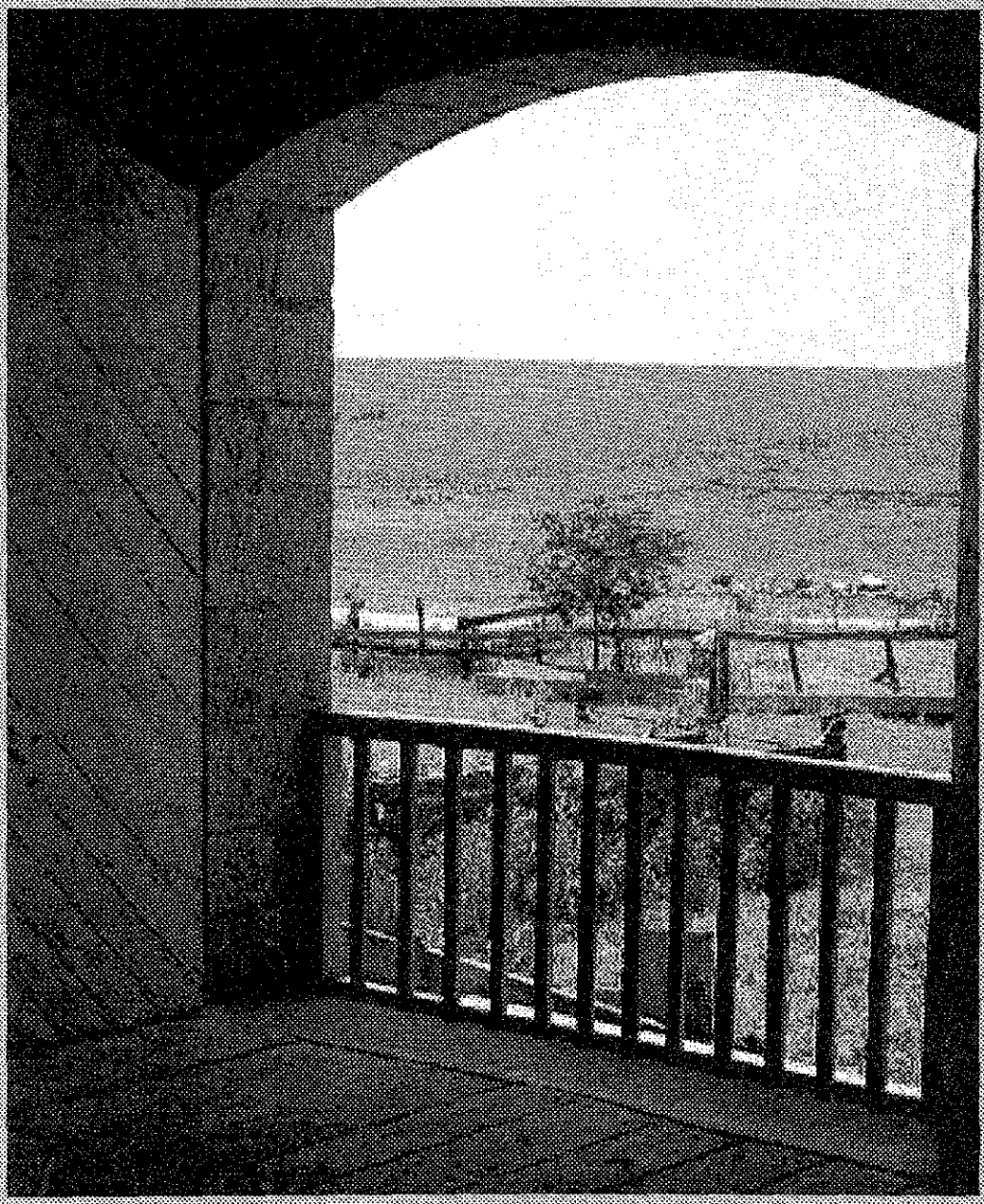
Tallgrass Prairie National Preserve



Historic Resource Study

By Hal K. Rothman and Daniel J. Holder

National Park Service

Contract # 1443PX600098121

United States Department of the Interior

NATIONAL PARK SERVICE

MIDWEST REGION
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August 23, 2000

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Memorandum

To: Technical Information Center, Information and Production Services Division, Denver Service Center (DSC-PGT)

Through: Chief, Cultural Resources, Midwest Region

From: Architectural Historian Dena Sanford, Cultural Resources, Midwest Region

Subject: Tallgrass Prairie National Preserve Historic Resource Study

Attached for your information is a copy of the final *Tallgrass Prairie National Preserve Historic Resource Study.* The historic resource study was prepared under contract with Hal K. Rothman and Associates.

Additional copies have been provided to the following:
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Attachment

Tallgrass Prairie National Preserve

Historic Resource Study

By Hal K. Rothman
And
Daniel J. Holder

United States Department of the Interior
National Park Service
Midwest Regional Office
Cultural Resources

Omaha
2000

Tallgrass Prairie National Preserve

Historic Resource Study

Hal K. Rothman

United States Department of the Interior
National Park Service
Midwest Regional Office
Cultural Resources

Omaha
2000

RECCOMMENDED:

Chief, Cultural Resources — Date: 23 May 00

CONCURRED:

Superintendent, Tallgrass Prairie National Preserve — Date: 6/27/00

APPROVED:

Regional Director, Midwest Regional Office — Date: 6/30/00

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Chapter 1:

Cattle and the Kansas Flint Hills

Rich in luxuriant tall and short grasses that make it prime cattle grazing country, the bluestem pasture of the Flint Hills of east-central Kansas is distinctive. Simply put, it looks different from the lands around it, and as a result it possesses a history different from most of Kansas. Undulating mounds glow bright green in the summer sun, and its crevasses create depths that seem to be at the bottoms of deep wells. The bluffs that make up the Flint Hills are mostly limestone-based rock outcroppings that play a significant role in supporting the overlying vegetation. That plant life, particularly the various species of wild grasses, has combined with water resources, topography, and geographic location to play a crucial part in making the area a key part of the nation's beef industry.[1]

The geographical boundaries of the Flint Hills are clear. Observers know the moment they leave the grasslands; as they enter the low-lying, humid area near Emporia to the north or the dry plains to the south and west, the differences are unmistakable. Stretching from Pottawatomie County, Kansas, to Osage County, Oklahoma, the bluestem region appears on maps as an elongated, oval-shaped area almost 200 miles long and fifty miles wide. At the close of the twentieth century, the National Park Service received authorization to preserve, restore, and interpret a small part of this ecosystem. Created on November 12, 1996, and located in Chase County, Kansas, Tallgrass Prairie National Preserve holds almost 11,000 acres of prairie that made up a significant portion of the Spring Hill/Deer Park Ranch cattle operation and was designed to tell the story of people and the grasslands that once dominated the center of the North American continent.[2]

The ecological significance of the Flint Hills transcends human history. The last remaining significant expanse of unplowed tallgrass prairie in the United States, the region is a vestige of an earlier geological landscape. Vegetation common at the time of historical contact between Europeans and Indians predominates, as tallgrass or true prairie species, including switchgrass, big bluestem, little bluestem and Indian grass, still characterize the Flint Hills. Three major waterways cross the Flint Hills – the Republican, Blue, and Kansas rivers. Several others, including the Neosho (Grand), Cottonwood, Marais des Cygnes (Osage), and Walnut rivers receive water from the area. Tallgrass Prairie National Preserve's water drainage systems – larger courses such as the Cottonwood River and its South Fork, Middle Creek, Palmer Creek, and Diamond Creek, and their feeder streams – are lined with stands of burr oaks, walnuts and

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[1] James C. Malin, *History and Ecology: Studies of the Grassland* (Lincoln: University of Nebraska Press, 1984): 165-66.

