# HISTORIC HOMESTEADS AND RANCHES IN NEW MEXICO: A HISTORIC CONTEXT

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*Historic Preservation Division, Office of Cultural Affairs, State of New Mexico, Santa Fe, New Mexico, 87501. Professional Services Contract No. 08 505 7000 0021, Department of Cultural Affairs, March, 2008*

Prepared for: Historic Homestead Workshop, September 25-26, 2010

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# PREFACE

This manual has been written under the auspices of the New Mexico State Office of the Bureau of Land Management and the Historic Preservation Division, Department of Cultural Affairs of the State of New Mexico. The purpose of this manual is to assist field personnel to analyze and determine the significance of sites created by the practices of ranching and homesteading in New Mexico. This manual is intended to guide both fieldwork and necessary archival research on homestead and ranch sites.

Our assumption is that most of the surveyors who will use this manual are archaeologists whose training is in archaeology rather than architecture or documentary research. This manual also assumes that the surveyor will encounter the site in the course of a survey of a project area or area of effect.

By "homestead or ranch site" we mean a habitation site, feature or group of features that may be associated with historic agricultural activity and/or with related activities. This site may be (probably will be) reduced, disturbed, or looted. It may have a standing habitation or other standing structures on it, but it is also possible or likely that no such features have survived. The site could be as old as the phenomenon of ranching in New Mexico or the Southwest – meaning that its earliest features may date back to the 1500s. It is much more likely, however, that it will be recent – nineteenth or twentieth century.

Determining the value and meaning of these sites will require the application of criteria of significance – essentially those of the National Register of Historic Places, which is the federal government's list of significant historic and prehistoric properties. Bear in mind that the National Register of Historic Places includes properties of national, regional and local significance. Properties of regional and local significance may be determined eligible to and nominated to the National Register of Historic Places. They may also be placed on New Mexico's State Register of Cultural Properties.

Agriculture has been the core of New Mexico's traditional economy. Our discussion nevertheless tries to distinguish the phenomena of ranching and homesteading from the general history of the state. Although this manual contains various references to specific times, places and sites, it is designed to be applicable to all of New Mexico, and may also have some applicability in other parts of the West.

***CoverPhotograph***

*Five-sided homestead. Front looks like a log cabin, back looks like a hogan, near the old Crocket Ranch in Cibola County near Fence Lake.*

## HOMESTEAD AND RANCH CHRONOLOGY

c. 9500 B.C. - Paleo-Indian occupation of the Southwest begins. Paleo-Indian people hunt big game and gather wild plants and small game during the late Pleistocene.

c. 5500 B.C. - the period called the Archaic begins in the Southwest. The beginning of this period coincides with environmental changes, including a decrease in moisture and changes in plant communities.

Plant foods were important before the introduction of agriculture in New Mexico. The leaves and crowns of the Agave can be roasted and can also be stored. Cactus fruits are edible, as are wild onion and wild potato. Many wild seeds and nuts can be eaten, including those of lamb's quarter, bunchgrass, bee plant, sunflower and piñon.

c. 1500 B.C. - crops are introduced into New Mexico from the south. By about 1000 B.C., Archaic peoples are eating some corn and squash along with wild foods.

At least two prehistoric agricultural or crop complexes, the Upper Sonoran and Lower Sonoran, were introduced into the American Southwest in prehistoric times. The concept of a crop complex implies a group of species with an apparent common geographic origin and a mutual association within certain environmental parameters, although an individual species may later experience a separate geographic distribution and history (Ford 1981:7).

This is also the date of introduction of corn into the Southwest, but one authority (Ford) considers a range somewhere between 1500 and 1200 B.C. likely (Ford: personal communication 1997). Wills 1988: 145 suggests an introduction date of about 3000 B.P., or 1000 B.C. Matson (Matson 1991:265, 268) suggests a date of about 1000 B.C.

From around 200 A.D. until the coming of the Spanish in the sixteenth century, the archaeological record in New Mexico shows that in some areas, agricultural communities remained stable over long periods, while in others, attempts to found such communities were abandoned.

The period A.D. 400 to A.D. 700 in the northern Southwest was marked by increasing dependence on agriculture.

Between about 700 A.D. and 1000 A.D. there is a change throughout the northern southwest, including most of western and northern New Mexico, from pithouse villages to villages composed of multi-room, surface structures. The pithouses, with some modification and elaboration, continued to be used for ceremonial purposes, as they are to this day. The shift from pithouses to surface dwellings may be directly linked to growth of population, more stable locations, and the growth of agriculture (Gilman 1983).

c. 750 A.D. - Historic New Mexico, the New Mexico of the Pueblo Indians, begins to become visible about this time, with the expansion of village settlement and the differentiation of living, storage and ceremonial rooms. Villages, in short, begin to resemble the pueblos first seen by Europeans in the sixteenth century and still extant.

c. 900 A.D. - several regional systems emerge in the Southwest. Two of these, the Chacoan and Mogollon systems, are in New Mexico. The Chacoan system appears to have been based primarily on agriculture; the Mogollon may have been equally dependent on hunting and agriculture.

In the thirteenth century large areas of the Southwest are abandoned, including the Classic Mimbres sites, Chaco Canyon and Mesa Verde in Colorado. One traditional explanation for these abandonments is enemy (specifically Athapascan) raids. There is no substantial evidence, however, that there were any Athapascan people (the ancestors of the modern Navajo and Apache) in New Mexico until sometime in the fifteenth century.

Before 1300 A.D. the Rio Grande Valley seems to have been sparsely inhabited. Beginning in the fourteenth century, however, major towns appear in this area - in the Chama River Valley, the Taos area, the Pajarito Plateau, near present-day Santa Fe and in the Galisteo Basin. Towns of up to six hundred rooms were built. Some of these are ancestral to the modern pueblos

c. 1400 A.D. - First arrival of Athapascan speakers in the Southwest (Opler 1983: 368-392). Sites that are probably Navajo have been radiocarbon dated to the 1500s (Hancock 1992; Hogan 1989).

1540 A.D. – the Vasquez de Coronado expedition, exploring north from Sinaloa in interior Mexico, enters New Mexico. Parties explore west to the Grand Canyon and east into the Great Plains. The expedition returns to interior Mexico. Over the next forty years, the frontier of European settlement moves north. Spanish expeditions re-enter New Mexico in the 1580s.

The arrival of Europeans leads to the end of traditional adaptations. The Spanish introduce new crops and domestic animals, creating a new agricultural base. They also bring a new religion, a new world view, a new government and diseases to which the Indians have no immunity.

The Spanish explorers who saw the pueblos in the sixteenth century all said that Pueblo Indians were good farmers who enjoyed abundant crops. They said very little, however, about specific irrigation practices. Martin de Pedrosa, writing in 1600 about the 1591 expedition of Francisco Sanchez Chamuscado, described a pueblo near the confluence of the Rio Grande and the Jemez River (possibly Santa Ana Pueblo), saying that "a stream of water with which the natives irrigate their cornfields flows nearby" (Hammond and Rey 1966:118).

Antonio de Espejo, describing what he saw among the Piro pueblos near modern Socorro in 1582, said that "they have fields planted with corn, beans, calabashes and tobacco in abundance. These crops are seasonal, dependent on rainfall, or they are irrigated by means of good ditches" (Hammond and Rey 1966:220).

Gaspar Castaño de Sosa, describing what he saw in the Tano and Tewa pueblos on the northern Rio Grande in 1592, said that "all six of these settlements had canals for irrigation, which would be incredible to anyone who had not seen them with his own eyes. The inhabitants harvest large quantities of corn, beans and other vegetables" (Hammond and Rey 1966:282). Castaño described another pueblo, possibly San Ildefonso, and said "this pueblo lies in a very extensive valley, all under irrigation" (Hammond and Rey 1966:283).

