ditches transport water from a river to where it is needed. Within the survey area, ditches have generally relied on gravity flow. Ditches typically drop one to five feet per mile. They were constructed by breaking the sod and then excavating with horse drawn fresnos. Laterals carry water from the main ditch to farm fields. Ditch riders were employed to tend ditches and laterals, making sure that the headgate and lateral gates were opened and closed at the appropriate times and checking for leaks or debris in the system.



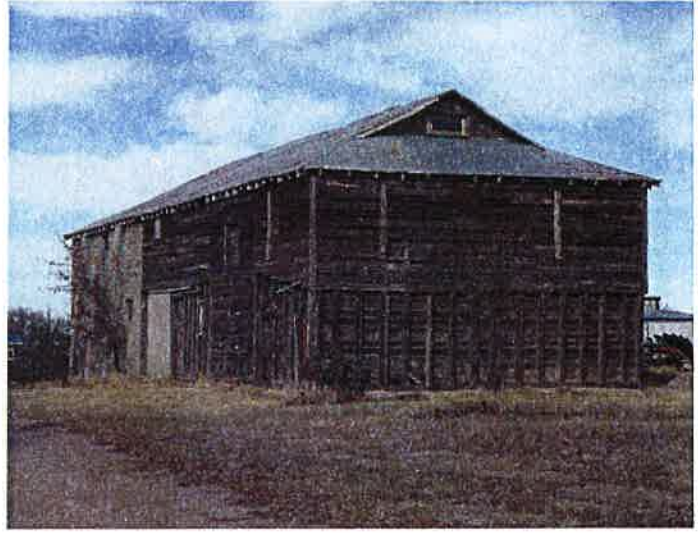
50T.1101 The ditch rider's house for the Nine Mile irrigation system is located on a bluff overlooking the dam.



5LA.11865 The town of Model was platted in 1912 by the Model Land Irrigation Company, a group of businessmen from Trinidad. The town was to serve as an example—a "model"—of irrigated town development. Irrigation attempts were ultimately unsuccessful, but the Model ditch remains as a reminder of these efforts.

Agricultural storage facilities

The farming history of the region is evident in a variety of crop storage facilities. These range from granaries on homesteads, used to store threshed grain or animal feed, to commercial crop storage operations.



5LA.11921 Church Bean and Grain in the town of Kim is a reminder of the role of the small town in crop marketing. Pinto beans were an important cash crop in the region during the 1910s and 20s, with farmers able to earn four to four and a half cents per pound pretty reliably. Wheat-growing on the eastern Plains took off in the early twentieth century with the entry of homesteaders from neighboring states who were accustomed to farming wheat. Other grains like rye, spelt, sorghum, and millet were also popular by the early 1900s.



5LA.11902 Agricultural storage facilities were often constructed adjacent to railroad tracks for easy shipping. This alfalfa processing and storage building is located in Hoehne. Alfalfa was a popular forage crop for cattle. It could be harvested for hay, made into silage, or grazed.



JHF.2341 Large farm granaries like this one are rare within the region. It was built in the 1940s by a farmer who came to the region from North Dakota, where such granaries are more common. The granary has six bins which would hold 1200 to 1600 bushels. Some of the grain was sold while the rest was used as feed for hogs.

ONE STOP

Commerce and Community



Although isolated on their individual homesteads, settlers on the plains of southeastern Colorado did not live in a vacuum. They traveled to nearby communities to purchase goods and services and to sell their crops and livestock. Dozens of communities have developed within the Purgatoire River region, spurred by population booms caused by railroad promotion, optimistic weather predictions, and agricultural speculation. Land developers and entrepreneurs were often drawn to newly settled regions in search of underserved markets. However, following shifts in transportation methods, severe weather patterns, failures of dry farming, economic depressions, and the consolidation of many small homesteads into larger ranch operations, today only three active communities remain within the project area: Branson, Hoehne, and Kim.

Trading

Prior to Mexican Independence in 1821, the government of New Spain prohibited trading with the French and Americans across its northern border, believing that such trade would deplete Spain's economic might. Nevertheless, nomadic Native Americans in what is now southeastern Colorado traded with residents of New Spain's northern frontier. Trade relations between New Mexicans, Puebloan people, and the Apache flourished in the eighteenth century, with textiles, corn, hides, and meat common items of commerce. As the Comanche moved into the area from the north and pushed the Apache south, trade became more challenging, but New Mexican traders—called *comancheros*—ventured to trade with the group by bartering guns, ironware, and other items for horses, hides, and buffalo meat. Although reviled by later settlers for selling guns, knives, and other items used as weaponry to the frequently hostile Comanche, the *comancheros* were continuing a tradition of trade with the group that had begun in the eighteenth century.

But aside from trade between New Mexicans, Plains tribes, and traders who subverted Spanish law, commerce across the northern border of New Mexico did not begin until the fledgling government of Mexico opened the border to commercial travel. With the resultant opening of the Santa Fe Trail, commerce in the area became more widespread. At Bent's Fort, Fort Lyons, and other trading posts and military forts along the Santa Fe Trail, fur trappers and traders, Native Americans, freighters, and others sold goods or purchased the extras they and their families needed to get by. In addition, traders and freighters carried American-made goods along the Mountain Branch of the Santa Fe Trail to the trading centers of Taos and Santa Fe. Many products went even further to other trading centers in Mexico's interior provinces, and Mexican-made products were likewise exported to markets along the trail in the United States.

Trade in the region additionally provided an opportunity for people to interact socially. These interactions often resulted in cross-cultural familial connections. Non-native traders and trappers sometimes married Native American women, and their marriages offered some measure of stability to ongoing relations between native and non-native groups. Notably, such key figures in the early settlement of the region as William Bent, John Prowers, Kit Carson, and Richens "Uncle Dick" Wootton had Native American wives. Anglo-American traders also married New Mexican Hispanic women, in some cases making important inroads into New Mexican society; Charles Bent, Thomas Boggs, and Kit Carson all married women from the Jaramillo family, a well known and politically connected trading family in Taos.

Communities

After 1860, increased travel, both along the Mountain Branch of the Santa Fe Trail and in the travel corridor along the Front Range, gave rise to new towns that became commercial centers for the region. Trinidad, founded by New Mexican merchant and farmer Felipe Baca, quickly became an important supply town along the Santa Fe Trail. Uncle Dick Wootton's toll road over Raton Pass, built in 1865, was something of a boon to the town, ensuring that the stage routes—and later the Atchison, Topeka, and Santa Fe Railroad, which bought the rights to build along Wootton's toll road—went through Trinidad. Trinidad, the largest town in the area and well situated at the intersection of the stage lines from Denver to Santa Fe and from Las Animas or La Junta to Santa Fe, served as the regional commercial center for nearby agriculture and coal mining. As mining became more and more important to the economy of the region, another plaza town to the north in Huerfano County, La Plaza de los Leones, was renamed Walsenburg and became another important supply center. To the northeast, La Junta and Las Animas grew in response to railroads extending their lines into the area after 1873. These towns had a reciprocal relationship with transit corridors: they developed because well-traveled roads and rail lines made it relatively easier for outlying settlers to access them, and the stage and later railway companies recognized that money could be made by fostering their growth. Likewise, it made sense to run stage roads and rail lines through established communities, where infrastructure was already in place to serve travelers. In 1878, the Atchison, Topeka and Santa Fe Railroad moved its Colorado headquarters to La Junta, building a large depot, roundhouses, and repair shops there. In addition, the AT&SF opened a Harvey House restaurant in La Junta, offering travelers a good meal in clean surroundings. The AT&SF also fostered commerce in the wider region by providing shipping points for farm produce and livestock.

But for many settlers and homesteaders, larger towns like La Junta, Trinidad, and Walsenburg were quite distant to supply the needs of everyday life. Although settlers in the area grew much of their own food and relied on homemade household goods and clothing, most still needed to make trips into town for items such as ammunition, sugar, and flour that they could not (at least efficiently) make themselves. General stores and post offices were found at smaller railroad stations like Delhi, Model, and Thatcher. Higbee, a village that served the farm community in and around Nine Mile Bottom in what is now Otero County was founded around 1865. The surrounding farming community was comprised of residents of Hispanic plaza settlements, such as Juan Cordova's Plaza and the Damacio Lopez Plaza, and Anglo-American farmers and ranchers, like William Richards and the Jones Brothers at the JJ Ranch. As with many small settlements, commercial establishments came in tandem with a post office, which would draw in surrounding residents and was often an informal community meeting place. In 1874, Higbee was noted to have a dry goods and grocery store, as well as a saloon.

Communities could be very transitory. One way to track their rise and fall is through post office records. The following shows the dates when some of the post offices within the region were established and discontinued. While some post offices operated for decades, others were only around for a few years. Many rural post offices were operated by homesteaders, so if a homesteader left the area, the post office often closed.

Location	Year Established	Year Discontinued
Apishipa	1867	1911
Bent Canyon	1872	1902
Higbee	1872	1925
Dodsonville	1873	1876
Glenham	1873	1874
San Jose	1873	1878
Barela	1874	1931
Pulaski	1874	1886
San Antonia	1875	1876
Linwood	1876	1886
Grinnell	1878	1883
Alfalfa	1881	1923
San Isidro	1882	1902
Thatcher	1883	1973
Downing	1886	1896

Location	Year Established	Year Discontinued
Indianapolis	1887	1889
Troy	1887	1942
Watervale	1888	1921
Timpas	1891	1970
Angora	1891	1894
Earl	1895	1923
Brazil	1895	1911
Omer	1900	1909
Beshoar Junction	1901	1903
Duncan	1901	1916
Maldonado	1901	1905
Yeiser	1904	1929
Farr	1907	1946
Tioga	1907	1954
Delhi	1908	1975

Location	Year Established	Year Discontinued
White Rock	1909	1927
Tobe	1910	1960
Augusta	1911	1928
Ayer	1911	1914
Rene	1912	1921
Benton	1913	1938
Bloom	1913	1938
Atwell	1915	1920
Tyrone	1916	1968
Gotera	1916	1922
Alcreek	1916	1935

Location	Year Established	Year Discontinued
Laub	1916	1923
Yachita	1916	1918
Edwest	1916	1919
Dalrose	1916	1943
Mindeman	1917	1935
Villegreen	1917	1985
Patches	1917	1928
Plum Valley	1917	1935
Simpson	1919	1934
Stage Canyon	1919	1920
Lone Oak	1922	1928

One of the region's largest boomtowns was the community of Indianapolis, named for the birthplace of several of its founding residents. In the 1880s the region experienced several years of heavy rainfall, which drew a new influx of homesteaders optimistic about the region's farming potential. In 1887, the community was reported to include seventy-five buildings, including a post office, a bank, a school, a saloon, a livery stable, a hotel, and five general stores. Just three years later, struggling with a lack of water and bypassed by the Denver, Texas & Fort Worth Railroad, residents abandoned the town. The buildings were moved or sold for scrap; nothing remains of the town today (Sneed 2000, 45-46).