[2] Bruce A. Jones, *Archeological Overview and Assessment for Tallgrass Prairie National Preserve, Chase County, Kansas* (Lincoln, NE: Midwest Archeological Center, National Park Service, 1998).

hackberry trees, and other woody and grass species. Chase County's hills contain more than seven hundred plant species and almost one thousand species of vascular plants. Many of the lowland acres with deep soil have been cultivated into pastures of smooth brome, winter wheat, milo, corn, soybeans, and alfalfa. Atop many of the bluffs, thin layers of sod laced with pieces of chert make the fields difficult to cultivate. As a result, the area has won renown for its cattle grazing.[3]

The Flint Hills is an ecological remnant of a much larger ecosystem. At one time, 1.1 million square miles of grass and savanna dominated the center of the North American continent. Created after the last Ice Age, these grasslands took their present form about 11,000 years ago. Stretching east to west from Indiana to the Rocky Mountains, grasses grew on lands too wet to become deserts and too dry to support forests. A host of other environmental factors contributed to their development. The relatively young Rocky Mountains to the west became the most defining environmental feature of the plains, blocking the moisture-laden winds that blow off the Pacific Ocean from reaching the region's western zone and refocusing wet air masses coming north from the Gulf of Mexico further to the east. As a result of this ecological combination, grasses predominated the landscape. Less than one-third of those central 1.1 million square miles were grassland-tree mixtures, with small groups of trees covering between 10 percent and 75 percent of the terrain.[4] The grasses seemed to stretch forever.

The human history of the Flint Hills closely links environmental change and cultural behavior. Human beings develop the systems called culture as a complex web of strategies and techniques that enable them to cope with survival problems in specific ecological contexts. Other living things adapt physiologically to assure survival; humans alone use culture as an instinctive response to environmental pressures and limitations. The environmental conditions imposed by the Flint Hills have affected every human population that ever settled there. The Tallgrass Prairies had a distinct set of uses to each of the peoples who came to make its lands their own. Despite its initial foreignness to both native peoples and the European-American settlers who followed them, all learned to see the prairies in the terms of their culture, to adapt to its advantages and to develop strategies to limit its disadvantages. The deep grasses of the Flint Hills fed abundant wildlife, and along river courses, seeps, and small springs a wide array of plants made gathering possible. Humans learned to support themselves by exploiting those resources. Later those grasses came to support cattle brought in from hundreds of miles away. Much of human behavior and indeed human history in the region stem from this pattern of accommodation.[5]

Shaping that behavior was the Flint Hill's fundamental liminal condition, for the region lies in a series of transition zones. Located within what geographers describe as the Central Lowlands Province of the Interior Plains of North America, the Flint Hills contain a series of microclimates, each diverse from one another. Chase County lies in a boundary zone between the subtropical

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[3] Vascular plant species: Ira Lee Barnard, who has done extensive study of the plant species at Tallgrass Prairie. She references a 1969 University of Kansas science bulletin for this information.

[4] James T. Neill, *Soil Survey of Chase County, Kansas* (Washington: United States Department of Agriculture, Soil Conservation Service, in cooperation with the Kansas Agricultural Experiment Station, 1974).

[5] Larry L. Naylor, *Culture and Change: An Introduction* (Westport, Conn.: Bergin & Garvey, 1996): 1-60; Marshall Sahlins, *Culture and Practical Reason* (Chicago: University of Chicago Press, 1976): 169-70, 205-210.

climate of the southeastern United States and the semiarid Great Plains. Located in the northern section of the Flint Hills, it exhibits many of the traits of the southern parts of its region. Periodic seasonal droughts typify the area, but expansive, grassy pastures and tree growth limited to the fertile bottom lands next to streams reveal elements of a subtropical climate. Except for the southernmost range of the Flint Hills in southern Kansas and northern Oklahoma, average annual rainfall reaches 30 to 35 inches. In that southern portion, higher average temperatures and longer frost-free periods offset lower precipitation levels. In southern Kansas, eight additional days in the average year remain free of frost, permitting a wider range of agroeconomic strategies. In the northern parts of the Flint Hills, earlier frost obviates the advantages of greater rainfall, creating a transitional bioregion.[6]

Like its climate, Chase County's soil is classed as transitional. The United States Department of Agriculture places the county's soil within two of its classifications: prairie soils associated with forest-grassland transition zones, and alluvial. Both are relatively fertile and with care will support agriculture. Although they are laden with coarse chert fragments of as much as three inches in diameter, Chase County's upland soils tend to have a well-drained texture, making them suitable for prairie grasses. The silty clay loam alluvial soils of the area's flood plains and low terraces are deep and well suited for cultivation, provided farmers practice conservation. Rolling hills, featuring extensive limestone bluffs that are divided by narrow valleys, define the region. This mineral resource proved to be of considerable economic worth as local entrepreneurs in the post-Civil War era quarried the area's limestone for building materials for the region and the nation.[7]

The Flint Hills represent a transition zone for several other environmental categories. Its vegetation encompasses tallgrass and mixed grass habitats, while the land immediately to the north of the Blue and Kansas rivers shows well-eroded features marking the southernmost reach of the glaciers. Ecologists categorize most of North America's prairie midsection as tallgrass, mixed-grass, and shortgrass prairie, divided by an east-west gradient measuring annual precipitation. Tallgrasses comprised the larger bluestem and Indian grass that dominated the region's eastern 120,000 square miles, including the eastern third of Kansas. Directly to the west, mid-size grasses covered the terrain, although tallgrasses are found in riverine environments and other moist areas. In the drier areas, little bluestem clusters predominated, alongside junegrass, needlegrass, and western wheatgrass. Short grasses thrived in the drier climate to the west, as buffalograss, blue grama, and other species of grass adapted to the environmental extremes of the

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[6] Malin, *History and Ecology*, 165-66.

[7] Ibid., 247; according to a 1948 aerial survey, of the county's 495,360 acres, 69,241 acres have slopes of less than 2 percent with no abrupt changes in relief; 126,302 acres have moderately sloping topography ranging from 2 percent to 7 percent; 170,000 acres have somewhat steeper slopes of 8 percent to 14 percent; 117,314 acres have steep hills or bluff-like slopes of more than 14 percent. *Physical Land Condition Affecting Use, Conservation, and Management of Land Resources: Chase County, Kansas* (United States Department of Agriculture, Soil Conservation Service, May 1948): 1-4.

region.[8]

In addition to the vast fields of grass, the Flint Hills was home to hundreds of animal and insect species. Fine grazing provided for a wealth of animal life, and flora and fauna adapted to each other. During earlier geological periods, large herbivorous mammals such as elephants, horses, camels, and bison thrived on the area's vegetation while they themselves provided nutrition for human hunters. Mammals either extinct or now strangers to the plains, such as the plains grizzly and the bighorn sheep, once crossed the Flint Hills. Until recent times, bison, pronghorn antelope, elk, and mule deer lived on the tallgrasses. Currently, most of the grasses are devoted to grazing cattle, but native species still inhabit the region, including smaller animals such as coyotes, bobcats, jack rabbits and small burrowing animals such as gophers.[9]