1598 (April) - Don Juan de Oñate takes formal possession of New Mexico at San Juan de la Toma (a point on the Rio Grande below El Paso del Norte).

1601 - Jusepe Brondate visits Juan de Oñate's colony at San Gabriel de Yunge Ouinge at the confluence of the Rio Grande and the Rio Chama. Of what he saw, he says that "the people devote themselves to agriculture, growing maize, beans, calabashes, fine melons, and watermelons. Some of their fields are irrigated by means of ditches; others depend on seasonal rains. They plant all their crops in May and harvest in August. This is the time when it rains in the province, although but little. In the winter it snows five or six times, as in Spain...the maize stalks are small, but the ears large. The Rio del Norte [Rio Grande] rises in the month of May when the snow begins to melt and carries considerable water until September" (Hammond and Rey 1953:626).

1600s – The New Mexico colonists pay the Franciscan friars with sheep for such services as baptisms, marriages and burials. The friars pay workmen with farm products for the labor of building the Pueblo mission churches. The friars and their Pueblo pupils produce woolen cloth.

1620-1670 – Livestock in New Mexico begin to increase. A market for them in Nueva Vizcaya (subsequently the states of Chihuahua and Durango) is established, and livestock are sent down the Camino Real.

1680 - Pueblos revolt and drive the Spanish out of New Mexico. The Pueblos keep at least part of the herds and flocks established under Spanish rule. Although the Pueblos propose to eliminate all elements of Spanish colonization, they do not give up beef, mutton, wool, or some new crops.

1692 - Reconquest of New Mexico by the Spanish begins under the leadership of Governor Diego de Vargas.

1693 - Vargas recolonizes the province of New Mexico with 70 families, 100 soldiers and 16 Franciscans (Simmons 1977:75).

1705 - Comanche enter northeastern New Mexico and the Southern Plains (Wallace and Hoebel 1952:8).

1700s – The system of *partido,* in which capital in the form of sheep is lent at interest, in the form of increase in the flock, becomes widespread in New Mexico. The owner of the sheep turns over a flock to a *partidario*, who pays for them with part of the natural increase and keeps part for himself, establishing his own flock.

1810s -1820s – older sheep ranges west of and along the Rio Grande prove inadequate, and ranchers begin to move out into the eastern plains. In 1824 Pedro José Perea of Bernalillo obtains a land grant in the Pecos Valley near modern Santa Rosa. One of his stated reasons for moving east is Navajo depredations west of the Rio Grande.

1821 (September) - Mexico gains independence from Spain, and New Mexico becomes a province of Mexico (Jenkins and Schroeder 1974:33).

1824 (July) - New Mexico becomes a territory of the Republic of Mexico.

1841 – United States Congress passes the Preemption Act. Under its terms, any head of household over 21 years of age can file a claim for 160 acres of public domain (Dick 1954:20, 34). The claimant is required to build a dwelling on the land and to make proof of settlement at a land office, and to swear that he has never preempted before, and does not own 320 acres in any state or territory, and does not intend to settle the land in order to sell it. He is then allowed to buy the land at a minimum approved price, usually $1.25 per acre.

1845 - United States declares war on Mexico. Kearny's "Army of the West" marches into Santa Fe and claims New Mexico as a territory of the United States.

1848 (February) - Treaty of Guadalupe Hidalgo provides that Mexico give up all claim to territory east of the Rio Grande and cede New Mexico and upper California to the United States.

1852 - John George Clancy establishes a fortified ranch on Alamogordo Creek. In 1876 he drives a flock of sheep from California to his ranch (Parsons 1953:9).

1854 - Captain John Pope surveys a railroad route along the 32$^{nd}$ parallel from El Paso to the Red River.

1854 (July 22) - Congress passes an act providing for the appointment of a surveyor general for the New Mexico territory and gives every citizen residing in the territory before 1853 or settling in the territory before 1858 a donation of 160 acres (Westphall 1965:1).

1855 – New Mexico's first Surveyor General takes office in Santa Fe.

1860 - Mescalero Apaches steal livestock from settlers along the Rio Hondo below Fort Stanton (Thomas 1974:31).

1862 (November) – Congress passes the Homestead Act. This act enables settlers to acquire 160 acres of public domain by occupying the land for 5 years, making improvements and paying a filing fee (Worster 1979:82).

1862 (November) - A military post is established at Bosque Redondo on the Pecos River and named Fort Sumner. Mescaleros defeated by the forces of General James H. Carleton are confined to a reservation there (Bailey 1970:25-29, 37).

1866 - Charles Goodnight and Oliver Loving drive their first herd of longhorn cattle across west Texas and up the Pecos River to Fort Sumner (Sheridan 1975:37).

1866 - The first homesteaders arrive in southeastern New Mexico late in the year, settling at or near good water sources, mainly along the Pecos River and the Rio Hondo from Roswell to the Chaves County line (Pratt and Scurlock 1989:294).

1872 - John Chisum establishes a permanent cattle camp at the Bosque Grande (Sheridan 1975:39-40). Homesteaders in the Rio Hondo request permission to relocate their entries to North Springs River because other settlers have taken all the water upstream (Westphall 1965:83).

1872 – U.S. Congress amends the Homestead Act to permit Union veterans of the Civil War to count each year of military service toward the five-year residency requirement. Veterans are required to reside on and cultivate the land for one year. Provisions of the 1872 law are subsequently extended to veterans of the Spanish-American War, the Philippine insurrection, the Mexican border campaign, World War I, and the Indian campaigns. Veterans' rights are expanded again by an act of 1920 that allows them first choice on lands newly opened for homesteading.

1873 (March) - Congress passes the Timber Culture Act. Based on the idea that planting timber will cause precipitation, this act provides an additional quarter section of land to any settler who will plant at least 40 acres in trees within four years. Title will pass to the settler after ten years if evidence of timber culture is supported by two witnesses.

1874 - Barbed wire is patented and produced in De Kalb, Indiana.

1875 - John Chisum establishes the South Spring River Ranch (the Jinglebob, Chaves County) with some 80,000 head (Hinton 1956:189).

1876 - The Lincoln County War, among rival ranching and commercial factions, breaks out (Sheridan 1975:41).

The territorial assembly reaffirms the traditional right of travelers to free access to natural waters for themselves and their animals, but provides that persons traveling with migrating herds or large numbers of animals must obtain permission from the owner of any natural spring or lake, and must pay for any damage to fields or private property (Clark 1987:50).

1877 - Congress passes the Desert Land Entry Act to stimulate irrigation through individual enterprise. A settler may buy a section of land for $1.25 an acre if he proceeds to irrigate within three years (Buchanan 1988:29).

1878 - Congress passes the Timber and Stone Act, which authorizes settlers and miners to buy up to 160 acres of land with potential timber and mineral resources at $2.50 per acre (Oakes 1983:27).

1879 - 85 - Joseph C. Lea buys 13,387 acres along the entire length of the Rio Hondo, while other members of his family buy more than 2,400 acres in the same area (Westphall 1965: 68-69).

1880 - The estimated area of artesian flow in the Roswell Basin is 663 square miles. By 1927 this has shrunk to 425 square miles (Theis and Sayer 1942:46).

1880 – Railroad enters New Mexico. A regional railroad system is established in New Mexico in the period 1880-1890.

1880 - Bureau of Immigration is created as an office of the New Mexico territorial government in February, 1880, and remains active until 1912. Its purpose is to attract genuine homesteaders and desirable businesses.