A second community boom, sparked by the Enlarged Homestead Acts of 1909 and Stock Raising Act of 1916 (along with the increasing unavailability of more favorable land elsewhere in the United States) occurred during the 1910s and early 1920s. Like the first town boom, a few years of above-average rainfall created a heightened level of optimism about the land's productivity. One of the boom communities was Kim.

The Story of Kim, CO

Kim, originally called "Kim City," was founded about 1917 on land homesteaded by 24-year-old Olin Dexter "Deck" Simpson and his wife, Bessie, 20. The Simpsons, who hailed from Cordell, Oklahoma, arrived in Kim Country in 1915 in a covered wagon, accompanied in a second wagon by Bessie's sister and brother-in-law, Dave and Jessie Mae Creswell. Both couples had 9-month-old infants. The Simpsons and Creswells filed on adjacent 320 acre parcels of land, and immediately set about farming and raising livestock.

Deck and Bessie Simpson and their baby boy, Cecil, lived for the first few years in a dugout, the front portion of which was framed out and functioned as a general store and post office. Deck carried groceries and farm equipment, and when he heard there were dairy farmers moving into the area, he ordered a shipment of cream separators. To set up a post office in their store, the Simpsons had to choose a name for the settlement. Bessie first chose "Dexter," in honor of her husband, but they discovered that name was already taken by a post office near Granby. Undaunted, Bessie proposed naming the town for the Rudyard Kipling novel, Kim, which she had recently finished reading and had very much enjoyed. The local residents thought it a fine name and voted it in. It wasn't long before a handful of businesses lined the original Main Street.

But the original Main Street did not last long. Kim City sat in its original location for only a couple of years. In 1920, a group of investors from Springfield, in Baca County, decided to plat a new town. They were led by Samuel Konkel, who owned a small Springfield newspaper called the Dry Land Record. Konkel knew that many of the dry land farmers in the Kim City area would soon be required to pay for public notices when they proved up their land. Konkel wanted the Dry Land Record to be the paper they chose. He and his eight co-investors formed the Kim Townsite and Development Company. They acquired a quarter section immediately adjacent to Kim City from Deck Simpson and, dropping the "City," called the new town simply Kim. The merchants of Kim City readily moved their businesses a few blocks south to Kim.

The Kim Townsite and Development Company was a good example of the spirit of entrepreneurship that infused small plains towns after World War I. The company platted 24 blocks with 12 to 18 lots each, lots selling for about 45 dollars apiece, although sometimes the company commanded more depending on size and location. Many people, like Sam and Otis Dickey, who opened Dickey General Merchandise, bought adjacent lots to build larger buildings or residences. It wasn't long before Main Street in Kim was an active collection of small businesses, with two auto garages, two general mercantiles, a cafe, and even a soda fountain/tire shop, which later became a soda fountain/barber shop and pool hall. By 1930, the census district or Kim had over 1,000 people. However, the influx of people led to something of a housing shortage. This was solved when

a local contractor imported a number of already built houses from a mining district near Trinidad. The houses were transported in pieces and reassembled at Kim. The houses were small, but they were well built and the price was right.

While other residents of Kim had relatives occasionally come from out of town to visit, one Kim family's relatives brought the circus along. Clyde C. "Cap" and May Church owned a mercantile on Main Street and also operated the bean and grain storage building on State Street. Cap and May had married in Texas while they were performers with the Norton Brothers Circus, which was run by May's family. The circus parade was noted to be longer than the town and almost ran into itself as it returned to the circus grounds. Other community events included 1920s visits from a Chautauqua, which put on a play with local children. In summertime, the county extension agent showed movies on a screen hung on the side of the newspaper office building. Later, after the school buildings were built in the 1930s, the school became the ad hoc community center and the venue for dances and movies.

The optimism and good dry land farming years of the teens and twenties was to give way to the drought and dust storms of the "Dirty Thirties." By 1940 the population of Kim was half what it had been in 1930. But those who were left hung on tenaciously. Vic Waters, who in the 1940s took over editorship of the Kim-Country Record (formerly the Dry Land Record) led the town in its crusade to acquire telephone service and to have a paved road from Kim to Trinidad. His efforts came to fruition largely because he was unafraid to rattle his editorial saber; in the late 1940s, Waters brought Kim's importance to the county into focus with his crusade to sever Kim and its surroundings from Las Animas County and attach to Otero County. Although Las Animas County stayed unified, the effort resulted in better service and a straighter and paved route along Highway 160. A lifelong Republican in a town that was at the time mostly Democrats, Vic Waters made his views known in his pithy and incisive column, "VICTHINX." Waters was called "The Prairie Gutenberg" for his use of a handset press, often setting the type with the help of Kim's high school students. Waters edited the Kim Country Record until his death in 1960 at age 84.

Today, Kim is a hamlet of the kind that is both typical and vital to farming and ranching communities throughout the American West. Its history speaks of everyday western life, and people whose fortunes rise and fall with the land, which is the bedrock of their home.

Although few businesses remain today in Kim, the residents of southeastern Colorado still rely on commercial enterprises much like the ones that once served their towns. Better roads and faster, more reliable trucks and cars make the larger towns like La Junta and Trinidad much more accessible than even fifty years ago. The businesses in these towns serve a wider geographic range and have larger customer bases, but like the smaller establishments Kim, and even like the trading posts, forts, and stage stops of a century and a half before, they rely on the trade of the travelers, farmers, ranchers, and their families to thrive.

Commerce and Community Resources

from the Purgatoire River Region

Communities

The term "community" encompasses a range of settlement types. Some were small towns with a collection of residential, civic, and commercial buildings. More often a community was simply a group of small buildings that might include a store, school, and post office serving the surrounding agricultural region. And many were simply dispersed collections of homesteaders centered on rural post offices, and possibly a school. Though rural communities might be spread across several square miles, they still provided a strong sense of place. Rural residents strongly identified with their local communities: they relied on fellow community members to combat the isolation of living on widely dispersed homesteads and to assist with the harvest and other farming and ranching activities. The sense of community can continue long after the general store closes or the school is shut down.



The community of Hoehne takes its name from William Hoehne, a German immigrant who arrived in the area in the 1860s. The town was platted by the Hoehne City and Town Development Company in 1887. The Hoehne post office operated from 1886 to 2011.

Post Office

In rural regions, the post office is often not a free-standing building, but instead combined with a general store or other commercial operation. The postal service also contracted with settlers to run post offices on their homesteads. Since people traveled to these homesteads to collect their mail, they often became the focal point of a dispersed rural community.

5LA.11844 Located on the homestead of John R. Comer, the Lone Oak Post Office operated from 1922 to 1928. Comer arrived on the homestead with his wife and daughter in the mid-1910s and received his homestead patent in 1920. The Colorado State Business Directory for 1925 lists Lone Oak as "A new post office in Las Animas County, 75 miles southeast of Trinidad the county seat. Branson is the nearest railroad and banking point. Farming and stock raising are the principal industries." John R. Comer is listed as a stone mason and his wife, Maude, is listed as the postmaster. There was also a notary, live stock dealer, taxidermist, and dairy listed. By 1930, Lone Oak had disappeared from the directory.

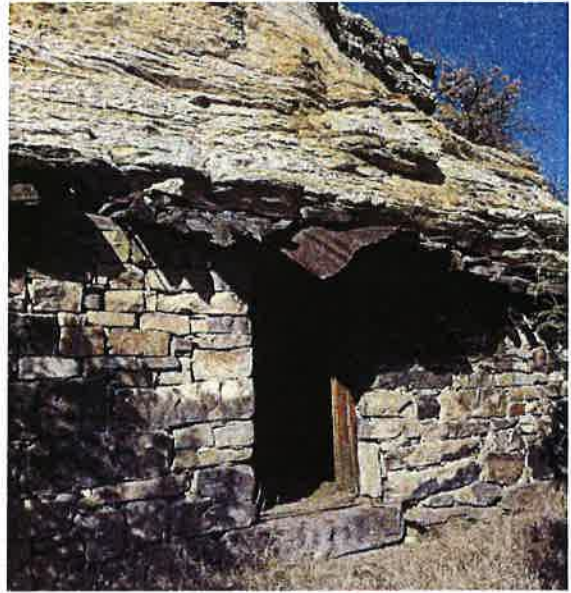
Commercial buildings

The most common commercial type was the general store, but a wide range of commercial enterprises were once located within the region. The commercial district of Kim in 1933 provides a good snapshot of the types of businesses typically found in communities. It included three general stores, two cafes, two garages, two filling stations, a printer, a machine shop, a barber, a pool hall, a grocery store, a laundry, a lumber yard, a bank, a cobbler, tourist cabins, a drug store, a hotel, and a beanery.

5LA.11923 The Dickey General Store was established in 1920, during the early years of Kim, by Samuel Dickey and his son, Otis Dickey, on the southwest corner of Cascade Ave and Main Street. The Dickey General Store provided goods and supplies, often on credit, to arriving settlers. In 1946, the Dickey's completed the construction of a new building at the current location on the southwest corner of Main Street at Cascade Ave.

Jail

Small, two-cell jails were surveyed in Kim and Branson. Neither appears to have been used often and were likely constructed primarily as a deterrent to keep those gambling and drinking at the local pool halls in line.



5LA.11940 The Branson jail was constructed in 1923, as the town, incorporated on March 26, 1921, was booming. The jail has two cells, each about 10 ½ feet in width, 12 ½ feet in length.



Religion



Then as now, religion served an important role in the daily lives of many people in southeastern Colorado. Besides offering, in the minds of many, a path to eternal life or a virtuous existence, religious institutions provided community cohesiveness and a social safety net during the days of early settlement.

The dominant religion among the earliest non-native inhabitants of the region was Franciscan Catholicism. Its importance in the daily lives of the early settlers in the northern fringes of New Spain cannot be understated. It informed foodways, art, rituals, familial and social relationships—religion affected nearly every aspect of daily life in some way. Even the earliest Spanish explorers traveled with a priest, whose function may have been to remind them of the supposed divine purpose of their mission. He also served another function: to provide last rites to those in a party who fell victim to any one of the many dangers inherent in exploration. In 1719 the Valverde Expedition gave the Purgatoire River its name *El Rio de Las Animas Perdidas en Purgatorio*—“The River of Souls Lost in Purgatory”—when members of the expedition died in its vicinity without benefit of last rites, as their priest had also been killed.

Catholicism in the Purgatoire River valley spread from New Mexico with early settlement, and as in New Mexico settlers were relatively isolated from the services provided by the Catholic Church. Priests and missionaries were few and served wide geographic areas. Churches were among the first buildings in most settlements, but not until settlement intensified in the middle of the nineteenth century did churches become common in the Purgatoire region. Prior to this, Hispanic homesteads and settlements often featured a *capilla*, a separate building that served as a chapel during visits from the priest. On very small settlements, this building served several purposes, sometimes used as a guest house or temporary storage room. Isolation from the centers of church activity led to one particularly notable adaptive strategy: the Penitente Brotherhood. The Penitentes, little understood outside their own culture, gained notoriety among the established Catholic Church hierarchy and also among Anglo-American settlers, who brought Protestant churches and missionaries after the 1860s.