Despite the aeons of animal life in the Flint Hills, human population has registered the greatest impact on the region, and in turn has been most affected by its environment. Humans learned advantages that sustained their societies through extended experience that can best be characterized as trial and error. People initially tapped the Flint Hills natural resources, pushing against the biogeographical limits of the region and the boundaries of their cultures. When technological advances permitted humans new ways to shape the physical environment for their cultural and economic gain, they met the region on its own terms. They adapted their culture to the potential they learned to see. Reflecting broader trends in environmental history, the region's earliest inhabitants made comparatively few demands on the often erratic and always undependable Great Plains environment. Later settlers to the area utilized a more potent arsenal to achieve their ends. Assisted by technologies that helped tame the hills and valleys and better transportation systems that connected far-flung communities and enabled residents to survive the worst environmental setbacks, these settlers brought different expectations that demanded more from the land. This constellation of forces and the cultural values of the people who developed it commenced large-scale environmental change, transforming the land into a source for the needs of a society far distant from the Flint Hills of Kansas.[10]

The human presence in the east-central Kansas area dates back at least ten thousand years, with many sites showing evidence of long-term occupation and use. Initially, the animals and plants supported by the grassy prairie and the relatively easily accessible rock faces where chert could be quarried and sharpened into tools and weapons were primary attractions. More than 150 recorded prehistoric and historic sites – animal kill sites, quarries, burial mounds, and campsites – have been identified in Chase County, with another several hundred known sites in the

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[8] Janet E. Bare, *Wildflowers and Weeds of Kansas* (Lawrence: Regents Press of Kansas, 1979): 1-6; Daniel S. Licht, *Ecology and Economics of the Great Plains* (Lincoln: University of Nebraska Press, 1997): 1-5.

[9] Eugene D. Fleharty, *Wild Animals and Settlers on the Great Plains* (Norman: University of Oklahoma Press, 1995): 11-27; Waldo R. Wedel, *An Introduction to Kansas Archeology* (Washington: Government Printing Office, 1959): 3-18 and Wedel, *Environment and Native Subsistence Economies in the Central Great Plains* (Washington, Smithsonian Institution, 1941); communication with Robert Mathews, Kansas Department of Wildlife and Parks, April 17, 2000.

[10] Joseph V. Hickey, *Ghost Settlement on the Prairie: A Biography of Thurman, Kansas* (Lawrence: University Press of Kansas, 1995): 26-31; Waldo Rudolph Wedel, *Prehistoric Man on the Great Plains* (Norman, University of Oklahoma Press, 1961): 29, 128-9.

surrounding Flint Hill counties of Morris, Lyon, and Marion. As far back as the Paleo-Indian era, when humans advanced onto the Central Plains following the last retreat of the North American glaciers, the natural resources of the Flint Hills supported small human communities. By the time the Europeans pushed onto the plains in the mid-sixteenth century, scattered groups of peoples may have lived throughout the area. These horticulturalists supplemented their diets by hunting the animals that lived on the surrounding grasses with weapons made from the materials they found around them.[11]

The limits of the region defined the practices of the people who came to the Great Plains before and after written history. Prehistoric pre-horse cultures spread all across the Great Plains on foot, adapting to environmental limits, but without horses they were limited to sedentary societies. Most of these communities were clustered around sources of water, with limited contact between different groups. All were limited in the ways in which they could exploit the region's animal resources, with hunting of bison restricted to communal affairs where herds were driven over cliffs or small numbers of animals were isolated in rough funnel-shaped enclosures that drove the bison to the killing zone. What horses allowed Indians to do was hunt bison more efficiently, with small numbers of men collecting large numbers of animals as needed instead of the whole community engaged in the pursuit. Nomadic groups began exploiting the rest of the plains' resources only after mounted travel became widespread. Horses also revolutionized transportation opportunities for villages and individuals, and made increased trading contacts possible, by allowing the movement of large numbers of trade goods.[12]

Incoming Europeans and Americans saw the region through their own cultural limitations. The first French explorers from Canada, entering Kansas from the east, labeled the region a prairie, seeing in it the grassy orchard or a park with scattered trees of their homeland. When Americans came, they saw a landscape they neither understood nor appreciated. Brought up in the typically wooded areas along the eastern seaboard, Americans labeled the treeless plains as worthless, imposing their own cultural expectations and the limits their perspective contained. The area lacked the primary necessity of their culture, the wood that so dominated nineteenth-century American society. People of the culture of wood, they derived much of their sustenance from it: their homes, their fuel, their tools, and many of their other accouterments. Without wood, they were lost. When they looked at land they rated its value by the amount of wood it contained. By this measure, the Flint Hills were impoverished and of minimal value to their society.[13]

In place of forests that covered eastern North America, these prairies were filled with grasses that displayed their splendor in tall thin stems that in the richer alluvial soils outside the Flint Hills could arch more than nine feet high. Despite the impressive show, the unseen truly distinguishes the prairie's natural ecosystem. Grasses are able to survive and flourish because of their large extensive root systems, vegetation made possible by the level of precipitation and high-quality sod. All across Missouri, Indiana, Iowa, Illinois, and eastern Kansas, the rich soil drew

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[11] Jones, *Archeological Overview and Assessment*, 1-29.

[12] Frank Gilbert Roe, *The Indian and the Horse* (Norman: University of Oklahoma Press, 1955): 11-71.

[13] James C. Malin, *History and Ecology*, 15-16; John Perlin, *A Forest Journey: The Role of Wood in the Development of Civilization* (New York: W.W. Norton, 1989).

early emigrants, and their settlement efforts became tenable with the invention of a plow in the middle of the nineteenth century that could easily break up the thick sod formed by generation of prairie plants. This farming device devastated the grasses' root system, and within a relatively short time, usually two planting seasons, the newcomers turned most of the tallgrass prairie into vast fields of croplands. Settlers' efforts modified most of the original grasslands and few areas escaped the plow. The Flint Hills provided a primary exception. Within Tallgrass Prairie National Preserve, cattle have been the predominant industry, and as a result, most of the original grassroot ecosystem has survived. Today Chase County is one of the few places in the American West where both unirrigated agriculture and small- and large-scale animal husbandry are possible. [14]

Even with the power of industrial technologies and the transportation systems that made their society function, the Flint Hills possessed only fixed and ultimately limited potential to American settlers. Unlike the humid climates east of the Mississippi River, where rainfall routinely topped thirty inches per year and the predominant color of the landscape was green rather than golden brown, the Flint Hills were marginally suited for the agroeconomic regime of the nineteenth-century United States. The unusual environmental characteristics of the Flint Hills made the process of harnessing it different from nearly every other place in the American West. The physical nature of Chase County, its historical circumstances, and economic patterns combined to preserve much of the precontact vegetation. Flinty soil provided the most obvious reason that the region escaped large-scale cultivation during the Euro-American pioneer period, but just as the tallgrass shows off its stem and leafs while hiding its roots far underground, the continuation of the cattle industry sprang from deeper, hidden causes. In most American frontier communities, ranchers preceded farmers, raising animals on relatively low-value lands until increasing populations and changing conceptions of use raised their value. Many parts of the Flint Hills reversed that cycle, with ranchers eventually supplanting Chase County's early farmers. From necessity and circumstance, the Euro-American emigrants who survived in the area learned to rely on cattle for their economic livelihood.[15]

As the country faced an increasingly bitter sectional debate over slavery during the middle of the nineteenth century, thousands of Americans headed west. They sought economic prosperity and political control of the new lands that belonged to the nation by the power of Manifest Destiny, the divinely guided mission laid out in 1845 by John L. O'Sullivan, editor of the *United States Magazine and Democratic Review*, that called for the United States to assume control of the entire continent. The West was shaped by the ever-extending railroad tracks, most running in

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[14] Walter M. Kollmorgen and David S. Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures of Chase County, Kansas," *Annals of the Association of American Geographers* 55, no. 2 (June 1965): 260-290; George Cameron Coggins and Michael McCloskey, "New Directions for the National Park System: The Proposed Kansas Tallgrass Prairie National Park," *Kansas Law Review* 25, no. 4 (Summer 1977): 480; Joseph V. Hickey and Charles E. Webb, "The Transition From Farming to Ranching in the Kansas Flint Hills," *Great Plains Quarterly* 7 (Fall 1987): 246-47.