1870-1880s - Texas ranchers enter the San Agustin Plains and the Valle Redondo and begin moving longhorns east along the Magdalena Livestock Driveway to the railhead at Magdalena. A few Texans also move into the San Juan River Valley of northwestern New Mexico, and from there into southeastern Utah.

1881 – U.S. Congress passes a provision (21 Stat. 315) permitting homesteaders to relate their claims back to a date of settlement, if prior to the date of entry.

1881 - An increase in cattle prices causes many ranchers to sell out to large ranching syndicates, some of them controlled by foreign investors (Hinton 1957:60).

First use of barbed wire on the Southern Plains (Gibson 1967:146).

1883 - Chisum family members and employees begin to file on 160-acre tracts along the Pecos River from Bosque Grande to Artesia in order to control the water (Hinton 1956:63).

1885-1886 - Winter is the most severe since 1850s. Extensive loss of crops and livestock.

1886 -1887 - Blizzards begin in November. Temperatures remain below zero in parts of New Mexico for two to three weeks in early 1887. Livestock losses are as high as 90 percent (Hollon 1966:136-137).

1887 - U.S. Congress passes the Hatch Act, creating agricultural experiment stations to carry on scientific research on agricultural problems and to disseminate information (Clark 1987:131).

1889 - New Mexico Territorial Assembly passes an act to prevent overstocking of ranges. Under its provisions, a person or corporation may use public lands only to the extent to which livestock can be supported on those by water to which that person or corporation has title (Clark 1987:54).

Late 1880s - Rapid decline of cattle industry in New Mexico due to drought, overgrazing, blizzards and other environmental factors (Baydo 1970:134).

1890 - the Queen family establishes a ranch about 40 miles southwest of Carlsbad in or near Dark Canyon. Water from the ranch supplies the nearby homestead community, which became known as Queen in 1905 (Pearce 1965:128).
Irrigation companies in the Pecos Valley advertise for homesteaders to file on public lands so the companies can sell the water from company canals (Myers 1974:23).

1891 - Timber Culture Act is repealed (Walker 1977:3).

1891-1892 – Severe drought in New Mexico causes widespread loss of livestock (Humphrey 1987:420).

1893 - 1894 - Continued below-normal precipitation (Gibson 1967:149; Tuan et al. 1973:58).

c. 1895 - Open range ranching in New Mexico ceases to be the general pattern, due to various factors including inclement weather, blizzards, and decline of range due to overstocking. Open ranges, however, continue in some areas, e.g. Lea County, as late as the 1920s (Baydo 1970:224-228).

1898 - U.S. Congress passes the Fergusson Act. Among its provisions is one setting aside 500,000 acres in New Mexico for the establishment of permanent reservoirs for irrigation. In March, 1899, the New Mexico Territorial Assembly responds with the creation of the office of Commissioner of Public Lands and Board of Public Lands, responsible for leasing, selling and managing Fergusson Act lands (Clark 1987:84).

1899 - New Mexico Territorial Assembly passes an act to prevent overgrazing due to overstocking and fencing (Clark 1987:54).

1903 -1905 - Large influx of homesteaders into New Mexico (Mosley 1973:19).

1907 - New Mexico Territorial Assembly passes a law creating the office of State Engineer, a water code, and a board of water commissioners. Hydrographic surveys of the territory begin (Clark 1987:118-123).

1908 (February 6) - Congress passes a law prohibiting the assignment of desert land entries to corporations or associations, limiting them to qualified, individual entrymen (Clark 1987:136).

1909 - Congress passes the Enlarged Homestead Act, often referred to as the Dry Farming Homestead Act, allowing a homesteader to file on 320 acres (Worster 1979:87).

1890-1910 - cultivated area of New Mexico is 788,000 acres (about 1,200 square miles) in 1890; in 1900 it has increased to over 5 million acres (about 7,800 square miles – as compared to 600 square miles in 1800 and 800 square miles in 1846). In 1910 it covers 11 million acres or 17,000 square miles, a peak figure never again reached (Williams 1986:128).

1909-1912 – a dry period reduces the influx of homesteaders and begins a lengthy process of abandonment and consolidation of homestead claims and reversion of homesteads to rangeland, lasting for over a generation.

1912 - Congress reduces the residency requirement from five to three years, also giving the homesteader the option of being absent from the homestead for up to five months each year. This is recognition of the need for and practice of a second livelihood.

1912 (January 6) - President William Howard Taft proclaims New Mexico the 47$^{th}$ state of the Union.

1916 - Congress passes the Stock Raising Homestead Act, authorizing entry on a full section of grazing land (Oakes 1983:27).

Due mainly to under-funding by Congress, the U.S. Geological Survey was slow to designate lands that could be claimed pursuant to this act. Designation lagged behind demand, and Congress passed a measure permitting an individual to petition for designation of public land, stating why he or she believed that the land was grazing land as defined by law. However, the Geological Survey still had to make this determination before the entry was allowed.

1917 - 1922 - A period of drought causes many homesteaders who had filed in the several preceding years of good rain to abandon their claims (Hinshaw 1976:154).

1918 - Mesquite dies in the severe drought and prickly pear is used for cattle food – this requires burning off the spines (Cabeza de Baca 1954:175).

1918 - 1919 - A severe winter forces many cattle and sheep ranchers out of business. Others who have profited during the WWI years begin to enlarge their holdings (Cabeza de Baca 1954:174).

A worldwide influenza pandemic – possibly originating in rural Kansas and carried to Europe by U.S. soldiers during WWI – becomes the deadliest plague in recorded history, killing about 21 million people. References to it are common in the history of the American West as they are worldwide; the influenza frequently appears in homestead records as a reason for the temporary abandonment of the homestead.

1919 (February 25) – an act of Congress (40 Stat. 1153) allows homesteaders to make a showing that adverse climatic conditions make it a hardship to reside on the claim for seven months a year and allows them to request a reduction to six months – but thereby increases the total time of residence to four years. Likewise the residence time per year can be reduced to five months, which increases the total required residence time to five years.

1920s - Good rain and high prices lead homesteaders and ranchers to increase farm acreage in the belief that this is a weather pattern that will continue (Thornthwaite 1941:186).

1927 (March 16) - New Mexico Legislature passes a statute regulating groundwater. All groundwater is declared to be public, subject to appropriation for beneficial use and subject to the control of the State Engineer (Clark 1987:237).

1933 - 1937 - Below-normal precipitation creates the general conditions known as the Dust Bowl (Tuan et al. 1973:58).

1933 (June 23) - Congress creates the Civilian Conservation Corps. However, the program does not go into effect until 1938. About 3 million people, mostly young men, work in this program on park, soil, and water conservation projects (Buchanan 1988:32-33). Forty-three camps are established around New Mexico. The program ends in 1942 (Clark 1987:244).

1934 - Congress passes the Taylor Grazing Act in response to drought conditions in the southern plains that are destroying the last vestiges of the formerly rich grasslands. The Act becomes the means to consolidate the abandoned public domain and to remove it from private management. Under the authority of the Act, President Roosevelt reserves from entry all unreserved lands in twelve western states including New Mexico. This action effectively ends homesteading (Clark 1987:254). The Taylor Grazing Act in effect reverses a public policy that for 50 years has found small farmers to occupy the arid lands. The Act creates a method whereby large areas of former grasslands can be returned to the public domain, put back into grass, and leased to ranchers.

1935 - Congress passes the Historic Sites Act, requiring archeological survey prior to the establishment of a federal or federally-authorized reservoir.