The Penitentes

La Fraternidad Piasoda de Nuestro Padre Jesus Nazareno (the Pious Brotherhood of Our Father Jesus of Nazareth), also known as the Penitentes, is a lay religious sect of the Catholic Church. Focused primarily in northern New Mexico and southern Colorado, but with chapters identified as far away as California, the Penitentes still exist and function as an organization within the Catholic Church. Historically, the sect emerged in northern New Mexico as early as the late eighteenth century, and as Hispanic migration north into southern Colorado increased in the nineteenth century, chapters of the Penitentes were established with new settlement.

The history of the Penitentes is linked to the political and religious isolation of the area during the time of their initial formation (possibly around 1790 or 1800, although exact dates are unknown). Largely ignored by the government of New Spain and later Mexico, the almost exclusively Catholic area had few religious leaders. Settlers in the area were largely associated with the Franciscan order, which at that time practiced corporal penance—that is, atonement for sins through private physical punishment. Although New Mexico (which at that time included what is now southern Colorado) was under the jurisdiction of the Diocese of Durango beginning in 1729, oversight was perfunctory at best until 1797; that year, the Church “secularized” the centers of power in the region, installing more priests and somewhat diminishing the role of the missionaries. Even after that time, resources were thin indeed: an 1812 assessment determined that only twenty-two Franciscan missionaries and two priests served 102 Spanish settlements and twenty-six Pueblos. In the absence of church leadership, the brotherhood of the Penitentes arose as a religious variant among settlers in need of spiritual sustenance as they faced the daily hardships that were part of their way of life on the northern New Mexican frontier.

Local chapters of the Penitentes are called “Moradas,” as are the buildings that house their activities. The tenets of the Penitentes’ faith are sincere devotion and a commitment to Christian charity and good works. They expressed their devotion during Lent and Holy Week through physical punishment related to Christ’s suffering; their acts included self-flagellation and re-enactments of the Crucifixion, rituals formed within Spanish Roman Catholic tradition in medieval times. However, as the Catholic Church in New Mexico shifted beginning in 1797 away from Franciscan dominance and toward secular priests, these rituals seemed extreme. An 1833 visit from Bishop Zubiriá of Durango resulted in an official admonishment by the church, based on the Bishop’s objection to what he felt were “excesses of most indiscreet corporal penences” (Pulido 2000).

Existing outside of the hierarchical structure of the Roman Catholic Church, the Penitente moradas nevertheless became integral to the social fabric of Hispanic settlements in the region, providing stability and spiritual focus as Hispanics adjusted to the massive political and social changes—including separation of church and state—associated with the Territorial period after 1846. As a result, the Penitentes were closely identified with Hispanic culture in the area, both by new non-Hispanic settlers and by the now non-Franciscan and mostly French church leaders, including Bishop Jean Baptiste Lamy of the Diocese of Santa Fe. In 1856 Lamy issued rules for the Penitentes, including their subjection to priestly oversight. He also forced the Brotherhood to change its name from the original La Santa Hermandad de la Sangre de Nuestro Senor Juscristo (Holy Brotherhood of the Blood of Our Lord Jesus Christ) to La Coradia de Nuestro Padre Jesus Nazareno (the Brotherhood of Our Father Jesus of Nazareth), which did not mention blood. The Penitentes had a champion, however, in Padre Antonio Martinez of Taos, who saw anti-Penitente sentiment as a component of the growing push to assimilate Hispanic culture into Anglo-American culture.

In 1875, Jesuit Missionaries encountered Penitentes in the area of Trinidad (as well as in Pueblo and Conejos around that time) and noted the group’s apparent Franciscan origins. The Sisters of Charity in Trinidad also noted this, in particular the Brotherhood’s incorporation of the Way of the Cross into their ritual. But the Jesuits denounced the sect in an 1877, decriing what they saw as the Penitentes’ corruption of Franciscan intent. Further condemnation came from sources outside Hispanic and religious culture that portrayed the Penitentes as bloodthirsty in their devotion: in 1888 journalist and travel writer Charles F. Lummis wrote an exaggerated account of a Penitente Crucifixion re-enactment, falsely claiming nails were used to bind the Cristo to the cross. Presbyterian missionary Alex M. Darley’s 1893 account was more sympathetic, but he also sensationalized the blood-letting of the Holy Week ritual, part of which required a “seal” of three gashes in the skin of the small of the back with sharp flint or glass. These were expertly administered by a Picador, who took care not to cut into the penitent’s back muscles.

Early Penitente moradas operated in less isolation from one another than might be assumed, as practices and organizational structures were similar across chapters; brothers made short and long treks on foot to visit other moradas. Similarities in morada architecture also testify to communication across communities; generally, the buildings consisted of two rooms: one was a chapel, and the other served as a site for meetings and a staging area for rituals. Originally, moradas were often a central building in a Hispanic settlement and were often proximate to the village church. Later, after Lummis’s and other sensationalized accounts of Penitente activities were published, opposition to Penitentes grew. As a result, subsequent moradas were constructed in more secluded locations.

As settlement in the region increased after the Homestead Act and the end of the Civil War, the Catholic Church paid more attention to the southeastern part of Colorado Territory. The Sisters of Charity of Cincinnati came to Trinidad in 1870 and founded a convent, school, and hospital, including the first Catholic nursing school west of the Mississippi. Jesuit priests formed a base in Pueblo around 1872, and their influence spread east along the Arkansas. As Anglo-American settlement increased in the region, other denominations

within the Christian faith appeared as well. Several Protestant denominations—such as Episcopalians, Baptists, Methodists, and Presbyterians—sent missionaries into the Catholic-dominated region in an attempt to evangelize and/or convert Native Americans (and in some cases, members of the Penitentes, whose beliefs and practices they understood poorly and tended to view as “dark fanaticism”). Early Protestant services were held in ad hoc gathering places: Bishop George Randall of the Episcopal Church conducted the first Episcopal service in the region at Skelly’s Dance Hall in Trinidad in the late 1860s. Larger Protestant churches and a synagogue were built in Trinidad in the 1870s and 1880s to serve settlers in the area and after the Atchison, Topeka and Santa Fe Railroad came through La Junta in 1878, churches were founded there as well. But the smaller churches that served the outlying communities in southeastern Las Animas County would, for the most part, not come until a later wave of settlement following the Expanded Homestead Act of 1909.

For smaller rural communities there were often not enough people to support the construction and maintenance of a church. Instead, local residents often held Sunday gatherings in the local school, in private homes, or other makeshift facilities. Isolated communities were served by circuit preachers and when preachers were not available, local residents would organize their own Sunday Schools. Even in towns like Kim, church construction was not immediate. Although Kim was platted in 1920, it was not until December of 1925 that the Kim Townsite and Development Company designated land for a Catholic Church at the north end of town, deeding the lot to Bishop Henry Tihen of Denver. Until then, Kim’s Catholics used the tarpaper schoolhouse as a Sunday meeting place, while Protestants held church in the older school building, which was a half-dugout.

Religious Resources

from the Purgatoire River Region

Moradas

A resource type most commonly associated with New Mexico and Colorado’s San Luis Valley, moradas are also found throughout the Purgatoire River region wherever there were concentrations of New Mexican settlers. The Penitentes had no hierarchal structure, so decisions about the placement and construction of moradas were made by the Penitente brothers. As a result, there are no official records dealing with their construction and documentation of moradas relies primarily on oral histories.

5OT.1166 and 5OT.1180. Two historic moradas are located in the Higbee vicinity. The first was constructed on the homestead of Francisco Pequete who received title to the land in 1912. The morada appears to have been in place by 1919 as suggested by a cross and date inscribed on a nearby rock. Oral histories suggest that the morada was abandoned in the 1940s because the location adjacent to a major highway was too public. The brothers moved to a much more private location at the bottom of a nearby canyon. Both are constructed of local sandstone and adobe and have a cruciform plan.



Churches and other buildings used for religious gatherings

Community churches in the region are typically simple buildings within limited decoration. These buildings have served an important role as gathering places for community events as well as religious services. Church buildings have often passed through various denominations, depending on what type of services were sought by local residents. Many of eastern Colorado's small town churches have become non-denominational in order to more inclusively serve their communities. Religious activities, however, have not been limited to church buildings. Schools and other community buildings have often been used for services or bible studies.



5LA.11769. The Riverside School was closed in the early 1960s due to declining enrollment and county consolidation efforts. The building became a meeting place for the rural ranching community and housed Sunday school gatherings until recently.



5LA.11941. The Branson Community Church began as the Church of God in the 1910s. A Baptist congregation purchased the church in 1927. The Baptist church was associated with the American Sunday School Union (ASSU) with services provided by various circuit ministers. After the church's affiliation with the ASSU ended in the 1950s, the congregation decided it was in the best interest of the church and community to be non-denominational.

Cemeteries

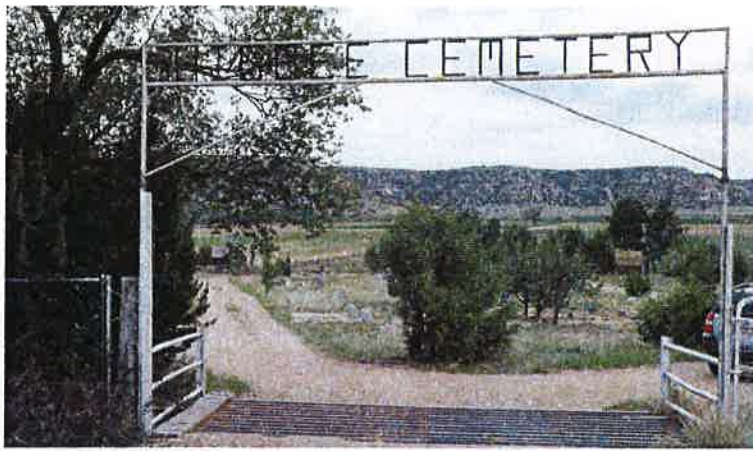
In rural areas, cemeteries are generally owned and operated by the community rather than affiliated with a specific church or religious denomination. Cemeteries can tell us much about the residents of a community including their faith, ethnicity, affiliations, and culture.



5LA.11864 Marker in the Earl Cemetery belonging to Wille P. Young. The headstone indicates that she was a member of the fraternal benefit society, Supreme Forest Woodmen, which was a women's auxiliary of the Woodsman of the World. The insurance company paid for headstones in exchange being able to place their logo on them.



5LA.11864 Earl Cemetery in Las Animas County



SOT.1103 The land for the Higbee Cemetery was originally homesteaded by John Thomas Wood in 1898. The first recorded burials in the cemetery were in 1898, though the grave of Robert Henry Whateley, a Civil War veteran, is dated 1869. The cemetery is still being used, and mostly contains burials for the Higbee Community. Many of Kit Carson's descendents are buried here, as well as several of Higbee's first settlers. The style of grave markers range from elaborately carved headstones to simple, hand-carved stones made of rough stone or concrete.