[15] Richard White, *"It's Your Misfortune and None of My Own": A New History of the American West* (Norman: University of Oklahoma Press, 1991): 3; Frank Wilson, "Landscapes: A Geologic Diary," in Rex Buchanan, ed. *Kansas Geology: An Introduction to Landscapes, Rocks, Minerals, and Fossils* (Lawrence: University Press of Kansas, 1984): 19-20.

an east-west direction, linking the raw materials of the western region to the industrial parts along the Atlantic seaboard. Farmers and ranchers in the new territories and states quickly became part of a national market economy, and national demand for products soon influenced their activities. Kansas became a territory in 1854, just as the nation's agricultural sector entered a three-year period of prosperity blunted by the national economic depression of 1857, an early harbinger of how the two sections of the country were interrelated. The territory's economic picture brightened with the discovery of gold in the mountains surrounding Denver. Thousands of Americans traveled across Kansas in pursuit of sudden wealth, and merchants and farmers suddenly saw a new flood of customers to satisfy.[16]

When Euro-Americans crossed America, they initially viewed the prairies with a mixture of hope and disdain. Great Plains settlement came as an afterthought in American expansion, for many settlers considered the region nothing more than the "Great American Desert," to be traversed as quickly as possible on the way to more fruitful places beyond. Many of those seeking frontier opportunities looked past the broken terrain and sought the broad plains further west, but some liked what they saw in the Flint Hills. Chase County attracted enough people to organize in 1859, two years before Kansas attained statehood. Named after Ohio Governor Salmon P. Chase, the new county calved from the southern portion of Wise County and the northern section of Butler County.

The sectional unrest that led to the Civil War isolated Texas, the nation's largest cattle-producing state, from the rest of the nation, and for the four years of conflict its immense, mainly unmanaged herds only grew bigger. The economic and transportation disruptions caused by the war left the county with immense herds in Texas and hundreds of thousands of consumers eager but unable to buy beef. After the war ended in 1865, ranchers began driving the animals west, feeding soldiers at isolated Army posts and Indians confined to reservations. The cattlemen also drove their herds north, at first directly to the stockyards of the cities and later to rail heads that fed those cities. By 1870, Abilene, a small Kansas town with a rail connection that was surrounded by huge areas of grazing land, became the major destination for countless steers. Many cattle owners made fortunes from their herds, but the prosperity did not extend far beyond the corridors created by the cattle trails.[17]

Left out of the initial growth of the cattle trade, the Flint Hills farming population grew slowly. Chase County remained mostly prairie, interrupted by thin bands of wooded areas and small farming plots. Broader economic circumstances eventually contributed to the region's development as a locale for cattle grazing. As did many other counties in the bluestem region, Chase County became prime grazing territory for cattle imported from elsewhere in the Southwest before shipment to eastern markets. This development reflected the marked increase in consumer demand for meat and meat products in both the United States and Europe that followed the Civil War. Located at the end of long cattle drive trails and near major rail transhipment

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[16] Sam W. Haynes and Christopher Morris, ed. *Manifest Destiny and Empire: American Antebellum Expansionism* (College Station: Texas A&M Press, 1997): 8-10; Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado* (Lawrence: University Press of Kansas, 1998): 6-14.

[17] Joseph G. McCoy, *Sketches of the Cattle Trade of the West and Southwest* (Kansas City: Ramsey, Millett and Hudson, 1874): 111-34.

points, the Flint Hills region became connected to the larger national cattle industry early in its history. The link created a service industry of feed distributors, bankers, and veterinarians to assist local cattle traders and ranchers. Chase County's major towns had their roots in agriculture and transportation, the county seat of Cottonwood Falls for its verdant grasslands and its close neighbor to the north, Strong City, as an important stop on the Atchison, Topeka and Santa Fe Railroad (AT&SF) line, a major shipping point for the area's cattle and limestone, and to a lesser extent, its agricultural products.[18]

Across the West, range cattle dominated from about 1870 to 1885, only to be replaced by cattle ranching. Changes in consumer preferences and the development of affordable barbed wire revolutionized the industry and led to the substitution of controlled pasturing of high-quality herds for unrestricted grazing of unblooded longhorns on public lands. The expansion of railroad lines into the Flint Hills area, especially tracks connecting to Kansas City and Chicago, fostered the growth of a regional agriculture industry. Someone had to construct the region's railroads, along with stock pens and cattle loading facilities, and the rails had to be maintained. In itself these became an important ancillary industry. Predictably, a regional economy developed with cattle-raising at its core. In the broader picture of Chase County's development, the expansion of transportation made the Flint Hills part of a Midwestern component of the larger national market economy.

Traditional frontier businesses also contributed to the area's development. Trading posts, general stores, mills, lumber yards, banks, and local offices for the cattle trade developed and expanded over time. Quarries and construction companies were additional important Chase County industries because of the abundance of local limestone. In addition to business and financial expansion, the creation of institutions such as churches and schools, as well as local media, helped new residents discover a sense of place. The county's first newspaper, the *Kansas Press*, appeared in Cottonwood Falls on May 30, 1859, edited by abolitionist, community leader, and entrepreneur Samuel N. Wood. A free-state paper, it described the city as having but two cabins, and only one had a board floor. The *Kansas Press* and its numerous successors were instrumental in chronicling the area's economic growth as well as the differences that arose between the county's farming and ranching interests, including debates over fencing and water rights, herd laws, and quarantine of incoming cattle.[19]

The cattle trade needed supporting businesses to thrive, but maintaining the herds remained the core industry. Grazing eventually rose to dominate Chase County's agricultural economy, and one of the key locations that illustrates that story is the cattle operation founded by Stephen Jones and continued by his immediate successor, Barney Lantry, the first two owners of the land that historically been known as the Spring Hill/Z Bar Ranch and today comprises Tallgrass Prairie National Preserve. Representing dramatically diverse backgrounds – Jones a product of the Texas frontier and Lantry arriving in Kansas after careers in the North – the men

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[18] White, *It's Your Misfortune*, 28-29; William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991): 207-47; Joseph Nimmo, "The Texas Cattle Trade, 1870," in Wayne D. Rasmussen, ed., *Agriculture in the United States: A Documentary History*, vol. 2 (New York: Random House, 1975): 1141-46.

[19] Chase County Historical Society, *Chase County Historical Sketches*, Vol. 1 (1940): 68-70.

found common ground in the cattle industry. Their backgrounds contributed to differing viewpoints. These two protagonists defined the Spring Hill/Deer Park Farm, today's Z Bar Ranch, and gave their operations significance in the cattle trade. That importance became part of a larger whole, of the story of peopling, settling, and transforming the nation.