1937 - Congress passes the Bankhead-Jones Farm Tenant Act (7 U.S.C. §§ 1000). Under its provisions the government buys back thousands of patented homesteads and returns them to the public domain.

1939 - 1943 – There is a period of high rainfall in which many farmers are still cultivating market crops, while the more general tendency under the Taylor Grazing Act is to cultivate winter feed for livestock whose summer pasture is leased from the federal government. "The farmer had become the rancher-farmer" (Pratt 1986:213).

1950 -56 - An extended drought, the severest in the twentieth century, grips the Plains and the West. It causes wind erosion of twice the area affected by the Dust Bowl of 1934-37 (Tuan et al. 1973:58-60).

1966 - Congress passes the Historic Preservation Act, creating the National Register of Historic Places. Section 106 of the Historic Preservation Act requires federal agencies to take into account the effect of their undertakings on historic properties. The Historic Preservation Act authorizes the Advisory Council on Historic Preservation and 36 Code of Federal Regulations 800 (See Chapter 5: Procedures).

# 1
# General History of Ranches and Homesteads in New Mexico

This chronology covers some of the main points in the development of agriculture in the Southwest before the arrival of Europeans. However, ranching - that is, the raising of large gregarious animals such as sheep, goats and cattle - is a European innovation that reached New Mexico in the early sixteenth century, while homesteading is an even more recent phenomenon originally authorized by federal legislation in 1862. Homesteading, as our chronology indicates, became an important phenomenon in New Mexico and, although unsustainable in the arid lands, continued until c. 1934, when it was substantially ended by the passage of the Taylor Grazing Act, although some homestead claims continued to be made into the 1940s (see further below).

Life and livelihood on patented homesteads continued until well after WWII, but as we will note below, homesteading was never an isolated phenomenon and most homesteads returned to range land. The Taylor Grazing Act was a legislative recognition that grazing, rather than small-scale farming or homesteading, was the better use of large areas of public land in the West and Southwest. The following general discussion is a context covering about four hundred years, A.D. 1540 - c. 1940.

## SHEEP RANCHING AND TRADE

The first sheep in New Mexico were those brought by Vasquez de Coronado's expedition in 1540. These were part of the supply train commanded by Captain Tristán de Luna y Arellano. Livestock, including, sheep, cattle and horses, went along on the march into central Kansas and back to winter quarters on the Rio Grande in 1541. The Franciscan friars who remained behind when Coronado returned to Mexico kept some sheep, but the friars were subsequently killed by the Pueblos, and the sheep are not known to have left any offspring.

The records of the expeditions of the 1580's to New Mexico do not mention sheep. In his *entrada* of 1598, however, Juan de Oñate brought livestock necessary to establish a permanent colony, including 1,000 cattle, 1,000 goats, 150 mares with colts, and 4,000 sheep.

The sheep were *churros* with thick, shaggy under-fur which yields a long-staple, easily matting wool, suitable for hand processing, although they produced as little as a pound of wool per fleece. *Churros* were hardy, enduring long drives, capable of substituting dew and succulent plants for water and of subsisting on either fresh or dry grass. They were the basis for the modern Navajo-churro breed.

When Oñate left office early in 1610, he turned over to successor Governor Pedro de Peralta, as part of the official transition, 1,350 head of sheep and goats. There was no inventory of flocks and herds owned by individual colonists.

As the Franciscan friars established pueblo missions in the 1620s and 30s, they also established large herds and flocks. Each friar entering New Mexico was allotted 10 heifers, 10 sheep and 48 hens. These were the basis of the large mission herds and flocks that became

critically important during the famine of the late 1660s. Scholes (Scholes 1936:313) notes that by about 1650 each friar in New Mexico had a herd of several thousand sheep and thirty or forty horses.

Baxter (1987:11) states that despite fragmentary evidence, it appears that between 1620 and 1670 livestock in New Mexico began to increase significantly, and that a market for them was established in the mining districts of Nueva Vizcaya (present-day Chihuahua and Durango). These exports were important because they were the currency that paid for tools, weapons and goods needed on the frontier. Both church and civil officials are known to have engaged in some trade in livestock. Whatever there was of this trade, however, may have done more harm than good. Governor Francisco de la Mora Ceballos was charged in 1634 with exporting livestock, including mares, cows, sheep and goats, that were essential to the colony. Thirty years later, Governor López de Mendizábal was charged with sending flocks to Nueva Vizcaya and abandoning the Indian herders there, leaving them unable to get back to New Mexico.

When the Pueblos revolted in 1680 and drove the Hispanics out of the province, it was with the expressed intention of eliminating all vestiges of European culture. They did not, however, give up agricultural innovations including beef, mutton and wool (Baxter 1987:13). When Vargas returned to New Mexico in 1692-93, the pueblos still had some sheep. Vargas brought additional livestock to New Mexico during the reconquest, and church officials brought more, with which to reestablish the missions. Vargas distributed livestock brought from Nueva Vizcaya to New Mexican families in the spring of 1697. Over 1,000 Hispanics received more than 4,000 ewes and other livestock (Baxter 1987:16).

After the reconquest, herds and flocks gradually increased (Baxter 1987:21). In 1715 Antonio Gallegos of Bernalillo declared in his will that he owned 360 sheep and goats. Over the next twenty years the flocks of New Mexico's upper class, the *ricos*, increased to number in the thousands. Sheep became a measure of wealth, partly because as privileged individuals received proprietary grants, they were useful mainly for grazing sheep. Outlying areas could not be occupied in the face of the growing threat from increasingly mobile and warlike Indians, and they were not suitable for irrigation or farming.

Cattle and sheep only gradually came to be significant among the Pueblos in the 1600s (Spicer 1962:546). The slowness of the adaptation evidently has to do with the fact that the Pueblos were already successful agriculturalists. The effect of livestock on the band peoples was more far-reaching. The Navajos and Apaches became raiders of the horses and sheep of the Spanish settlements in the 1700s. The Navajos, probably because they had already adopted some Pueblo farming practices, gradually added livestock raising to their repertory, until sheep culture became as important to them as farming. Navajo and Apache livestock raiding was a practice that induced symbiosis with the Spanish and later with the Anglos. Since the non-Indians were the source of supply, the Apaches and Navajos permitted them to raise stock, rather than driving them out of the country (Spicer 1962:547).

An incident of 1735 indicates that livestock numbers were still too low to afford an exportable surplus. Governor Cruzat y Gongora issued a decree forbidding all exports of sheep, cattle, wool or grain, explaining that excessive sales in the previous year had caused food and

clothing shortages. In 1744 Governor Codallos y Rabal allowed the sale of wool from the Albuquerque area for export to the interior of Mexico, but the sale of live animals was probably still prohibited at this time (Baxter 1987:28).

The *partido* system - a means of lending capital at interest in the medium of sheep - became increasingly important in New Mexico in the eighteenth century. Possibly the earliest known *partido* contract in New Mexico dates to 1745 (Baxter 1987:29). Under this agreement, Captain Joseph Baca of Albuquerque received 417 ewes from Lieutenant Manuel Sáenz de Garvisu for a period of three years.

By 1757 the Pueblos and Hispanics between them owned seven times more sheep than cattle: 7,356 horses, 16,157 cattle, 112,182 sheep (Baxter 1987:42; Weber 1992:310). "As sheep became increasingly acceptable as a means of exchange for imported consumer goods, a small clique of rancher-merchants began to dominate livestock marketing within the province and to control other aspects of the local economy" (Baxter 1987:42). Many of these were natives of Spain, or criollos (born in the New World, but of European extraction).