Education



As families ventured west across the country for new opportunities and livelihoods, education and the establishment of schools contributed to the community building process. Schools not only provided education to the region's children, they housed community gatherings, local meetings, and social events. As one homesteader described:

The schoolhouse was also the gathering place for all community affairs. Some of the women, feeling the lack of cultural activities, organized the Emerson Literary Society, which met regularly. The meetings were for families, not just the ladies. In fact, all gatherings in those days were family affairs (Durrell 1974, 105).

In 1861, fifteen years before Colorado's statehood, the first territorial legislation regarding public schools was passed. This legislation established a territorial superintendent of schools, provided for the election of county superintendents, and allowed electors to petition their county superintendents for a new tax to support school districts. During this time, any area with ten parents of school age children (ages 6 to 21) could petition their county superintendent to form a new school district. When Colorado became a state in 1876, the federal government gave the state land to be used for a public school system. The Public Land Survey System divided the state into townships, and sections 16 and 36 of each township were taken out of the public lands available for homesteading and designated as school sections. The state could lease these lands to raise funds for education.

The establishment of school districts and construction of school buildings reflected the population trends of rural Colorado: where homesteaders settled, schools soon followed to serve a population spread out among farms and ranches. Because of the difficulty of travel—most students walked or rode horses to school—schools were typically located so that children would not have to travel more than five miles. Las Animas County once contained more than 130 school districts. The establishment of school districts followed the periods of settlement: a scattering of schools were established across the area in the 1870s and 1880s as the initial group of settlers arrived; few new districts were seen between 1894 and 1908; and more than fifty districts were established in the eastern portion of the county between 1909 and 1929, reflecting the homesteading boom.

Most districts were represented by a single schoolhouse, typically containing only one room. Schools often were located on an acre of land donated by a local farmer who had school-age children under the provision that the land would revert to its original ownership if the school closed. Schools were commonly constructed of wood frame or sandstone, though the first school in a district might have been a dugout later replaced with a more permanent building. Frame schools were relatively easy to move where they were needed as school enrollment shifted.

Communities came together to construct a school. According to the daughter of one homesteader,

I do not know where the money came from for the necessary nails, lumber, windows, door, desks, blackboard, and stove, but I do know how the building went up because I was there . . . The men set a day, brought their sod cutters, wagons, spades, and carpenter tools and went to work. In a remarkably short time the building was up, the windows and door installed, and the [outhouses] out back, one labeled boys, the other girls, completed. A teacher was found and school was underway. All eight grades were taught in one room (Durrell 1974, 101-102).

Rural schools were managed by local school boards consisting of community members. Elected county superintendents supervised local districts, and their responsibilities included establishing curriculum guidelines and conducting biannual visits. The large number of school districts, however, made supervision difficult, and districts were left with a fair amount of autonomy. Rural school districts often had a shorter school year which was arranged around the agricultural calendar, since children were expected to help their families with farm and ranch work.

Rural schools typically offered instruction equivalent to grades one through eight. A single teacher taught all grades and all subjects in a combined multi-age classroom. Any rural student wishing to continue to high school moved to a larger school district, such as Trinidad, Hoehne, Kim, Branson, or La Junta and typically made arrangements to board in town during the school year. Many girls from the region were sent to Catholic boarding school in Canon City.

The majority of rural school teachers were young, single women, as married women were not allowed to teach. Finding teachers for isolated districts could be challenging. Some school districts provided the teacher a residence, or teacherage, adjacent to the school; in other cases, the teacher boarded with a local family. Teachers were often not much older than their students and had minimal training. The minimum age for teachers was sixteen and the only essential qualification was a passing score on the 8th grade comprehensive test. By 1920, the majority of teachers had completed high school, but the state did not require a college education until 1961.

Schools were the focal point of many rural communities. A school building might be the only physical structure indicating the location of a rural neighborhood and was used for social gatherings as well as religious services, funerals, and grange meetings. The school teacher was also expected to be more than just an instructor: she organized box socials, dances, and holiday gatherings at the school and was often expected to serve as a moral role model for her community.

Constructed quickly with whatever materials were available, many rural school buildings were falling apart within a decade. During the 1930s, the Civil Works Administration (CWA) and Works Progress Administration (WPA) improved the condition of rural schools in Las Animas County by providing labor for school repairs as well as by constructing new school buildings. These new schools, however, were built concurrent to declining enrollment as the harsh economic and environmental conditions of the 1930s drove many homesteaders out of the region.

In the 1940s, a movement to consolidate the state's many small rural districts gained momentum, which led to the School District Reorganization Act of 1949. Between 1953 and 1956, 2,105 school districts in Colorado were consolidated into 967. By 1965, only 181 districts remained. Consolidation was promoted as a strategy to provide a more equal education to students across the state, using better facilities—such as science labs and gymnasiums—and offering a wider range of classes. Improved transportation made these consolidated districts possible. By the mid-1950s, most rural districts in Las Animas County had been consolidated with the Branson, Hoehne, or Kim schools. The last rural district in Otero County, located at Higbee, was consolidated with La Junta in the early 1960s.

Education-related Resources

from the Purgatoire River Region

Schools

Historic school buildings in the survey area range from abandoned one-room schools scattered across the plains to large school complexes still in use in Branson, Hoehne, and Kim. One-room school houses were generally single-story, rectangular plan, and measured no more than 30' by 40'. The construction methods and materials employed were typically the same found on nearby homesteads. The larger schools located in towns were more influenced by national trends in school design.

Teacherages

Many school districts provided housing for teachers. Finding good teachers willing to work in isolated and primitive conditions was often a challenge. A teacher post that offered the privacy of one's own dwelling was much more attractive than having to share a cramped homestead with a student's family. Sometimes teacherages were purpose built, other times an older school house was converted to a teacherage after a new school was constructed.

Other school facilities

Additional facilities associated with one-room schools include wells and water pumps, outhouses, and playgrounds. Many rural school grounds also included a barn where children could keep the horses they rode to school during the day. The barns were also used to store coal. Larger school complexes include sports fields and various administrative and maintenance facilities.



5LA.11938. The town of Branson constructed its first school, two-room frame building in the late 1910s, but soon outgrew it and replaced it with a larger brick school in 1923.



5LA.11914. The Tyrone School was constructed as part of the Model School District around 1924. That year, nineteen students attended the school, and all were born outside Colorado (in states including Oklahoma, Kansas, Mexico and Missouri) indicating their parents were part of the wave of homesteaders drawn to the region in the 1910s and 1920s.



The Riverside School district was established in 1918 and operated until the early 1960s. The rural school complex is remarkably intact and includes a water pump, two outhouses (one for girls and one for boys), and a brick teacherage.





Depression and the Dust Bowl



Throughout the 1930s, eastern Colorado, along with the majority of the southern Plains states, experienced extreme droughts; southeastern Colorado received only 126 total inches of moisture for all the years between 1930 and 1939. This amount was 205 inches less than the previous decade and provided well below the eighteen inches needed annually to grow wheat.

Dust was not uncommon when the winds blew across the plains, and in the eastern part of the state, the few dust storms of 1931 were not surprising. “Dusters” returned the next year with more vigor, and by 1933 they had become so intense that everyday life became almost impossible for both people and livestock. The storm that began on May 9, 1934 lasted for several days and removed an estimated 300 million tons of fertile top soil from the Great Plains. The storms increased in numbers and intensity as the “Dirty Thirties” continued, and 1937 was the worst year on record. The storms destroyed millions of acres of farmland and caused mental and physical anguish to residents. Town street lights were turned on during the day; people put wet sheets over doors and windows to try to stop the infiltration of dust into buildings. Some ate meals under their tablecloths and wore goggles or masks of wet towels while outdoors. Dust covered roads, fences, and cars, and it piled as high as snowdrifts; rail traffic was stopped. Cases of dust pneumonia reached epidemic proportions in southeastern Colorado, in animals as well as in humans.

During this period, called by some the worst ecological disaster in the history of the United States, an area of over fifty million acres became known as the Dust Bowl, encompassing primarily southeastern Colorado, western Kansas, northeastern New Mexico, and the panhandles of Texas and Oklahoma. Its boundaries changed frequently. Baca County—in the far southeast corner of the state—was the most affected area in Colorado, but dust storms were not uncommon as far north as Burlington in Kit Carson County and Julesburg in Sedgwick County.

In addition to the dust storms, the Colorado plains suffered from recurring and serious infestations of grasshoppers. Grasshoppers seemed to thrive in the dry soil. Although they caused some problems in 1934 and 1936, billions of the insects came in 1937 and 1938. They moved up to a mile and a half per day in eastern Colorado; they almost blackened out the sun, and there were so many of them that the ground appeared to move. Members of the National Guard, Civilian Conservation Corps, Soil Conservation Service, and Works Progress Administration were all called to help with extermination efforts. Making matters worse, even this severe drought was punctuated by brief periods of heavy rain, which in turn caused severe floods.

Many residents could no longer support themselves. With no crops, no income, no livestock, and no chance of rain, they left in hopes of finding a better life elsewhere. Though the population dropped dramatically, the numbers remaining would have likely been even lower without the aid of numerous New Deal programs. Several programs provided direct relief to needy residents of eastern Colorado, while others aimed to broadly stimulate the area’s economy through loans to farmers and businesses and through changes in banking practices to protect depositors and prevent bank closures. Direct relief to

needy families came in the form of cash payments and allocations of food and goods. Farmers received payments to subsidize lands kept fallow and livestock unsuitable for slaughter. Relief figures for the Depression years show that few in eastern Colorado did not benefit in some way from the New Deal programs. Many relief cases were farm owners and tenants. In fact, only four states had a higher percentage of farmers on relief during this period.

The Works Progress Administration, established in May 1935, was the major provider of public jobs for the unemployed during the latter part of the thirties. The agency's main goal was to get the unemployed back to work and off of the relief rolls. "Small useful projects" were designed to provide employment for a maximum number of needy "employable" workers in the "shortest time possible." These jobs were especially vital in rural southeastern Colorado, where no other work was available for farmers and ranchers devastated by drought.

The WPA funded numerous road and school projects in southeastern Colorado, with the majority related to transportation—specifically the grading and graveling of farm-to-market roads. Culverts and bridges were components of many of these projects, although some larger bridges were built separately by the WPA. In Las Animas County numerous WPA stone bridges and culverts were built over the county's dry creek beds and arroyos, which were prone to flooding when it rained. Some bridges were even constructed expressly to raise road beds out of the dust in low areas.

The ecological disaster of the 1930s also led to a dramatic shift in government land-use policy. Since the 1860s, the federal government's land-use agenda had focused on settling the plains. As prime agricultural land was taken, the government expanded homesteading legislation to promote settlement of more marginal lands. As a result, a wave of new homesteaders came to the Purgatoire River Region in the early decades of the twentieth century. Native grasses were plowed under as homesteaders planted crops. In many areas, pastures were overgrazed as newcomers tried to raise too many cows on too few acres, unaware of the fragility of the local ecosystem. After the drought hit in the 1930s, there was little organic material left to hold the fine topsoil in place. In 1935, agricultural experts meeting in Pueblo to discuss solutions to the crisis estimated that winds had blown 850 million tons of topsoil off the southern plains that year alone. The Roosevelt administration addressed the environmental crisis with a series of New Deal agencies, including the Agricultural Adjustment Administration, Resettlement Administration, Farm Security Administration, and Soil Conservation Service.