Viewed as part of the westward expansion of the United States in the nineteenth century, the cultural history of the Spring Hill/Z Bar Ranch reveals the changes in the Midwestern cattle trade. Like the industry as a whole, the ranch changed from an open range, resident-owner operation to the closed range, absentee-owner pattern that succeeded it.

Growing along with the Kansas cattle industry was the railroad system. In Chase County, the AT&SF connected the grazing areas with the ranges where the animals were born and the slaughterhouses where they died. Western railroads such as the AT&SF received enormous grants of land as partial compensation for the cost of building the rail system. When they could, they filled these lands with immigrants. Colonization agencies, steamship lines, and European agents flooded England, France, Germany, and other northern European countries with colorful, boastful circulars extolling the agricultural virtues of Kansas.[20]

The American settlers who established the region's cattle industry depended upon the technological transformations engendered by railroads and barbed wire. Improved transportation opened up urban markets to meat produced on the plains, while the new fencing material of barbed wire, patented in 1874, transformed grazing patterns. It ended the widespread practice of cattle owners grazing and watering their herds on public lands, kept traveling stock out of local crops and off local and private range, and imposed a formidable order on cattle raising in general. Once barbed wire became available, the richer owners could afford to purchase and enclose large tracts of land for the exclusive use of their herds. Enclosing the open range permitted better breeding practices, and blooded stock, whose meat consumers demanded, quickly replaced the scrawny Texas Longhorn, the eight pounds of hamburger on eight hundred pounds of hoof of regional lore. With barbed wire, cattle raising ceased to save a place for roustabouts and vagabonds and instead became the business of landed gentry. The fences also reduced labor costs and cattle losses, but the cost of acquiring lands greatly increased the initial stake needed to enter the cattle business.

The Flint Hills are among the most unspoiled tallgrass prairie ecosystems remaining in America, and remain one of the best examples of an American Indian ecology. Tallgrass Prairie National Preserve shows how humans used and shaped the unique environment of the Flint Hills to the specific needs of human cultures. In a post-industrial society where agricultural work is part of an increasingly distant past, the preserve provides a clear link to a way of life that most Americans revere, but few have ever experienced. In this it offers a window into the national soul, a look at who we were so that we can see who we have become.

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[20] Keith L. Bryant, Jr. *History of the Atchison, Topeka and Santa Fe Railway* (New York: Macmillan Publishing Co., 1974).

Chapter 2:

Early Flint Hills Inhabitants

The combination of grass and hills captures the eye of Flint Hills visitors. That pairing is ancient; it has undergone thousands of years of living, dying, and coexisting. Say the word "Kansas" to those unfamiliar with the state, and images of tornadoes and flat lands running out to the distant horizon are most likely to come to mind. In parts of the state, the weather is all too often as bad as portrayed in story, while the unrelieved landscape, starkly beautiful in its own way, has little appeal to those who accept the standard conventions of scenic beauty. The myth of Kansas topography and weather describes the western half of the state. The terrain across the eastern third of Kansas offers great variety, and the Flint Hills contain some of the best vistas in the state. Running through the Kansas counties of Clay, Riley, Dickinson, Geary, Wabaunsee, Marion, Chase, and Butler, the irregular oval-shaped landmarks created by eons of geographic forces provide a counterpoint to the legend of *The Wizard of Oz*.[1]

The jagged bluffs originated millions of years ago. Continents, oceans and atmosphere began forming during the Precambrian Era, dating from the earth's formation about 4.65 billion years ago to about 600 million years ago. Continental land masses were created and destroyed throughout the Precambrian Era and its successor, the Paleozoic. The region that far in the future became Kansas was covered by shallow seas during the opening periods of the Paleozoic, starting the creation of limestone layers. These layers became the basis of east-central Kansas today.

During the era's final period, the Permian, about 286 million to 245 million years ago, the Flint Hills were formed. The seas continued their cyclic raising and lowering, leaving behind deposits of limestone, shale, and chert. The sedimentary rocks formed by the deposit of the shallow inland seas' dead marine life were buried under several thousand feet of rock, compacting the mass. Uplift and erosion eventually exposed the rocks and centuries of erosion wore away softer sedimentary material, leaving behind harder limestone deposits.[2]

In the subsequent Mesozoic Era, the eastern half of what became Kansas experienced little significant geologic activity. During the era's earliest period, the Triassic, which started about 225

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[1] Rex Buchanan, ed. *Kansas Geology: An Introduction to Landscapes, Rocks, Minerals, and Fossils* (Lawrence: University Press of Kansas, 1984): 2-5; John C. Frye, "The Erosional History of the Flint Hills," *Transactions of the Kansas Academy of Science* 58, n. 3 (1955): 79-86; Grace Muilenburg, *Land of the Post Rock: Its Origins, History, and People* (Lawrence: University Press of Kansas, 1975); Raymond Wood, ed., *Archeology on the Great Plains* (Lawrence: University Press of Kansas, 1998): 16-19; Douglas B. Bamforth, *Ecology and Human Organization on the Great Plains* (New York: Plenum Press, 1988): 2-14; Bruce A. Jones, *Archeological Overview and Assessment for Tallgrass Prairie National Preserve, Chase County, Kansas* (Lincoln, NE: United States Department of the Interior, National Park Service, Midwest Archeological Center, 1998): 10-11.

[2] W. Brian Harland, *A Geologic Time Scale* (Cambridge: Cambridge University Press, 1992): 23-4; Preston Cloud, *Oasis in Space: Earth History from the Beginning* (New York: W.W. Norton and Company, 1988): 121-138, 210-211; Colin W. Stearn, Robert L. Carroll, Thomas H. Clark, *Geological Evolution of North America*, 3d ed. (New York: Wiley, 1979).

million years ago, dinosaurs emerged, following millions of years later by the first mammals. In the Jurassic, the era's middle period which began about 195 million years ago, the continent of North America tore away from modern-day Europe and Africa, drifting west across the Pacific Ocean's volcanic zone, beginning the geological processes that eventually created western North America's mountains. Primates and flowering plants originated about 136 million years ago, during the Mesozoic era's final period, the Cretaceous. The westward drift of the continent continued the creation of the mountain chains along its western border, and the uplifts blocked the inland waters from flowing west, creating a huge swamp across the continent.[3]

Erosion and earthmoving upheavals reshaped the Rocky Mountains during the following Cenozoic period. Shifting tectonic plates caused a second round of uplifting across the North American continent, raising the Rockies 3,000 meters and lifting the present Mississippi River basin hundreds of meters. The uplifts eventually played a crucial role in the Great Plains' climate as the new mountain ranges, now the Rocky Mountains, Sierra Nevada, and Sierra Madre of Mexico, interrupted the usual pattern of wind and weather known as the Pacific Westerlies. Moisture-carrying air masses heading east from the ocean were forced upwards. Cooled as they rose, the clouds condensed and released their water in rain and snow along the western edge of the mountain ranges. For the inland areas, the resultant "rain shadow" contributed to the end of the continent's middle swath of swamps and pine forests. They were replaced by what would one day be millions of acres of grassland. Aiding the introduction of new vegetation species was a climatic change that brought warmer, drier air, fostering the development of grassy replacements.[4]

The unique characteristics of the Flint Hills combined with the global forces acting on continents, geological changes reshaping huge stretches of land, and individual drops of rain eroding away tiny pieces of rock. When crop production began after human settlement, those changes left a lasting impact. Outside of the river bottoms, the area's soil was never especially suitable for cultivation. The limestone, consisting of the mineral calcite, made up of calcium carbonate chiefly deposited by marine sediments, contains numerous bands of chert. Because chert is much less soluble than the surrounding limestone, when the rock erodes it leaves behind a clay-dominant soil containing large quantities of flinty gravel. This process does have positive results. The resulting blanket protects the underlying rock, slowing the rate of erosion. As a result, the crests of the Flint Hills are higher in elevation than surrounding lands that do not contain chert.