Before the 1770s livestock production was at a bare subsistence level; after 1780 New Mexico began to produce a truly exportable surplus, in numbers such that the trade significantly aided New Mexico's economy, rather than depleting it as had earlier been the case. In 1788 Governor Fernando de la Concha estimated the number of New Mexican sheep sold in Chihuahua at 15,000 head valued at about 30,000 pesos. Six years later a friar noted that "15 to 20,000 sheep leave this province annually, and there have been some years when up to 25,000 left." In 1803 Governor Chacón estimated the number of cattle and horses going to market annually in Sonora and Nueva Vizcaya at more than 600 annually, plus 25 to 26,000 sheep and goats (see below). In 1827 Colonel Antonio Narbona reported that there were 5,000 cattle, 240,000 sheep and goats, 550 horses, 2,150 mules and 300 mares in New Mexico (Gutierrez 1991:319-320; Carroll and Haggard 1942:43).

At the end of the century, sheep marketing involved provincial merchants who brought their livestock to La Joya de Sevilleta, the last settlement north of the Jornada del Muerto. November was the traditional departure date, but as exports increased the dealers began to favor August, when summer rains improved grazing and filled waterholes. The caravans that went to Nueva Vizcaya were called *conducta*s or *cordones*. They were escorted by detachment of soldiers from the Santa Fe presidio to guard against Indian attack. Zebulon Pike saw a *conducta* in 1807 (see below).

Governor Fernando de Chacón gives an overview of New Mexico agriculture in 1803:

> Agriculture in said province does not appear in the best state owing to a lack of know-how. Nevertheless, the most common grains are sown, like wheat, corn and barley, and all kinds of vegetables in limited quantity, there being no practical way to export them to the provinces because of the great distances intervening between all of them. As a result the majority of its inhabitants are little dedicated to farming, in particular the Spaniards and castas who content themselves with sowing and cultivating only what is necessary for their sustenance. [Living] by

> luck through the scarce years, like the current one, they experience great need which is met by resort to wild plants, roots, milk, beef and mutton...Although the Province possesses sufficient oxen for farming, what is most in abundance is sheep. Without counting what is consumed locally, there is exported to [Nueva] Vizcaya and the lesser [frontier] presidios from one year to the next twenty-five to twenty-six thousand head of sheep. Of swine there exists no great number because the natives of this country are more accustomed to the use of fat from beef than from hogs, and there is no one dedicated to the manufacture of soap. The raising of horses and mules is little encouraged because of the continual raids by the enemy [Indians]. But annually more than 600 animals of each kind are brought in from the Sonora and Vizcaya, not counting the herds of mustangs, which the citizens are in the habit of hunting whenever they go out on the frontier (Simmons 1985:81-88).

During the revolutionary years (1810-1821) the sheep trade declined, as did all forms of commerce, due to the unsettled conditions caused by war. The numbers of sheep in New Mexico, however, rose sharply, leading to a revival of the trade in the Mexican period (1821-1846).

By the 1820s the sheep population had grown to over 200,000, not counting Navajo herds, and the *pastores* were pushing out into the borderlands of northeastern New Mexico and as far as the Texas panhandle in search of pasture. The increase in numbers did not mean better breeding. Weather, predators and Indians made sheep raising a risky proposition at best, and there was no incentive to invest in superior breeding stock. Gregg (see below) talks about the poor quality of New Mexico sheep, but evidently does not understand the reason.

Shearing was still done with a knife. In 1829 Charles Bent, the trader who later became the first American governor, imported several pairs of shears for sale, but shears did not come into general use until the territorial period.

The increase in numbers of sheep meant a need for new pastures. Ranchers began to move onto the plains between the Sandia and Manzano mountains. Also in the period 1818-1824, several rancher-merchant families from Santa Fe and the Rio Abajo requested land grants on the Pecos in what are now San Miguel and Guadalupe Counties. The move to the east was partly on account of heavy Navajo raiding on the Puerco.

After independence from Spain, the rancher-merchants continued to send sheep down the Camino Real to Chihuahua, but sought out new markets in Durango, a growing mining center that traded with all of Mexico. In 1829 Antonio Armijo pioneered a route to California. Armijo and his party traveled from Abiquiu west-northwest, forded the San Juan near its junction with the Animas, recrossed the San Juan at the Four Corners to avoid the canyons downstream, and crossed northeastern Arizona to the Colorado (to the Crossing of the Fathers, the crossing used by Dominguez and Escalante and named for them), then southwesterly to the sites of St. George and Las Vegas, then south of Death Valley to near modern Barstow, then to the San Gabriel mission and to Los Angeles. In 1831, trader-trapper William Wolfskill took a somewhat different route. Wolfskill followed the Dominguez-Escalante route to the Dolores River, then northwest

to cross the Colorado near present-day Moab and the Green near present-day Green River. At Castle Dale, he veered southwest to follow the north-flowing Sevier River toward Parowan, then west to Newcastle and southwest to Las Vegas. At this point he picked up the Armijo Trail.

Wolfskill and his company, then, were the first to traverse what became known as the Old Spanish Trail to Los Angeles (Briggs 191). Evidently they could not have done so without some knowledge of earlier explorations including those of Dominguez-Escalante, Garcés, Smith and Armijo.

Governor Manuel Armijo (the last Mexican governor) made land grants totaling over 5 million acres during the late 1830s and early 1840s, including community grants that became necessary as the Hispanic population rose from about 25,000 in 1821 to almost 60,000 in 1846, including some 10,000 Pueblos. Some of the new farming and sheep-raising areas on the southern border between Los Lunas and San Marcial were harried by Apaches and Navajos. Huge grants were made in the east to naturalized foreigners including Charles Beaubien, Gervacio Nolan and Ceran St. Vrain.

The total number of sheep reached a high of about 5.5 million in 1844. Although this number declined somewhat after the American conquest, New Mexico was the biggest sheep producer in the United States in 1850 (Sheck 1990:25).

After the United States acquired the Southwest and the California gold rush created a demand for meat, New Mexico's sheep industry grew significantly. The number of sheep in the territory doubled in the 1850s. The trade was cornered by a few Hispanics *ricos* and subsequently a few additional Anglo merchants. They continued the *partido* system already in use in New Mexico.

In the 1850s breed stock from New Mexico flocks was driven to Utah, Colorado, Wyoming and Montana to create flocks in other areas of the Rocky Mountains (Williams 1986:120). The number of sheep in New Mexico increased from about 250,000 in 1830 to 830,000 in 1860 to up to 4 million in 1880.

Indian raids, especially by Navajos, fell off after the Civil War, making it possible to expand the grazing area and to establish new settlements, particularly in the west and south. After the Navajos were defeated at Armijo Lake in 1864, families from Pena Blanca on the Rio Grande began to settle along the Puerco, and by 1890 had occupied the Puerco to its headwaters (Mosk 1942:44). The extension of settlement before 1880 was almost entirely Hispanic, and some areas of agriculture continued to be primarily Hispanic enterprises, notably sheep raising. Coan (Coan 1925:390) estimates that sixteen of the twenty families that controlled three-fourths of the sheep in New Mexico in 1880 were Hispanic.

After the Civil War there was more demand for wool than for mutton (Williams 1986:120). Because the traditional *churro* sheep produced little wool, about 40,000 merinos were imported from California (about a third of them died on the trail). The resulting crossbred stock raised the wool clip in New Mexico from about 32,000 pounds in 1850 to over 4 million pounds in 1880. When the market for meat rose in the 1870s, almost 250,000 sheep from New Mexico were driven to Nebraska and Kansas feedlots to be slaughtered in Omaha and St. Louis.