One example was the Land Utilization Program (LUP), established in 1934. The program's creators argued that rural poverty was tied to soil erosion and that loan defaults, tax delinquency, and farm failures were the result of misguided settlement patterns and improper land use, rather than individual mishandling of resources. Through the LUP, the federal government purchased submarginal and eroded lands, restored them, and converted them to federally-managed grazing, wildlife, or recreation areas. The government helped displaced farmers find more suitable land elsewhere. Under the LUP, the federal government purchased land in Baca, Las Animas, and Otero Counties. New Deal agencies encouraged grazing over farming and promoted soil conservation methods.

During Roosevelt's presidency, the homesteading movement initiated by President Lincoln came to a halt. With the Taylor Grazing Act of 1934, the government withheld remaining public lands from homesteaders. The act also authorized the Interior Department to establish grazing districts and manage a grazing permit system. The government eventually purchased more than 4,700,000 acres of submarginal farmland and overgrazed rangeland in the West. Local grazing associations managed the purchased lands jointly with other publically and privately owned lands, altogether improving more than 30 million acres. In 1953, the management of lands purchased by the LUP was transferred within the U.S. Department of Agriculture from the Soil Conservation Service (SCS) to the Forest Service. On June 20, 1960, the lands in southeastern Colorado became part of the Comanche National Grasslands.

Depression and Dust Bowl Resources

from the Purgatoire River Region

The whole region felt the impact of the Depression and drought in the 1930s. The resources most plainly related to this context are the abandoned homesteads of those who left the region during the 1930s and the projects constructed by New Deal agencies. Resources related to the New Deal programs were not included within this survey project since they were the focus of a previous Colorado Preservation, Inc. survey. Some examples from that project are included below.

Abandoned Homesteads

Many of the optimistic homesteaders who arrived in the region during the 1910s found conditions to be much more challenging than they anticipated. With crop failures and a fall in crop prices during the 1920s, homesteaders began leaving their lands. After the dust storms arrived, a mass exodus began which lasted through the 1940s. Hundreds of abandoned homesteads still dot the landscape, a reminder of the region's boom period. It is surprising how much homesteaders left behind: automobiles, stoves, and bed frames are commonly found on homestead sites.



Part of the region's homesteading boom, Viviana Montoya came from New Mexico. She filed her homestead claim in 1918 and acquired the title to her land in 1921. When she proved up, she had put around forty acres under cultivation, growing beans, corn, fodder, and wheat. She established an extensive homestead complex including multiple dwellings, a corral, and a chicken house. Artifacts on the site include stove parts, cookware and dishes, and a car body.

New Deal Resources

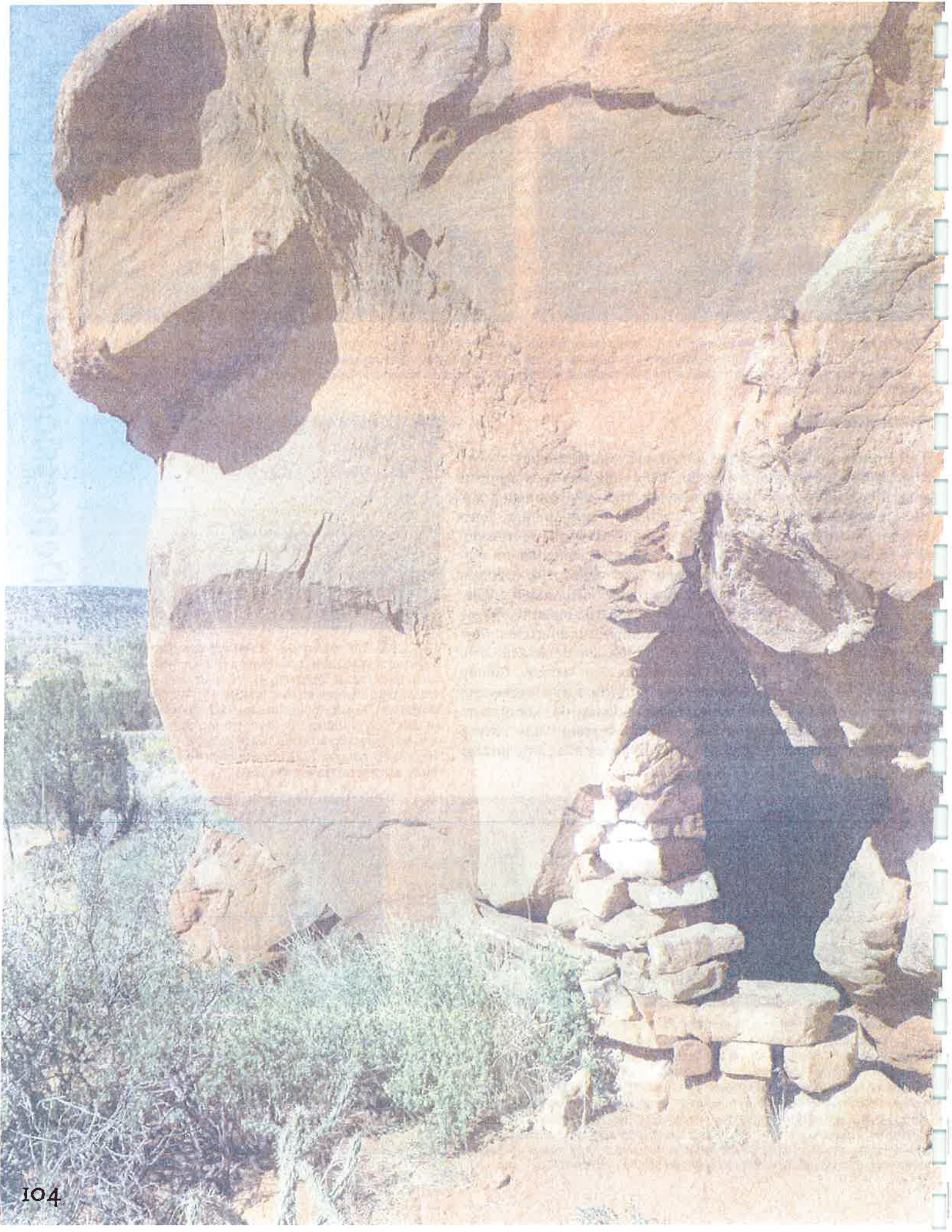
The extreme drought conditions forced many homesteaders to seek other sources of income during the 1930s, and New Deal agencies were the major source of employment. The WPA funded small, useful projects that could raise the morale of communities. Since the goal was to put people to work in the midst of the Depression, WPA projects generally featured labor-intensive construction with inexpensive materials. In the Purgatoire River region, they used the same construction methods, locally quarried sandstone and adobe, as the homesteaders. Within the survey region, the majority of New Deal projects were related to road improvements or education. New Deal resources within the project include the Shadel School Barn, Branson Gymnasium, Hoehne Gymnasium, Kim Schools, County Garage in Kim, Bunker Hill School, Thatcher School and Teacherage, Andrix School Barn, White School Addition, Cedar Hill School Barn, Prairie Star School Barn, Long Ridge School, Pleasant Valley School, McArthur School, and 7-D School along with more than fifty bridges and culverts.



5LA.11153. This culvert on CR 44 was constructed in 1936 as part of a WPA project to develop the Kim High School bus route. It included improving 41 miles of road with grading and constructing culverts and bridges. The project application stated that: "Roads in this area are badly in need of drainage, the dust storms last winter have left ditches filled with sand, and also many cuts with dust piled up higher than the fences." The project cost was \$22,225 with \$20,624 of that in federal funds and the rest from the county.



LA.11145. The 7-D school district submitted a WPA project proposal on August 6, 1936, seeking the demolition and reconstruction of their 28' x 38' school building. The total proposed project cost was \$3225 with \$2603 of that in federal funds and the rest from the school district. According to the proposal: "The present school building was laid up in mud and is about the collapse. The work . . . is necessary in order to insure a safe building in which the children may attend school." At this time, the school had an enrollment of approximately 25 students. The WPA approved the project on August 24, 1936. Construction began in October 1936, but was suspended when it was determined that the stone from the old school was "unsatisfactory for use in new building." The WPA approved an additional \$2466 to complete to the project and the new school was completed June 2, 1937. The project employed an average of 21 men per month. Laborers were paid \$44/month, mason helpers and truck drivers were paid \$50/month, masons were paid \$63/month, and the foreman and timekeeper were paid \$125/month. The school enrollment declined dramatically in the decade after its construction. By 1949, only five students, all from the same family, were enrolled. In September 1949, the 7-D School District board voted to consolidate with the Villegreen School District (#91).



- Adams, Robert. *The Architecture and Art of Early Hispanic Colorado*. Boulder: Colorado Associated University Press, 1974.
- Baca, Vincent C., ed. *La Gente: Hispano History and Life in Colorado*. Denver: Colorado Historical Society, 1998.
- Bauer, William. *Colorado's Post Offices, 1859-1989*. Golden, CO: Colorado Railroad Museum, 1990.
- Beshoar, Michael. *All About Trinidad and Las Animas County, Colorado: Their History, Industries, Resources, Etc.* Denver: Times Steam Printing House & Blank Book Manufactory, 1882.
- Birnbaum, Charles, A. "Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes." Preservation Brief 36. U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1994.
- Boyd, Leroy. "Towns Flourished and Died on the Prairie," *Pueblo Chieftain*, 17 September 1971.
- Boyle, Susan Calafate. *Comerciantes, Arrieros, y Peones: The Hispanos and the Santa Fe Trade*. Special historic study, Santa Fe National Historic Trail and the National Park Service. Published by the southwest Cultural Resources Center, Santa Fe. Professional Papers No. 54, 1994.
- Brockett, L.P. *Handbook of the United States of America and Guide to Emigration*. New York: Gaylord Watson, 1883.
- Bryant, Keith L. *The History of the Atchison, Topeka and Santa Fe Railway*. Macmillan Publishing Company: New York, 1974.
- Campbell, John Martin. *The Prairie Schoolhouse*. University of New Mexico Press: Albuquerque, 1996.
- Carrillo, Richard F., William J. Convery, III, Barbara J. Zook, Dorothy J. Best, Bonnie J. Clark, with contributions by Constance La Lena and Diane Benavides Mason. *Context Study of the Hispanic Cultural Landscape of the Purgatoire/Apishapa, Las Animas County, Colorado*. Compiled and edited by Richard F. Carrillo, Constance La Lena, and Diane Benevides Mason. Trinidad, Colorado: Trinidad Historical Society. 2003.
- Carter, Carrol Joe and Steven F. Mehls. "Colorado Southern Frontier Historic Context." Office of Archeology and Historic Preservation, Colorado Historical Society, 1984.
- Chamber of Commerce of the City of Trinidad and County of Las Animas. *Las Animas County, Colorado: its development and possibilities*. Chamber of Commence: Trinidad, CO, c.1910.
- Church, Minette. "The Grant and the Grid: Homestead Landscapes in the Late Nineteenth-Century Borderlands of Southern Colorado." *Journal of Social Archaeology*, vol. 2 no. 2. June 2002.
- _____. "Purgatorio, Purgatoire, or Picketwire: negotiating Local, National, and Transnational Identities along the Purgatoire River in Nineteenth-Century Colorado" in *Archaeological Landscapes on the High Plains*, Laura L. Scheiber and Bonnie J. Clark, eds. University Press of Colorado: Boulder. 2008.
- Clark, Bonnie. "Lived Ethnicity: Archaeology and Identity in Mexicano America" *World Archaeology*, vol. 37 no. 3. September 2005.
- _____. *On the Edge of Purgatory: The Archaeology of Abandonment in Hispanic Colorado*. Ph.D. dissertation, Department of Anthropology, University of California, Berkeley, 2003.
- Clason, George S. *Free Homestead Lands of Colorado Described: a Handbook for Settlers: a Guide for Settlers*. 2nd ed. Denver: Clason Map Company, 1916.
- Colorado: a Statement of Facts Prepared and Published by Authority of the Territorial Board of Immigration. Denver: Rocky Mountain News Steam Printing House, 1872.
- Colorado Department of Education, "A Report on Colorado School District Organization." 2002.
- Corbett, Kathleen. "Hope Set in Stone: Rural Hispanic and Anglo-American Vernacular Architecture in the Purgatoire Canyon." Master's thesis, University of California, Berkeley: 2003.
- Cottrell, H.M. "Dry Land Farming in Eastern Colorado." Fort Collins: The Agricultural Experiment Station of the Colorado Agricultural College, 1910.