Between the vegetation and the topography lies the soil. Flint Hills soil is the oldest in the state, its initial development beginning about 60 million years ago. Eroded material from the softer minerals of the Rocky Mountains constitutes only part of the makeup of the soil. The limestone remnants of the Cretaceous sea that once covered the region added to the soil, providing tons of

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[3] Alan G. Smith and David Smith, *Atlas of Mesozoic and Cenozoic Coastlines* (New York: Cambridge University Press, 1994); Cloud, *Oasis in Space*, 364-370; H. Gier, "Vertebrates of the Flint Hills," *Transactions of the Kansas Academy of Science* 70 n. 1 (Spring 1976): 51-9.

[4] Annick Smith, *Big Bluestem: Journey into the Tall Grass* (Tulsa, OK: Council Oak Books, 1996): 23-26; William T. Barker, "The Flora of the Kansas Flint Hills," *The University of Kansas Science Bulletin* 48 n. 14 (October 17, 1969): 525-84; Ron Redfern, *The Making of a Continent* (New York: New York Times Book Co., 1983): 161; Frank Wilson, "Landscapes: A Geologic Diary," in Buchanan, *Kansas Geology*, 19-20.

additional nutrition to the grass systems, as did ashes from volcanic activity, minerals and rocks transported by glaciers, and the addition of vegetative material from grasses living and dying atop the soil. As a result, most of eastern Kansas' soil is classified as Mollisol M1, characterized by a dark color reflecting a large degree of decomposed plant and animal matter.[5]

The drier conditions in Kansas and across the Great Plains continued after the Miocene era ended about ten million years ago. During the following Pliocene and Pleistocene eras, grasses became more widespread and the forests shrunk to narrow lines of trees that lined waterways. In the latter epoch, which ended about ten thousand years ago, glaciers crawled south and reached northern Kansas at least once. The grasses escaped total destruction by seeding lands to the south during glacial advances and moving northward again following their retreats. As a result, the grasses that make up the prairie have different origins: needlegrass and bluegrass developed in the north; buffalo grass and grama originated in the mountain plateaus of Mexico. The Big Bluestem (*Andropogon gerardi*) and Little Bluestem (*Andropogon scoparius*) species are semitropical in origin and are thought to have developed in the east or southeast of the continent. Paralleling the expansion of grasses were animals that took advantage of the new nutritional source. Many Pleistocene mammals were larger than their modern-day counterparts. The wide expanses of prairies, digestive systems that allowed more efficient ingestion of the vegetation, and the development of large mammalian predators, which helped ensure development of swifter survivors, all contributed to the larger sizes. Plains-dwelling animals also developed high-crowned teeth that appeared to replace dental material ground away by chewing the harsh grasses. Remains of moose, deer, elk, and bison species measurably larger than those now living have been found in Kansas.[6]

Big bluestem is the primary grass in Chase County. It once dominated the continent's mid section, growing in the secondary flood plains of broad stream valleys from Canada's Lake Winnipeg to the Texas Gulf Coast, and reached east to Illinois and west to Wisconsin. The Big Bluestem's leaf growth can reach four to six feet above the ground, with seed stems stretching as high as nine feet, and its root system can extend more than seven feet into the ground. The roots form a thick mat through the soil, branching and extending in every direction. The fast-growing plants create a canopy which helps stifle competition from other grasses. Big Bluestem and its drier sibling, Little Bluestem, comprise nearly 70 percent of natural prairie vegetation. These

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[5] Thomas B. Bragg, "The Physical Environment of Great Plains Grasslands," in Anthony Joern and Kathleen Keeler, eds., *The Changing Prairie: North American Grasslands* (New York: Oxford University Press, 1995): 50-52; James C. Malin, *History and Ecology: Studies of the Grassland* (Lincoln: University of Nebraska Press, 1984): 12-13; A.S. Hitchcock, *Manual of the Grasses of the United States*, United States Department of Agriculture Miscellaneous Publication No. 200 (Washington, D.C.: United States Government Printing Office, 1950); Alvin Lugn, *The Origin and Sources of Loess in the Central Great Plains and Adjoining Areas of the Central Lowlands* (Lincoln, NE: The University, 1962): 19-33.

[6] Cloud, *Oasis in Space*, 387; John E. Weaver and F.W. Albertson, *Grasslands of the Great Plains: Their Nature and Use* (Lincoln, NE: Johnsen Publishing Co., 1956): 9; Debra K. Bennett, "Fossils," in Buchanan, *Kansas Geology*, 119-122; Brian S. John, *The Ice Age, Past and Present* (London: Collins, 1977); P.G. Riser, E.C. Birney, H.D. Blocker, S.W. May, W.J. Parton, and J.A. Wiens, *The True Prairie Ecosystem* (Stroudsburg, PA: Hutchison Ross Publishing, 1981): 26-28.

species predominate, lending the Flint Hills the appellation "Bluestem Hills."[7]

Grasses in the Midwest and on the Great Plains succeeded because they thrived in local climatic extremes that included wind, fire, drought, and rain. Unlike trees, grasses have tough stems small enough to let the wind slide around them, and the stem's outer rind consists of a silicon oxide that provides lightweight strength. Traces of silicon also reinforce the plant's cellular structure, helping it grow. Big Bluestem plants depend upon the wind for pollination and lack the intricate flowering mechanisms that attract insects. The leaves of bluestem grasses are uniform in thickness, with clusters of large "hinge-line" cells in the leaf tissue's upper epidermis. These clusters tend to lose water rapidly and contract, causing the leaf to roll into a long narrow tube. The leaf's pores, through which water vapor passes during transpiration, are on the inside of this tube, decreasing water loss during periods of drought.[8]

The plant's structure and growing cycle also make it ideal grazing material. Bluestem leaves grow from their bases, not their tips; even when the grass blade is eaten, it continues growing. When the stem itself is consumed, the old stem bases begin producing new shoots. The plant growing season peaks before May, storing key nutrients, including lime from the underlying stones, just as bison began spring feeding and American Indians on horseback came out of winter camps to roam the plains. Later, European-American cattle owners scheduled their herds' arrival in this period to secure a final period of grazing before market. Unlike trees, prairie grasses do not store large amounts of energy in cellular structures of wood. Each plant efficiently consumes its share of available materials and converts it into useful output, either in the vegetation on which grazing cattle thrive during the early summer growing season, its root systems during the winter months that constantly rejuvenates the surrounding soil, or in death with its return to the prairie's biomass.

Bluestem grass and cottonwood trees were not alone on the grasslands. Early Euro-American travelers in Kansas recorded examples of vegetation such as numerous species of the composite family of flowers, including sunflowers, dandelions, cocklebur, and thistle; legumes such as broom and alfalfa; and less extensive species of grasses. Other potential sources of nutrition for animals and humans included fruits and berries, grapes, plums, gooseberries, raspberries, and black walnuts.[9]

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[7] John Madson, *Where the Sky Began: Land of the Tallgrass Prairie* (Ames: Iowa State University Press, 1995): 63; Peter Farb, *Face of North America: The Natural History of a Continent* (New York: Harper and Row, 1963): 207; John E. Weaver, *Prairie Plants and Their Environment: A Fifty-year Study in the Midwest* (Lincoln: University of Nebraska Press, 1968): 6, 32-7; Weaver and Albertson, *Grasslands of the Great Plains*: 66-7.