In 1880 there were about 160,000 head of cattle in New Mexico; in 1890 there were 500,000; in 1900 about one million. The number of sheep increased from about 2 million in 1880 to about 5 million in 1900 (Byron:12). All the available range land in the territory was brought into use between 1880 and 1900. The railroad was the stimulus for the expansion of the cattle industry (Williams 1986:120). By 1900 only three counties (Rio Arriba, San Miguel and Union) had large concentrations of sheep. The sheepherders in Union County were primarily Anglos. As cattle began to dominate the market, a number of Anglo sheepherders converted to cattle and mutton and wool exports fell. Cattle took more range per head; as their numbers increased, there were conflicts over range and water that continued well into the twentieth century. "Uncle Joe" Turner, speaking to the present writer in Albuquerque in 1972, described such a conflict as he witnessed it in the Rio Arriba near Lindrith in 1912 (personal communication).

## Human Behavior – Sheep Ranching

### Clemente Gutierrez

Clemente Gutierrez was born about 1716 in Aragón, Spain. He came to New Mexico about 1750. In 1755 he married Josefa Apolonia Baca, daughter of Antonio Baca of Pajarito, a major sheep rancher. Gutierrez bought land near his father-in-law's ranch and to the west along the Rio Puerco. He lived on his ranch at Los Padillas.

He engaged in several lawsuits concerning *partido* sheep, including a dispute with Mateo Joseph Pino. Pino was called away from the grazing area on the Puerco by the Marqués de Rubí, then making his inspection of the northern frontier, and left the disposition of some bands of ewes with Gutierrez, who kept all the sheep. We do not know the outcome of Pino's subsequent appeal to the governor.

Gutierrez served as syndic (business agent) of the Franciscan Order in New Mexico, and was therefore responsible for managing church lands and livestock. He used this position for his own advancement - in one case in which he was authorized to collect a debt owed to the Order, he demanded livestock worth perhaps four times the amount owed. He was later ordered by the governor to return a specified sum to the debtor.

Gutierrez represented the Bishop of Durango for eight years as collector of tithes in New Mexico. He bought this office at auction in 1777 and farmed out collections in the Rio Arriba to his brother-in-law. A contemporary report (by Father Juan Agustín de Morfi) criticized the system of contracting out collections and the huge profits that accrued to Gutierrez.

In 1777 Governor Mendinueta imposed a new embargo on exports of sheep, cattle and unprocessed wool, noting in his decree that a few individuals contracted sheep before they were born, hoping to control the market and to realize excessive profits. It is probable that Gutierrez was one of those meant. In 1779, Mendinueta's successor, Juan Bautista de Anza, made a census in which he recorded a steep decline in livestock numbers from twenty years earlier.

Gutierrez died in 1785. At his death he had 7,000 yearling and two-year-old wethers ready for sale, another 6,600 for fall delivery, 13,000 ewes on *partido* to twenty-four *partidarios* in the

Rio Abajo. He owned three ranches at Pajarito and San Clemente on the Rio Grande and a ranch on the Rio Puerco.

**Mariano Chaves y Castillo**.

Mariano Chaves y Castillo was the biggest sheep trader in New Mexico during the Mexican period. His great-grandfather was don Juan Miguel Alvarez del Castillo, a Spaniard who came to New Mexico early in the 1700s, married twice into prominent local families, and served as alcalde mayor of Acoma, Laguna and Zuni. He mixed trading and livestock as did many of New Mexico's upper class. After his third marriage he moved to El Paso. He died while traveling through the Rio Abajo in 1765. The subsequent inventory of his property showed that he had debts receivable from New Mexicans all over the province, from Abiquiu to Belen.

In 1832 Chaves, then resident in Los Padillas, sent 30,000 head of sheep to Durango, the largest delivery made by a single individual in the Mexican period (Baxter 1987). Chaves, his brother José, their uncle Antonio Sandoval and the Otero family owned two-thirds of all the sheep (135,500 out of 204,200) exported from New Mexico in the period 1835-1840.

Chaves was among the sheep exporters who requested export tax relief from the Mexican national congress in 1836 (a seven-year exemption from the tax was granted in 1838. He briefly served as New Mexico's governor from January-April, 1844. He kept a store at San Miguel del Vado, where the Santa Fe Trail crossed the Pecos River.

Chaves died on May 16, 1845. His son, J. Francisco Chaves, born at Los Padillas in 1833, took sheep to Los Angeles in 1854 by way of Zuni, the White Mountains and the Mogollon rim, the Gila, the Pima villages and the Yuma crossing of the Colorado River. This route, however, was not used again, as far as we know. The preferred route was the Spanish Trail described above. In 1829-30, as noted above, Antonio Armijo had reached California by a somewhat different route.

**Antonio Armijo**

Armijo is referred to in official records as "citizen Antonio Armijo" and "commandant for the discovery of the route to California." We know little about him except what we learn from the record of this trip.

Armijo initiated commercial traffic between New Mexico and California. In 1829-30, with sixty men and a pack train, he traveled from Abiquiu west-northwest, forded the San Juan near its junction with the Animas, recrossed the San Juan at the Four Corners to avoid the canyons downstream, and crossed northeastern Arizona to the Colorado (to the Crossing of the Fathers, the crossing used by Dominguez and Escalante and named for them), then southwesterly to the sites of St. George and Las Vegas, then south of Death Valley to near modern Barstow, then to the San Gabriel mission and to Los Angeles. Armijo and his party bartered wool blankets for horses and mules then returned to New Mexico.

Armijo made a record of his trip to California. Two versions, the first unofficial and the second official, were published in the Registro Oficial del Gobierno de los Estados-Unidos Mexicanos on June 5 and 19, 1830. The diary entries are brief. Armijo notes water sources and encounters with Indians- "on this day [December 10, 1829] there was found a settlement of Payuches, with no mishap; it is a gentle and cowardly nation" (Hafen 1850:127).

Armijo says that he "returned [to New Mexico from California]...by the same route with no more mishap than the loss of tired animals, until I entered the Navajo country, by which nation I was robbed of some of my animals, and I arrived in this jurisdiction of Xemez today the 25th of April, 1830" (Hafen 1950:131).

## CATTLE RANCHING

Ranching is not specific to open grasslands. "Cattle ranching...thrived in a great variety of New World physical environments, from tropical savannas to subtropical pine barrens and mid-latitude prairies, from fertile lowland plains to rugged mountain ranges, from rainy districts to semi-deserts" (Jordan 1993:9). Ranching was practiced in settled areas as well as on frontiers, and not every frontier went through a ranching phase.

In some areas in the American West, native animals (e.g. bison) were driven off or decimated to make way for cattle. In most places there were few competitors or predators that could keep cattle out. The most successful predator on cattle in North America was the Indian.

"...no herding system has ever attained, in any locality, a stable ecological balance, except at a lower productivity level than existed there when pastoralism first began. The open-range cattle-ranching strategy invariably caused habitat modification and damage" (Jordan 1993:10).

By the time of the discovery of America, the raising of range cattle occupied a broken belt of land on the Atlantic rim from Scandinavia and the British Isles down to Angola in Africa. Range cattle raising was to be found in highlands, islands, marshes, moors, savannas and semideserts, having been forced to the edges of two continents by more intensive farming practices. Ranching would similarly become established in a wide variety of coastal, marsh, plains and highland environments in the New World.

Aspects of cattle culture that we often consider typically North American are in fact well known in the Old World. Cattle droving from Scotland and Wales into the British lowlands may be thousands of years old (Jordan 1993:51). The Fulani of West Africa have traditionally used earmarks, but not cattle brands. Lassos were used in Spain and France, although not for roping from horseback, but usually to pull animals out of deep mud or marsh.