- Cummins, Leone. *The History of Branson, Colorado*. Compiled by Leone (Castleberry), 1979.
- Darley, Alex M. *The Passionists of the Southwest, or, the Holy Brotherhood: A Revelation of the 'Penitentes.'* Reissued in 1968 by the Rio Grande Press, Inc., Glorieta, New Mexico. 1893.
- Department of the Interior, General Land Office. *The Unappropriated Public Lands of the United States*, Washington, D.C: Government Printing Office, 1909.
- _____. *Suggestions to Homesteaders and Persons Desiring to Make Homestead Entries*. Washington, D.C: Government Printing Office, 1909.
- _____. *Suggestions to Homesteaders and Persons Desiring to Make Homestead Entries*. Washington, D.C: Government Printing Office, 1922.
- Dickinson, Joan D. 1995. *Deep Hollow Ranch: America's Oldest Cattle Ranch*. Originally published in *American Cattleman*, republished on <http://deephollowranch.com/history.htm>. Accessed February 6, 2010.
- Doggett, Suzanne and Holly Wilson, "Rural School Buildings in Colorado." Multiple Property Documentation Form, 1999. On file at Colorado Historical Society.
- Durrell, Glen R. "Homesteading in Colorado." *Colorado Magazine: State Historical Society of Colorado Quarterly* v.51, no. 2 (Spring 1974).
- "Eastern Colorado: Its Opportunities and Resources." Passenger Traffic Department, Missouri Pacific Iron Mountain, 1906.
- Freed, Elaine. *Preserving the Great Plains & Rocky Mountains*. Albuquerque: University of New Mexico, 1992.
- Fraser, Clayton B. and Jennifer H. Strand. "Railroads in Colorado 1858-1948." National Register Multiple Property Documentation Form. 1997.
- Friedman, Paul. *Final Report of the History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area, Las Animas County, Colorado*. Powers Elevation. Prepared for the United States Department of the Interior, National Park Service, Rocky Mountain Regional Office, Denver, Colorado. 1985.
- _____. *Valley of Lost Souls: A History of the Pinon Canyon Region of Southeastern Colorado*. Monograph # 3. Denver: State Historical Society of Colorado, 1988.
- Gates, Paul W. "Homesteading in the High Plains." *Agricultural History*, Vol. 51, No. 1, Agriculture in the Great Plains, 1876-1936: A Symposium (Jan., 1977).
- Grant, Clarence G. *Vanishing Wagon Tracks; the Autobiography of an Ex-Saddle Tramp and Homesteader in the Middle West*. New York: Exposition Press, 1961.
- Green, Larry. "Atchison Topeka & Santa Fe Railway Company Place Names, First and Second Districts Colorado Division." 2004.
- Gregg, Josiah. *Commerce of the Prairies: or the Journal of a Santa Fe Trader*. 1st ed. Vol. 2. New York, 1844. Accessed via Google Books.
- Hall, Frank. *History of the State of Colorado*, Volume IV. Chicago: the Blakeley Printing Company. 1895.
- Hargreaves, Mary W.M. "The Dry-Farming Movement in Retrospect," *Agricultural History*, vol. 51, no. 1, pp.149-165 (1977).
- Hart, John Fraser. *The Rural Landscape*. Baltimore: John Hopkins University Press, 1998.
- Hill, George G. *Practical Suggestions for Farm Buildings*. Farmers Bulletin No. 126. Washington: Government Printing Office, 1901.
- Holleran, Michael. "Irrigation and Water Supply Ditches and Canals in Colorado, 1787 to 1961." Draft National Register Multiple Property Documentation Form, 2011.
- Jones-Eddy, Julie. *Homesteading Women: An Oral History of Colorado, 1890 – 1950*. New York: Twayne Publishers, 1992.
- Jordan, Terry G. *North American Cattle Ranching Frontiers*. Albuquerque: University of New Mexico Press, 1993.

- Keck, Frances Bollacker. *Conquistadors to the 21st Century: A History of Otero and Crowley Counties Colorado*. La Junta: Otero Press, 1999.
- _____. *The JJ Ranch on the Purgatory River: The Jones Family and the Prairie Cattle Company*. La Junta, Otero Press, 2001.
- Kosta, William. "Prairie Gutenberg," *Empire Magazine*, The Denver Post. May 12, 1957.
- Louden, Richard. *The Branson Story*. Pueblo: Schuster's Printing, 1999.
- McCann, Roud. *Colorado's Agriculture*. Cooperative Extension Work, 1924.
- McClelland, Linda F., J. Timothy Kelley, Genevieve P. Kelley, and Robert Z. Melnick. "Guidelines for Evaluating and Documenting Rural Historic Landscapes." *National Register Bulletin 30*. U.S. Department of the Interior, National Park Service, Interagency Resources Division, 1989 (revised 1999).
- Montano, Mary. *Tradiciones Nuevomexicanas: Hispano Arts and Culture of New Mexico*. Albuquerque: University of New Mexico Press, 2001.
- Murray, Robert A. *Las Animas, Huerfano, and Custer, Three Colorado Counties on a Cultural Frontier: A History of the Raton Basin*. Denver: Colorado State Office, Bureau of Land Management, 1979
- Nelson, Lowry. *American Farm Life*. Cambridge: Harvard University Press, 1954.
- Noble, Allen G. *Wood, Brick, and Stone: the North American Settlement Landscape*. Vols. 1 and 2. Amherst: The University of Massachusetts Press, 1984.
- Noble, Allen G. and Richard K. Cleek. *The Old Barn Book: A Field Guide to North American Barns and Other Farm Structures*. New Brunswick: Rutgers University Press, 1995.
- Nostrand, Richard L. *The Hispano Homeland*. University of Oklahoma Press: Norman. 1992.
- Pabor, William E. *Colorado as an Agricultural State: its Farms, Fields, and Garden Lands*. New York: Orange Judd Co., 1883.
- Paul, Virginia. *This Was Sheep Ranching: Yesterday and Today*. Seattle: Superior Publishing Company, 1976.
- Payne, J.E. *Cattle Raising on the Plains. Bulletin 87*. Fort Collins: The Agricultural Experiment Station of the Agricultural College of Colorado, 1904.
- _____. *Investigation of the Great Plains. Unirrigated Lands of Eastern Colorado. Seven Years' Study. Bulletin 77* Fort Collins: The Agricultural Experiment Station of the Agricultural College of Colorado, 1903.
- _____. *Wheat Raising on the Plains. Bulletin 89*. Fort Collins: The Agricultural Experiment Station of the Agricultural College of Colorado, 1904.
- Phillips, Sarah. *This Land, This Nation: Conservation, Rural America, and the New Deal*. Cambridge: Cambridge University Press, 2007.
- Pisani, Donald J. *Water, Land, & Law in the West: The Limits of Public Policy, 1850-1920*. Lawrence: University Press of Kansas, 1996.
- Potter, Ermine L. *Western Livestock Management*. New York: Macmillan Company, 1917.
- Rohrer, Joseph R. *Questions and Answers on the United States Public Land Laws and Procedure*. Washington, D.C.: General Land Office, 1912.
- Simpson, Cecil W. "A Tribute to the Founders of Kim, Colorado." *Kim News*, a publication of the Kim School Community Association, April, 1982. p. 4.
- Smith, Honora DeBusk. *Early Life in Trinidad and the Purgatory Valley*. Thesis (M.A.): University of Colorado, Boulder, 1930.
- Sneed, Dean F. *Las Animas County Ghost Towns and Mining Camps*. Trinidad: Great Escape Publishing, 2000.

Steele, Thomas J. and Rowena Rivera. *Penitente Self-Government: Brotherhoods and Councils, 1797-1947. Santa Fe: Ancient City Press. 1985.*

Steinel, Alvin T. *History of Agriculture in Colorado.* Fort Collins: Colorado Agricultural College, 1926.

Stone, Wilbur Fisk, ed. *History of Colorado.* Vol. 1. Chicago: The S.J. Clarke Publishing Company, 1918.

Taylor, Morris F. *First Mail West: Stagecoach lines on the Santa Fe Trail.* Reissued 2000. University of New Mexico Press: Albuquerque, 1971.

_____. *Pioneers of the Picketwire.* O'Brien Printing and Stationary: Pueblo. 1964.

_____. "The Town Boom in Las Animas and Baca Counties." *Colorado Magazine* v.55 n.2 (1978).

_____. *Trinidad, Colorado Territory.* Published by Trinidad State Junior College. 1966.

Tenney, E. P. *Colorado and Homes in the New West.* Boston: Lee and Shepard, 1882.

Ubbelohde, Carl, Maxine Benson, and Duane A. Smith. *A Colorado History, 8th Edition.* Boulder: Pruett Publishing Company, 2001.

Weigle, Marta. *Brothers of Light, Brothers of Blood: The Penitentes of the Southwest.* Albuquerque: University of New Mexico Press, 1976.

Weigle, Marta and Peter White. *The Lore of New Mexico.* Albuquerque: University of New Mexico Press, 1988.

West, Beda D. Simpson. "Kim, Colorado and Some of Its People" in *Kim News*, a publication of the Kim School Community Association, April, 1982. p. 5-6.

Wentworth, Edward N. *America's Sheep Trails.* Ames, Iowa: Iowa State College Press, 1948.