[8] Madson, *Where the Sky Began*, 57-8.

[9] Malin, *History and Ecology*, 31-34; Homer A. Stephens, *Trees, Shrubs, and Woody Vines in Kansas* (Lawrence: University Press of Kansas, 1969); J.A. Warren, "Notes on the Number and Distribution of Native Legumes in Nebraska and Kansas," United States Department of Agriculture, Bureau of Plant Industry, Circular No. 31 (1909); James L. Phillips and James A. Brown, eds., *Archaic Hunters and Gatherers in the American Midwest* (New York: Academic Press, 1983): 1-10; Mary Adair, *Prehistoric Agriculture in the Central Plains: Its Development and Importance* (Ph.D. diss, University of Kansas, 1984); Thomas F. Doran, *An Observation in That Unlawful, Wide-Flung Kingdom* (1922): 482-501, cited in Thomas A. Witty, *The Slough Creek, Two Dog and William Young Sites, Council Grove Lake, Kansas* (Topeka: Kansas State Historical Society Anthropological

Prairie grasses dominate the Flint Hills. Those grasses have adapted to their environment, lying dormant during the peak lightning season, and quickly regenerating from seeds or roots following periods of drought. Tree growth is limited by periodic droughts and lightning-sparked fires. The trees that have survived in the Flint Hills, most notably fast-growing poplar trees such as cottonwood, grew in areas sheltered from fire or in areas of reliable ground water, as in river bottoms. The continued outbreaks of fire on the Great Plains resulted in a virtual monoculture of grass. Eventually human planting of domesticated grasses such as wheat replaced the native grasses over much of the area, and the suppression of prairie fires allowed the spread of trees away from protected places. The controlled burning of stubble replaced whole-scale prairie burning, and the pattern of burning owed more to the needs of the crop instead of the objectives of hunters.[10]

The region's plant, animal, and mineral resources attracted human settlement. Archaeologists cannot assign the prehistoric Paleo-Indian period a definitive beginning and end, but instead treat it as a time period that started about 12,000 years ago, when now-extinct faunas were still evident across the Great Plains. It is likely that humans reached the plains even before that time. During the Pleistocene (Ice Age) period, which ended about 11,000 years ago, natives of Asia moved across a land bridge across what today is the Bering Sea, likely following game animals to North America. These ancestors of the American Indian gradually moved down the middle of the continent, probably in an ice-free zone just to the east of the Rocky Mountains. The global climate in which glaciers flourished dictated typically cooler and wetter weather patterns across the Great Plains than those of today. The Pleistocene climate and the resulting vegetation supported many animals and plant species now extinct or no longer seen in Kansas, including mammoth, mastodon, and *Bison bison antiquus*, the ancestor of modern American Bison. To the humans who traveled along the ice-free front of the Rocky Mountains, the plains were enticing.[11]

Paleo-Indian societies that developed on the plains took advantage of the resources stored up in the grasses and animals of the plains. Paleo people concentrated on the hunt for large animals and supplemented their kill with gathered wild plants, including modern fauna that first appeared about six thousand years ago. Archaeologists have differentiated these cultures by the artifacts they left behind. The Llano cultural complex, dating from 10,000 to 8,600 B.C., is the earliest identified in Kansas. Clovis points, usually about four inches long, used in hunting of members of the elephant family, including mammoth and mastodon, mark the Llano culture. Artifacts from the Lindenmeier site, north of Fort Collins, Colorado, dating from 8900 to 8100 B.C., best represent the Folsom culture that replaced the Llano; it is identified by projectile points,

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Series Number 10, 1982): 10-11.

[10] G.P. Chapman, *Grass Evolution and Domestication* (New York: Cambridge University Press, 1992): 3-37, 200-15; United States Natural Resources Conservation Service, *Prairie Plants: Warm-Season Grasses, Flowers and Legumes* (Washington, D.C., United States Department of Agriculture, 1998); Janet E. Bare, *Wildflowers and Weeds of Kansas* (Lawrence: Regents Press of Kansas, 1979): 5-6; Stephen J. Pyne, *Fire in America: A Cultural History of Wildland and Rural Fire* (Princeton: Princeton University Press, 1982): 71-125.

[11] Waldo R. Wedel, *Prehistoric Man on the Great Plains* (Norman: University of Oklahoma Press, 1961): 46-78.

typically about two inches long, used to pursue species of now extinct *Bison bison antiquus* and *Bison bison occidentalis*, ancestors of today's American bison. The coordination and cooperation needed to isolate and kill large mammoths and bison contributed more than economic sustenance. It likely played a very significant role in cultural development.[12]

These earliest North American societies found Kansas' vegetation and fauna appealing. An abundance of natural resources useful for tools, medicine, and weapons made the area attractive. Prehistoric quarry sites have been discovered throughout the southern Flint Hills near Maple City, a few miles north of the Oklahoma border. Some smaller, older quarries have been found farther north in Kansas and artifacts made of the blue-gray stone have been uncovered throughout northern and northeast parts of the state. Nodules of chert have been found on exposed limestone slopes. These nodules were used to produce chipped stone tools, including the long slender cutting points that characterize the time periods.[13]

Environmental and geographic conditions have inhibited thorough reconstruction of the cultures of these early settlers. Llano sites have been excavated in states surrounding Kansas, while within the state only surface finds of Clovis points indicate the culture's presence. The oldest archeological deposits in Kansas are often exposed at or near the ground surface in the western part of the state, but are deeply buried in the eastern half, a function of long-term erosion in the higher western part and the depositing of sediments to the east. The Euro-American decision to use the Flint Hills primarily for grazing also played a role in archeologists' inability to uncover many artifacts. Early Paleo-Indian habitation sites on river bottoms are likely covered with silt, and occupation sites are on grazing lands that remain uncultivated. Both reduce opportunities to find surface artifacts, although artifacts have been found in numerous upland sites across the Flint Hills. Most of the significant archeological evidence in central Kansas has been excavated in conjunction with the construction of big reservoirs, where large-scale, funded research has been conducted.[14]

Changes in continental weather conditions brought on a new range of human communities known as the Archaic Period that lasted approximately six thousand years. Paleo-Indian cultures had also experienced varying climates, but the dramatic changes about eight thousand years ago, a renewed set of varied weather patterns classified as Middle Holocene, had a major role in the

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[12] Brian M. Fagan, *Ancient North America: The Archaeology of a Continent* (New York: Thames & Hudson, 1991): 66-86, 80-82; Brian M. Fagan, *The Great Journey: The Peopling of North America* (New York: Thames & Hudson, 1987); Kenneth A. Ashworth, *Phase I Project Review of Diamond Creek Watershed, Morris and Chase Counties, Kansas* (Salina, KS: United States Department of Agriculture, Soil Conservation Service, 1980): 9; Jones, *Archeological Overview and Assessment*, 10-12.

[13] Waldo R. Wedel, *An Introduction to Kansas Archaeology* (Washington, D.C.: U.S. Government Printing Office, 1959): 480-82.