Southwestern Spain, including Extremadura and Andalucia, were range cattle growing areas at the time of the discovery of America. Ranchers raised cattle in the salt marshes of the Guadalquivir in Andalucia and on the adjacent wooded sandy hills, developing commercialized large-scale open-range ranching by early in the sixteenth century. At the same time, a distinct highland range cattle system developed in Extremadura.

Permanent Hispanic settlement began in New Mexico in 1598 with Oñate, but Hispanic New Mexico never became a center of cattle ranching. "Perhaps the single greatest retarding factor was the presence of a substantial established population of Pueblo Indian irrigation farmers" (Jordan 1993:146). The mission fathers, Jordan contends, blocked the development of a large-scale cattle industry in order to protect the fields and crops of the Indians. Oñate introduced breeder flocks of sheep, and these continued to dominate even after the reconquest of the 1690s. Diego Padilla south of Albuquerque owned 1,700 sheep but only 141 cattle in 1740. By 1757 all the Hispanics of the province owned fewer than 8,000 cattle and fewer than 2,500 horses. In 1832 there were 240,000 sheep in the department but only 5,000 cattle and 850 horses. Sheep became "the economic hallmark of the regional Euroamerican culture" (Jordan1993:147) and were adopted by the Navajos and Utes. Early nineteenth century expansion onto New Mexico's frontiers was initiated by herders who sometimes founded villages. This expansion, made possible by the Comanche Peace negotiated by Governor de Anza at Pecos in 1786 after signal military victories, continued for almost a century, until checked and pushed back by the arrival of Anglo ranchers on all New Mexico's margins.

The "Texas system" of cattle ranching evolved on the coastal prairies of southwestern Louisiana and in contiguous southeastern Texas. It was a system derived from several sources: the Louisiana French, the inhabitants of the Southern pine barrens, and the Mexican Texans, or *tejanos,* influenced mainly by Gulf Coast practices from Veracruz and Tamaulipas. The essence of this system, deriving both from the Carolinas and from northeastern Mexico, was the practice of letting cattle care for themselves year-round in localized pastures on the open range, without supplemental feeding or protection. This system somewhat resembled that of the Andalusian marshes in Spain. It was sometimes called "rawhiding."

The Mexican contribution to this system was less important than that of the Carolinas and Louisiana (Jordan 1993:212). The Mexican influence had to do mostly with horseback skills, especially roping. Mexican cowboys, or *vaqueros*, worked mainly in the country south of the Nueces, and were rare in north Texas and rarer still in the rest of the West. The "Texas system" of cattle ranching that reached New Mexico in the 1860s and 1870s, then was not substantially derived from Mexico or Mexican practices, but owed more to the Carolinas and Louisiana.

Texas cattle herds began to move to midwestern feeder areas as early as the 1840s and 50s, mainly along the Shawnee Trail that ran up from north-central Texas through Oklahoma into Missouri (Kansas City and Sedalia). However, the Shawnee Trail was soon plagued by thieves and hostile farmers. Texans began following trails further west after 1866, skirting the edge of the plowed lands to reach railroad shipping pens in Kansas and Nebraska, mining districts in the Rocky Mountains, and Indian agencies in New Mexico and the northern Plains. Thus the Goodnight-Loving Trail came into existence. Cattle were first brought into New Mexico in substantial numbers by Oliver Loving and Charles Goodnight (1866) to supply the Indian agencies. The other two major trails were the Chisholm and Western, crossing Texas and Oklahoma into Kansas. The Western Trail branched from Dodge City into eastern Colorado and up across eastern Wyoming to Montana.

The passage of the Homestead Act of 1862 and the establishment of Fort Sumner happened in the same month (November). The existence of the fort was the reason for the first cattle drive by Goodnight and Loving into New Mexico in 1866.

Until the mid-1870s many of the large herds driven north were used to stock ranges in Colorado, Wyoming, Montana and Idaho. The largest single cattle drive ever in New Mexico was in 1874, when 110,000 head were trailed north from Roswell to Colorado (Williams 1986:120). When Indian raids declined in western New Mexico in the 1870s, John Chisum and the Slaughters drove herds to military posts and rangeland in western New Mexico and Arizona.

In the early 1880s, with the end of the Indian wars, the number of cattle companies began to increase rapidly. A successful cattle company had to control water. It was first necessary to survey the townships so that land entries could be filed on water sources.

John P. Casey of Albuquerque made entries south of Quemado in late 1882 in the names of various men including a black cook and a doctor who lived in Dodge City. These individuals filed homestead and preemption claims on both sides of Largo Creek. They then sold their claims to Casey (Westphall 1965:58). The requirement that actual settlers reside in a township in order for it to be surveyed was largely ignored. Eleven claims by eleven different individuals were entered on one day (January 2, 1883); six of them were commuted to cash payment on one day (March 15, 1883). Casey entered into a verbal partnership with Surveyor General Atkinson, who gave him plats of the area (American Valley) before they were approved or filed in the Santa Fe Land Office. Casey subsequently acquired several partners, including Thomas B. Catron, who became the attorney for the group.

Casey was typical of a class of businessmen who acquired control of water and land by using straw men, while forming partnerships with investors and influential lawyers and public officials, like Catron and Atkinson.

Cattle operations established on the basis of homestead claims were fraudulent from their inception, since they ignored the legal requirement for growing crops. Only 58 percent of homestead entries in New Mexico were actually patented (Westphall 1965:65); where grazing was the land use, actual ownership was not essential. Westphall emphasizes fraud, but shows us something else: the fact that a majority of homestead claims were patented is consistent with the conclusion that the homesteads were actually used by people - newcomer Anglo small farmers and native Hispanics - who were at least attempting to conform to the requirements of law.

Texas ranchers established themselves in the San Agustin Plains and the Valle Redondo. By the early 1880s they were moving longhorns east along the Magdalena Livestock Driveway to the railhead at Magdalena. A few Texans moved into the San Juan River Valley of northwestern New Mexico, and from there into southeastern Utah (Jordan 1993:229).

In the 1880s John Chisum controlled the entire area between the Pecos Valley and the Texas border south of Fort Sumner. His herd was about 60,000 at its largest. His headquarters at South Spring created the little commercial town of Roswell. By the end of the 1880s much of Chisum's range had been cut up into cattle companies such as the Littlefield (LFD), Mallet and DZ.

From about 1876 to 1884 New Mexican *pastores* followed the trails of the *comancheros* and *ciboleros* into the arroyos and canyons of the Canadian River, establishing plazas with complexes of buildings. The plaza of Ventura Barrego at one time had twenty-four houses; the plaza of Jesus Maria Trujillo consisted of a large stone corral, a long stone main building with six rooms, and several small buildings separated by a space from the main dwelling. The houses were built with adobes or slabs of sandstone, laid up in mud mortar, with viga and adobe roofs. Texas ranchers forced the *pastores* back into New Mexico (Robinson 1979:150; Cabeza de Baca 1954:4-10; Urbanofsky 1973: 4-6).

The "Texas system" of cattle ranching spread through the Great Plains and the interior northwest, as far north as the Dakotas and southern Canada. It favored big operators. Some of them acquired huge tracts of land like the XIT Ranch in the Texas panhandle (originally a Mexican land grant) or the Armendaris and Montoya Grants in New Mexico. Others depended on eastern capital, attracted by low overhead costs and large profits.