Wyckoff, William. *Creating Colorado, The Making of a Western American Landscape 1860-1940.* New Haven: Yale University Press, 1999.

Yocam, Ella Mae and Edith Anderson. *Kim: Yesterday and Today.* Published by the Kim School Community Association: Kim, Colorado. 1979.



- Albanese, John P.
 1978 *Archeogeology of the Northwestern Plains*. In *Prehistoric Hunters of the High Plains* by George C. Frison, Academic Press, New York:375-389.
- Alexander, Robert K., John D. Hartley, and Thomas F. Babcock
 1982 *A Settlement Survey of the Fort Carson Military Reservation*. Grand River Consultants, Inc. Submitted to IAS, Denver.
- Anderson, Jane L.
 1985 *Chronological Framework*. In *A Chronological Framework of the Fort Carson Pinon Canyon Maneuver Site, Las Animas County, Colorado*, edited by Christopher Lint. U.S. Army Fort Carson Pinon Canyon Cultural Resources Project, Contribution No. 2. Center for Archaeological Research, University of Denver, Denver. Submitted to USDI National Park Service, Rocky Mountain Regional Office, Denver, Contract No. CX 1200-3-A021: 14-52.
 1989 *Regional Chronology*. In *Temporal Assessment of Diagnostic Materials from the Pinon Canyon Maneuver Site*. Edited by Christopher Lintz and Jane L. Anderson. *Memoirs of the Colorado Archaeological Society*, No. 4, Colorado Archaeological Society.
- Baker, Thomas R.
 1984 *Preliminary Discussion of an Archaeological Inventory Conducted at Conchas Reservoir, San Miguel County, New Mexico*. In *Papers of the Philmont Conference on the Archeology of Northeastern New Mexico*, edited by Carol Condie. *New Mexico Archeological Council Proceedings* 6(1):233-250.
- Bannon, John Francis.
 1970 *The Spanish Borderlands Frontier, 1513-1821*. Holt Rinehard & Winston, New York.
- Benedict, James B.
 1974 *Early Occupation of the Caribou Lake Site, Colorado Front Range*. *Plains Anthropologist* 19(63):1-4.
 1975a *The Albion Boardinghouse Site: Archaic Occupation of a High Mountain Valley, Southwestern Lore* 41(3):1-12.
 1975b *The Murray Site: A Late Prehistoric Game Drive System in the Colorado Rocky Mountains*. *Plains Anthropologist* 20(70):267-268.
 1979 *Getting Away from It All: A Study of Man, Mountains, and the Two-Drought Altithermal*. *Southwestern Lore* 45(3):1-12.
- Benedict, James B., and Byron L. Olson
 1978 *The Mount Albion Complex: A Study of Prehistoric Man and the Altithermal*. Research Report No. 1, Center for Mountain Archaeology, Ward.
- Berthrong, Donald J.
 1963 *The Southern Cheyennes*. University of Oklahoma Press, Norman.
- Bolton, Herbert Eugene
 1964 *Spanish Borderlands*. Reprinted. University of Oklahoma Press, Norman. Originally published 1921.
- Bryson, Reid A., David A. Baerreis, and Wayne W. Wendland
 1970 *The Character of Late-Glacial and Post-Glacial Climatic Changes*. In *Pleistocene and Recent Environments of the Central Great Plains*, edited by Wakefield Dort, Jr., and J. Knox Jones, Jr., Department of Geology, University of Kansas, Special Publication 3, The University Press of Kansas, Lawrence:53-77.
- Campbell, Robert Gordon
 1969 *Prehistoric Panhandle Culture on the Chaquaqua Plateau, Southeast Colorado*. Doctoral dissertation, University of Colorado. University Microfilms, Ann Arbor.
 1976 *The Panhandle Aspect of the Chaquaqua Plateau, Southeast Colorado*. *Texas Tech University Graduate Studies* No. 11. Lubbock.

Carrillo, Richard F.

- 1981 The Prowers County Building, An Episode in Transition. Prepared for the Prowers County Commission, Lamar, January.
- 1985 Historical Archaeology Research Design. A Management Plan for the Pinon Canyon Maneuver Site (Draft), compiled by Mark Guthrie. Center for Archaeological Research, University of Denver, Denver. Submitted to USDI National Park Service, Rocky Mountain Regional Office, Denver:71-110.
- 1990 Historical Archaeology Research Design. An Introduction to the Archaeology of Pinon Canyon, Southeastern Colorado, Volume III. Edited by William Andrefsky, Jr. Submitted to U.S. Army, Fort Carson, Colorado and NPS-IAS, Denver. Larson-Tibesar Associates, Inc., Laramie, Wyoming.
- 1994a A Proposal for Phase III Historical Archaeological Excavations at the Prowers House, Boggsville Historic Site (5BN363), Bent County, Colorado. Submitted to the Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas, Colorado.
- 1994b Strange Sites in the Purgatoire River Valley. Paper presented at CCPA Continuing Education Symposium, University of Northern Colorado, Greeley, March 12-13.
- 1995a The San Juan Art Center (La Capilla de San Juan Bautista/Church of St. John the Baptist) and Environs (Site 5SH125): Historical Archaeology at the Spiritual Source of an 1870s Hispanic New Mexican Community Known as Carnero, in the Upper San Luis Valley, Near Present-Day La Garita, Saguache County, Colorado. Prepared for San Juan Art Center, Center. Project undertaken with funds provided by the Colorado State Historical Fund, Colorado Historical Society, Denver, Colorado.
- 1995b Archaeological Sites on El Rio de Purgatorio: Hispanic New Mexican Influences in the Historical Archaeology of Southeastern Colorado. Paper presented at the 58th Annual Meeting of the Plains Anthropological Conference, Laramie, November.

Carrillo, Richard F.

- 2007 Ethnicity. In Colorado History: A Context for Historical Archaeology. Colorado Council of Professional Archaeologists. Prepared for the State Historical Fund, Colorado Historical Society, Denver.
- n.d. A Report of Preliminary Historical Archaeology Test Excavations Conducted at the Boggs and Prowers Houses, 1990-1991, Boggsville Historic Site (5BN363), Bent County, Colorado (In Progress).

Carrillo, Richard F., and Andrea M. Barnes

- 1990 A Report of Historical Archaeological Monitoring and Survey at the Site of Boggsville (5BN363, Bent County, Colorado. Richard F. Carrillo, Principal Investigator. Submitted to the Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas, Colorado.

Carrillo, Richard F., and Stephen M. Kalasz

- 1990 Historical Feature and Site Type Analysis. In An Introduction to the Archaeology of Pinon Canyon, Southeastern Colorado, Volume 3. Edited by William Andrefsky, Jr., Submitted to U.S. Army, Fort Carson, Colorado and NPS-IAS, Denver. Larson-Tibesar Associates, Inc., Laramie, Wyoming.

Carrillo, Richard F., and Philip L. Petersen

- 1995 Historical Archaeology at the Prowers House: Phase 4, An Architectural Assessment, Fall 1994, Boggsville Historic Site (5BN363), Bent County, Colorado. Richard F. Carrillo, Historical Archaeologist and Principal Investigator. Report submitted to Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas, Colorado. Funds provided, in part, by the State Historical Fund, Colorado Historical Society, Denver.

Carrillo, Richard F., and Philip L. Petersen

- 1996 The Caddo Agency Site (John M. Prowers First Ranch) (5BN444) and the AT&SF Railroad Site (5BN445.1): An Historical Archaeology Study at Big Timbers, Bent County, Colorado. Prepared for the Pioneer Historical Society of Bent County, Las Animas, Colorado. SHF Project No. 95-M3-39.

- Carrillo, Richard F., Diane Adams and Dorothy Larson
 1989 Relative Dating of Historic Homesteads: A Test Employing Cartridges and Bottle Glass. Temporal Assessment of Diagnostic Materials from the Pinon Canyon Maneuver Site. Edited by Christopher Lintz and Jane L. Anderson. *Memoirs of the Colorado Archaeological Society, No. 4*, Colorado Archaeological Society, Denver, Colorado.
- Carrillo, Richard F., Lori E. Rhodes, and Philip L. Petersen
 1993a Historical Archaeology at Boggsville Historic Site (5BN363): Excavations Conducted to Facilitate the Restoration and Reconstruction of the Prowers House, Bent County, Colorado. Richard F. Carrillo, Historical Archaeologist and Principal Investigator. Prepared for the Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas, Colorado.
- Carrillo, Richard F., Stephen M. Kalasz, Stephen A. Brown, Philip L. Petersen, and Christian J. Zier
 1994 Archaeological Excavations Conducted in the Fall of 1993 at the Prowers House, Boggsville Historic Site (5BN363), Bent County, Colorado. Prepared for the Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas, Colorado. Prepared by Centennial Archaeology, Inc., Fort Collins, Colorado.
- Carrillo, Richard F., Philip L. Petersen, and Daniel L. McGrew
 1995 A Preliminary Report of Results from the First Annual University of Colorado-Colorado Springs Historical Archaeological Field School at Boggsville Historic Site (5BN363): An Early 1860s Village In Southeastern Colorado, Summer of 1994. Prepared for the Boggsville Revitalization Committee, Pioneer Historical Society of Bent County, Las Animas.
- Carrillo, Richard F., Collette C. Chambellan and Thomas J. Lennon
 1996 A Summary Report of a Historical Archaeology Survey Conducted at the Pinon Canyon Maneuver Site, Las Animas County, Colorado During the Summer of 1993. Prepared for NPS-RMRO, Denver. Prepared by WCRM, Inc., Boulder.
- Carrillo, Richard F. Constance La Lena and Diane Benevides (Editors)
 2003 Context Study of the Hispanic Cultural Landscape of the Purgatoire/Apishapa, Las Animas County, Colorado: An Interdisciplinary Approach to the History, Architecture, Oral History and Historical Archaeology. Compiled by Richard F. Carrillo, Cuartelejo HP Associates Inc., La Junta and Constance La Lena and Diane Benevides Mason, Trinidad Historical Society members. With Dorothy Best (folklorist), Albuquerque; William J. Convery III (historian), Lafayette; Barbara Zook (historical architect), Santa Fe and Bonnie J. Clark, Ph.D., Berkeley. Prepared for the Trinidad Historical Society, Trinidad. Funded, in part, by a Colorado Historical Society State Historical Fund Grant, Las Animas County Commissioners, Evergreen Resources, Inc., and members of the Trinidad Historical Society.
- Carter, Carrol Joe and Steven F Mehls
 1984 Colorado Southern Frontier Historical Context. Colorado Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver, Colorado.
- Coues, Elliot (editor)
 1970 The Journal of Jacob Fowler. University of Oklahoma Press, Norman.
- Earles, Amy C., Richard F. Carrillo, Nick Trierweiler, John C. Acklen
 1987 Evaluation of Old Las Animas (5BN176), A Late Nineteenth Century Town on the Arkansas River, Bent County, Colorado. Mariah Associates, Inc., Albuquerque, New Mexico. Submitted to Department of the Army, Corps of Engineers, Albuquerque District, Albuquerque, New Mexico.
- Eddy, Frank W., et al
 1982 Cultural Resource Inventory of the John Martin Dam and Reservoir, Colorado. Prepared for the Albuquerque District Corps of Engineers. Science Applications, Inc., Golden.
- Fighmy, Jeffrey L.
 1984 Colorado Plains Prehistoric Context. Office of Archaeology and Historic Preservation, Colorado Historical Society, Denver.
- agan, Brian M.
 1987 The Great Journey: The Peopling of Ancient America. Thames and Hudson, Ltd., London.