The Maxwell Cattle Company on the former Beaubien and Miranda Grant in Colfax County covered over 1.7 million acres, with more than 10,000 cattle and 50,000 sheep. The Bell Ranch on the former Pablo Montoya Grant controlled water rights on over 2 million acres. Cowtowns for the Maxwell and the Bell were Cimarron and Liberty, respectively. By 1872 southeastern San Miguel County was controlled by the Consolidated Land, Cattle Raising, and Wool Growing Company. By 1880 the area that is now Union County was controlled by the Prairie Cattle Company (Williams 1986:122).

Politicians speculated in land. The largest operator was Thomas B. Catron, the Santa Fe politician and lawyer who became one of New Mexico's first senators in 1912. He may have been the largest individual landowner in the history of the United States, with about 2 million acres in his own name. Catron controlled the northern half of present-day Catron County through his American Valley Company. Catron was first and foremost a land speculator, with only a superficial interest in what was actually done on the land. Albert B. Fall, who became the other U.S. senator from New Mexico in 1912, acquired the Tres Ritos Ranch north of Tularosa, where he raised cattle.

In the 1880s it was widely assumed that cattle ranching was a way to quick profits. It depended on the use of the public domain. A calf worth five dollars could be matured on the public domain and reach a sale value of forty or fifty dollars in four years (Clark 1987:596).

Large herds on vast ranges attracted bands of cattle thieves. Rival gangs established headquarters near the cattle ranges and fought wars among themselves and with the cowboys. The Stockton gang was involved in the San Juan War near Farmington; the Selman's Scouts raided between Eddy (now Carlsbad) and Roswell. In the 1880s a rustlers' war in Doña Ana County had to be suppressed by the territorial militia. The Colfax County War was fought between miners and Maxwell Ranch cowboys; the Lincoln County War was fought among ranchers trying to gain a regional monopoly. Some cowboys who got involved in these wars became outlaws and professional gunmen, and their names are still familiar. William ("Billy the Kid") Bonney, who worked as a cowboy for one of the principals in the Lincoln County War, became the most famous of all.

The "Texas system" collapsed in the late 1880s. A system derived from coastal lands, based on Iberian longhorns that had never experienced a severe winter, could not work indefinitely in the high cold High Plains. There were winter die-offs in 1871-72 in the central Great Plains, drought in eastern Colorado in 1879-80, a severe winter of 1879-80 in Utah, and then the catastrophic winter of 1884-85, that killed as much as ninety percent of some herds, and finally the winter of 1886-87, which is often referred to as the single event that ended open-range ranching. In 1889 there were blizzards in New Mexico; at least nine cowboys and sheepherders in northeastern New Mexico died of exposure, and hundreds of cattle and at least 26,000 sheep froze to death (Arellano:10). The Crónica de Mora, however, expressing the views of some farmers in the area adjacent to the High Plains, viewed the record snowfall as "an unlimited supply of water for spring...and the settlers in the mountain valleys in this vicinity should go to work, now that there is time to do it, to build substantial reservoirs for the storage of water for the irrigation of lands late in the spring or during the early summer. The last two seasons have demonstrated that during dry spells there is not sufficient water on hand for the irrigation of lands now under cultivation" (La Crónica de Mora, November 30, 1890).

"Open range" is a term for the Texas system of letting cattle care for themselves, and is best defined by what it is not and does not do. As the term indicates, it does not involve fence-building. This system begins to disappear as soon as there are competing uses or claims on the land. In New Mexico, it is the system introduced from Texas in the 1860s, and continues in the 1870s, then begins to decline in the 1880s. However, raising cattle without fences persisted in some areas into the twentieth century, for example in Lea County (where open-range cattle raising was still the rule about 1910 and continued into the 1920s) and elsewhere. In a conversation with "Uncle Jim" Burleson at the Fite Ranch headquarters in southeastern Socorro County in 1984, this writer asked: "When did you come to this country, Uncle Jim?" "1911, wasn't no fences" he answered (personal communication).

The railroad created major stock towns and shipping places such as Clovis, Clayton, Tucumcari, Chama, Carrizozo and Magdalena, yet cattle totals did not increase in the early twentieth century. Homesteading began to break up the ranges; drift fences had to be removed. Barbed wire began to delimit most ranches.

Some ranching terms still in common use are Anglo-Californian, not Texan as often thought. *Rodeo*, for a cattle hunt or roundup, is in common use in California by 1850 and spreads through the west. Hackamore from *jaquima*, *bosal*, taps from *tapaderas*, cavvy or cavvayard (group of horses) from *caballada*, chinks (short chaps), corral from *corral* are all Anglo-Californian, according to Jordan (1993:256-57).

Jordan (1993:264) suggests that western cattle transhumance (seasonal movement, that is, between summer and winter pastures) is derived mainly from the California ranching tradition, with Pacific coastal and Mexican roots, but may also owe something to New Mexico highland herders, although they were herding sheep, not cattle.

The number of large ranches in New Mexico (that is, ranches over 50,000 acres) increased in the twentieth century, due mainly to the decline and disappearance of the homestead and the absorption of homesteaded lands into ranches (Cormier 1994: 87). At the same time, the immense nineteenth-century ranches were broken up into more manageable sizes or sold to major corporations.

## Human Behavior – Cattle Ranching

"The cowboy" became a stereotype of American culture in the twentieth century. In fact the backgrounds, activities, and ethnicity of ranchers and cowboys varied widely.

### Charles Goodnight

Charles Goodnight (1838-1929) was the first of the Texas cattlemen to bring cattle into New Mexico. Goodnight, of Pennsylvania German origin, was born in Madison County, Illinois, and came to the Brazos area of Texas in 1845 with his family. He worked at various jobs relating to farming, ranching and the development of a new country, including supervising slaves at various types of work. At twenty, he took a bunch of cattle into the San Saba Valley. In 1857 he took a herd of cattle into Palo Pinto County. He worked in this area (Palo Pinto, Parker and Young Counties) for the next ten years. Here he met Oliver Loving, a small slave-owner and owner of a store, who trailed cattle to Shreveport, Alexandria, New Orleans, and eventually to Illinois and Denver.

Goodnight resolved to leave the Texas frontier, creating a new cattle trail west of the old ones. His idea was to avoid the pre-Civil War trails, since other cattlemen would undoubtedly be using them, to find previously ungrazed country, and to market cattle in the mining region of the Rockies, where buyers would have cash and gold. The Comanche and Kiowa on the High Plains made a direct route impossible, so Goodnight decided to go by the Butterfield Trail to the southwest, then up the Pecos. He discussed his plan with Oliver Loving and they agreed to join herds. This made two thousand head of cattle and an outfit of eighteen men. Their point of departure was twenty-five miles southwest of Belknap, Texas. They sold steers at Fort Sumner - which had existed then for two years - and Loving took stock cattle on to Colorado, past Las Vegas, across the Raton to the vicinity of Denver. Goodnight went back to Texas to bring up another herd.

When Goodnight returned with the second herd, he and Loving established a winter camp at Bosque Grande, forty miles below Fort Sumner, making dugouts in the east bank of the Pecos. This was the first ranch established by Texan cattlemen in eastern New Mexico (Haley 1949:147). They made some deliveries of cattle to Santa Fe, and regular deliveries to Fort Sumner.

All of Goodnight's cattle ventures through the 1870's were in areas never previously grazed, and in describing them he refers to towns that did not then exist.

Goodnight placed a herd on the Canadian River in eastern New Mexico in 1875. He established camps for his cowboys before returning to Colorado. He designated his range and told his cowboys "not to molest the *pastores* as long as they stayed outside the designated range for his cattle" (Haley 1949:278). Since New Mexican *patrones* had been running sheep in eastern New Mexico since the