- Forbes, Jack D.
1960 Apache, Navajo and Spaniard. University of Oklahoma Press, Norman.
- Friedman, Paul D.
1985 Final Report of History and Oral History Studies of the Fort Carson Pinon Canyon Maneuver Area, Las Animas County, Colorado. National Park Service, Denver, Colorado.
- Frison, George C.
1978 Prehistoric Hunters of the High Plains. Academic Press, New York.
- Greer, John W.
1966 The Louden Site (CO-1), Las Animas County, Colorado. Southwestern Lore 32(3): 57-65.
- Gunnerson, Dolores
1974 The Jicarilla Apaches: A Study in Survival. Northern Illinois University Press, DeKalb. Gunnerson, James H.
1960 An Introduction to Plains Apache Archaeology--The Dismal River Aspect. Smithsonian Institution Bureau of American Ethnology Bulletin 173, Anthropological Papers, No. 58.
1968 Plains Apache Archaeology: A Review. Plains Anthropologist 13(41):167-189.
1983 Archaeological Overview of the Central High Plains. Draft Manuscript on file, Center for Archaeological Research, University of Denver.
1987 Archaeology of the High Plains. Bureau of Land Management, Colorado. Cultural Resource Series No. 19. Denver.
- Hand, O.D., Carla Latuda, and Gerald A. Bair
1977 Trinidad Lake Cultural resource Study Part I: An Evaluative Study of Historical and Archaeological Sites within the Corps of Engineers Trinidad Lake Flood Control Project, Las Animas County, Colorado. Manuscript on file, National Park Service, Interagency Archeological Services, Denver.
- Hardesty, Donald L., Carrillo, Richard F., Steven F. Mehls, Jane L. Anderson and Thomas J. Lennon
1995 Data Recovery Report of Lockwood Stage Station at the Pinon Canyon Maneuver Site, Las Animas County, Colorado. Submitted to the NPS-IAS, Denver. Submitted by WCRM, Inc., Boulder.
- Hester, James J., and James Grady
1977 Paleoindian Social Patterns on the Llano Estacado. In Paleoindian Lifeways, edited by Eileen Johnson. The Museum Journal 17:78-79.
- Hickerson, Harold
1973 Fur Trade Colonialism and the North American Indian. Journal of Ethnic Studies 1(2):15-44.
- Hyde, George E.
1959 Indians of the High Plains. University of Oklahoma Press, Norman.
- Irwin-Williams, Cynthia, and Henry J. Irwin
1966 Excavations at Magic Mountain: A Diachronic Study of Plains-Southwest Relations. Proceedings No. 12. Denver Museum of Natural History, Denver, Colorado.
- Jorgensen, Joseph G.
1972 The Sun Dance Religion. University of Chicago Press, Chicago.
- Kappler, Charles J.
1904 Indian Affairs, Laws and Treaties. Vol. II, National Archives, Washington, D.C.
- Kenner, Charles L.
1969 A History of New Mexican-Plains Indian Relations. University of Oklahoma Press, Norman, Oklahoma.
- Kingsbury, Lawrence A., and Lorna H. Gabel
1980 Eastern Apache Campsites in Southeastern Colorado. Colorado College Publications in Archaeology, No. 3. Department of Anthropology, Colorado College, Colorado Springs.

- Kirkpatrick, David, and Karl W. Laumbach
 1984 Across the Great Plains to the Rocky Mountains. In Papers of the Philmont Conference on the Archeology of Northeastern New Mexico, edited by Carol Condie, New Mexico Archeological Council Proceedings 6:3-28.
- Krieger, Alex D.
 1964 Culture Complexes and Chronology in Northern Texas. University of Texas Publication No. 4640. Austin.
- Lamar, Howard
 1977 The Reader's Encyclopedia of the American West. Crowell Publishing, New York.
- Lavender, David
 1972 Bent's Fort. University of Nebraska Press, Lincoln.
- Lewis, Oscar
 1942 The Effects of White Contact upon Blackfeet Culture. J.J. Augustin, New York.
- Lintz, Christopher
 1978 Architecture and Radiocarbon Dating on the Antelope Creek Focus: A Test of Campbell's Model. Plains Anthropologist 23 (82, Pt. 1):319-328.
- Loendorf, Lawrence
 1998 Visions from Canyon Walls: Petroglyphs and Pictographs from the Pinon Canyon Maneuver Site.
 2008 Thunder & Herds: Rock Art of the High Plains. Walnut Creek: Left Coast Press.
- Lutz, Bruce J., and William J. Hunt
 1979 Models for Patterns and Change in Prehistoric Settlement-Subsistence Systems of the Purgatoire and Apishapa Highlands. Submitted to the National Park Service, Interagency Archeological Services, Denver.
- Meltzer, David J.
 1993 Pleistocene Peopling of the Americas. Evolutionary Anthropology, pp. 157-169
- Mishkin, Bernard
 1940 Rank and Warfare among the Plains Indians. J.J. Augustin, New York.
- Moore, Jackson W.
 1973 Bent's Old Fort, An Archeological Study. State Historical Society of Colorado and the Pruett Publishing Company.
- Moorhead, Max L.
 1968 The Apache Frontier. University of Oklahoma Press, Norman.
- Nowak, Michael
 1982 Archaeological Investigations in Southeastern Colorado. Colorado College Publications in Anthropology No. 5, Colorado Springs, Colorado.
- Richardson, Rupert Norval
 1933 The Comanche Barrier to South Plains Settlement. Arthur H. Clark, Glendale, California.
- Schleiser, Karl H.
 1972 Rethinking the Dismal River Aspect and the Plains Athabaskans, A.D. 1692-A.D. 1768. Plains Anthropologist 17(56):101-133.
- Schroeder, Albert H.
 1965 A Brief History of the Southern Utes. Southwestern Lore 30:53-78.
 1974 A Study of the Apache Indians. In American Indian Ethnohistory: Indians of the Southwest, Volume 1, edited and compiled by D.A. Horr, Garland Books, New York.
- Secoy, Frank Raymond
 1953 Changing Military Patterns on the Great Plains. J.J. Augustin, Locust Valley, New York.

- Shields, Wm. Lane
1980 Preliminary Investigations at the McEndree Ranch Site, 5BA30. *Southwestern Lore* 46(3):1-17.
- Shimkin, D.B.
1940 Shoshone-Comanche Origins and Migration. *Pacific Congress Proceedings* 6(4):17-25.
- Stewart, Omer C.
1966 Ute Indians: Before and After White Contact. *Utah Historical Quarterly* 34(1):38-61.
- Stoffle, Richard W., Henry F. Dobyns, Michael J. Evans, and Omer C. Stewart
1984 Toyavita Piavuhuru Koroin, "Canyon of Mother Earth": Ethnohistory and Native American Religious Concerns in the Fort Carson-Pinon Canyon Maneuver Area. University of Wisconsin-Parkside, Kenosha, Wisconsin. Submitted to USDI National Park Service, Rocky Mountain Regional Office, Denver, Contract No. CX 1200-3-A006.
- Thomas, Alfred B.
1935 *After Coronado*. University of Oklahoma Press, Norman, Oklahoma.
- Thornbury, William D.
1965 *Regional Geomorphology of the United States*. John Wiley and Sons, Inc., New York.
- Van Hook, Joseph O.
1933 Settlement and Economic Development of the Arkansas Valley to the Colorado-Kansas Line 1860-1900. Unpublished Ph.D. dissertation, Department of History, University of Colorado, Boulder.
- Wallace, Ernest, and E. Adamson Hoebel
1952 *The Comanches: Lords of South Plains*. University of Oklahoma Press, Norman.
- Way, J. Edson
1984 Preliminary Results of an Archaeological Survey along the Canadian River, Chappell-Spade Ranch, Tatum County, San Miguel County, New Mexico. In *Papers of the Philmont Conference on the Archeology of Northeastern New Mexico*, edited by Carol Condie, *New Mexico Archeological Council Proceedings* 6:201-226.
- Weber, David J.
1982 *The Mexican Frontier, 1821-1846: The American Southwest Under Mexico*. University of New Mexico Press, Albuquerque, New Mexico.
- Weber, Kenneth R.
1980 Ecology, Economy, and Demography: Some Parameters of Social Change in Hispanic New Mexico. *Social Science Journal*. 17(1):53-64.
1990 Ethnohistory of the Pinon Canyon Maneuver Site. In *An Introduction to the History of Pinon Canyon, Southeastern Colorado*. Edited by William Andrefsky, Jr. Submitted to NPS-RMRO, Denver. Submitted by Larson-Tibesar Associates, Inc., Laramie, Wyoming and Centennial Archaeology, Inc., Fort Collins, Colorado.
- Wedel, Waldo
1959 An Introduction to Kansas Archeology. *Smithsonian Institution Bureau of American Ethnology Bulletin* 174.
1964 *The Great Plains*. In *Prehistoric Man in the New World*, edited by Jesse D. Jennings and Edward Norbeck. University of Chicago Press, Chicago.
- Wenke, Robert J.
1990 *Patterns in Prehistory: Humankind's First Three Million Years*. Third Edition, Oxford University Press, New York; Oxford.
- Wheat, Joe Ben
1971 Lifeways of Early Man in North America. *Arctic Anthropology* 8(2):22-31.

Wilcox, David R.

- 1981 The Entry of Athabaskans into the American Southwest: the Problem Today. In *The Protohistoric Period in the North American Southwest, A.D. 1450-1750*, Edited by David R. Wilcox and W. Bruce Masse, Arizona State University Anthropological Research Papers No. 24, Tempe:213-156.

Wood, John Jackson

- 1967 *Archaeological Investigations in Northeastern Colorado*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Colorado, Boulder.

Wood, Caryl E., and Gerald A. Bair

- 1980 *Trinidad Lake Cultural Resource Study Part II: The Prehistoric Occupation of the Upper Purgatoire Valley, Southeastern Colorado*. Manuscript on file, National Park Service, Interagency Archeological Services, Denver.

Wood, W. Raymond

- 1971 *Pottery Sites Near Limon, Colorado*. *Southwestern Lore* 37(3):53-85.

Wood Simpson, Caryl

- 1976 *Trinchera Cave: A Rock Shelter In Southeastern Colorado*. Unpublished Master's thesis, Department of Anthropology, University of Wyoming, Laramie.

Zier, Christian J. and Stephen M. Kalasz

- 1999 *Colorado Prehistory: A Context for the Arkansas River Basin*. Colorado Council of Professional Archaeologists, Denver.