[14] Ashworth, *Phase I Project Review of Diamond Creek Watershed,* 9-11; George C. Frison, *Prehistoric Hunters of the High Plains* (San Diego: Academic Press, 1991); Patricia O'Brien, *Archeology in Kansas*, University of Kansas Museum of Natural History Public Education Series No. 9 (Lawrence: University of Kansas, 1984): 27-31; D.D. Yaple, "Preliminary Research on the Paleo-Indian Occupation of Kansas," *Newsletter of the Kansas Anthropological Association* 17, n. 7 (1968): 1-9; E.N.Wilmsen and F.H.H. Roberts, "Lindenmeier, 1934-1974, Concluding Report on Investigations," *Smithsonian Contributions to Anthropology* (1978): 24.

development of new societies. Before this period of change, the east-flowing Maritime Tropical and Pacific air masses controlled the Central Plains' climate, and the resulting weather patterns produced the precipitation levels responsible for the development of vast prairie regions. Over the course of thousands of years, environmental changes forced Paleo hunters to modify their methods of survival. New climatic patterns killed off existing vegetation and introduced new species into the region.

The start of the Middle Holocene was marked by the beginning of the Altithermal or Hypsithermal Climatic Interval, a period of warmer, drier climatic conditions that continued until about 3000 B.C. As a result of the new weather patterns, tree growth decreased and grasslands spread out across the Plains. This new climatic norm was widespread across the Great Plains, and the reduced rainfall and warmer seasons produced striking effects upon area vegetation, animal, and human populations. As new vegetation patterns emerged and the availability of animals shifted in response, human societies in turn modified their diet choices and developed new technologies, including weapons and ceramics, to cope with the new conditions.[15]
These new environmental conditions also acted to hide artifacts from later archaeologists. In the Flint Hills, geomorphological evidence suggests that the reduced vegetative cover caused by the Holocene Period's decreased precipitation combined with the effects of brief, intense periods of rainfall to increase erosion patterns. This makes it likely that artifacts from Early and Middle Holocene environments were washed out of watersheds and drainage valleys. As a result, in the Flint Hills, little evidence of habitation sites from the Early and Middle Holocene have been located. One site with old Archaic materials has been excavated at the Coffey Site in the Blue River watershed of Tuttle Creek Reservoir. A radiocarbon date of 4335 B.C. was obtained from deeply buried charcoal at the excavation, about sixty-five miles north of Tallgrass Prairie National Preserve.[16]

In contrast to the earliest Archaic periods, the Late Archaic is well represented throughout the Flint Hills. Archeologists identified one community, the Munkers Creek Phase, defining it by artifacts found at the William Young site, about twenty miles north of the preserve, on a tributary to the Neosho River in Council Grove Reservoir. The deeply buried artifacts recovered include heavy knives and projectile points made of locally available chert, as well as modeled ceramic effigies in the shape of human heads. The two heads, dated to 5500 to 5000 Before Present (B.P.), are the earliest ceramic objects yet recovered in Kansas. Items associated with the Munkers Creek Phase have also been found at the Roniger Site Complex in Chase County, a few miles south of the preserve.

Another Late Archaic culture has been identified through excavations at the El Dorado and John Redmond reservoirs south and east of the preserve, and is classified as belonging to the El Dorado Phase. Projectile points found suggest the introduction of bow and arrow technology during the time period, reflecting the change in hunted animals from large mammals that required

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[15] Jones, *Archeological Overview and Assessment.*

[16] Patricia J. O'Brien, *A Most Preliminary Report of the Coffey Site, 14PO A Plains Archaic Site in Pottawatomie County* (Topeka: Kansas Anthropological Association, 1973); Larry J. Schmits, *The Coffey Site Environment and Cultural Adaptation at a Prairie Plains Archaic Site,* (M.A. thesis, University of Kansas, 1983).

spear thrusts for killing to smaller, faster animals.[17]

These Archaic Period cultures in the Flint Hills demonstrate a successful response to changing environmental conditions. The communities survived in the grasslands of the Plains, maintaining economic and social ties to groups outside the immediate area, and showed evidence of experimentation with new technologies such as ceramics and bow and arrows, and changed strategies for survival, including the introduction of intensive collecting of food materials, including edible plants and freshwater mussels. The accumulated data suggests a number of long-lived communities that possessed sufficient flexibility to overcome changes in weather patterns and the resulting evolution of plant and animal species.[18]

The pottery techniques that lend the next time span the overlying term "Ceramic Period" developed slowly, but they were transformative. Increased population density during the Early Ceramic period (A.D. 1 to 900) became possible as a result of new patterns of subsistence and continued technological developments in weapons and agriculture. The use of domesticated plants also figured prominently. Early Ceramic artifacts have been found throughout the Flint Hills, with the large numbers of recovered projectile points and substantive refuse pits suggesting relatively stable, semipermanent camps. These people relied on bison and deer, complemented by smaller animals, for much of their food. Evidence of the beginning of agriculture — the cultivation of corn and sunflower, combined with the use of grinding tools to produce meal, further suggests an enduring regime. Eight archeological complexes from the Ceramic Period, each with its own geographic center, have been identified across Kansas. Some are near Chase County. Kansas City Hopewell, with villages along the Kansas River north of the preserve, featured a dense series of settlements combining a large main village and several satellite sites along nearby creeks. Some of the ceramic artifacts of the Roniger collection in Chase County display Hopewellian influences. Settlements associated with the Cuesta and Butler phases are located to the south of Chase County, while counties to the east contain artifacts from another cultural grouping, the Greenwood Phase.[19]

The Middle Ceramic Period, which lasted from 1000 to 1500 A.D., was marked by increasing use of domesticated plants, especially the cultivation of beans, maize, sunflowers, and squash in family gardens. The period's changing weather patterns propelled social change, as increased amounts of rainfall reduced the risk of crop loss and made surplus harvests more likely.

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[17] Thomas A. Witty, ed. *Salvage Archeology of the John Redmond Lake, Kansas* (Topeka: Kansas State Historical Society, 1980).

[18] Jones, *Archeological Overview and Assessment,* 11-12; Ashworth, *Phase I Project Review of Diamond Creek Watershed,* 9-11; Frison, *Prehistoric Hunters of the High Plains*; Mary Adair, *Prehistoric Agriculture in the Central Plains* (Lawrence: University of Kansas, 1988); Bruce D. Smith, *Rivers of Change: Essays on Early Agriculture in Eastern North America* (Washington, D.C.: Smithsonian Institution Press, 1992); Kelly Kindscher, *Medicinal Wild Plants of the Prairie: An Ethnobotanical Guide* (Lawrence: University Press of Kansas, 1992): 1-11.

[19] O'Brien, *Archeology in Kansas*, 45-55; Witty, *The Slough Creek, Two Dog and William Young Sites*, 15-16; Thomas A. Witty, "Notes of Flint Hills Archeology," *Kansas Anthropological Association Newsletter* 14, no. 8 (April 1969): 2; Ashworth, *Phase I Project Review of Diamond Creek Watershed*, 11-12; Jones, *Archeological Overview and Assessment*, 18-23.

Shifts in agriculture, together with other technological changes, indicates that population groups in the Flint Hills and across Kansas adapted to a more sedentary lifestyle. Horticulture became a more prominent activity, supplanting hunting, although game animals still supplied significant nutrition. The emphasis on farming along waterways made possible increased population density, and several Middle Ceramic sites indicate the presence of greater numbers of larger buildings clustered together. Seven Middle Ceramic complexes have been identified in Kansas. Chase County and eastern Kansas most often reveals artifacts from the Pomona Variant, a descendant group of the Plains Village Tradition that existed from A.D. 1000 to 1600. Pomona artifacts have been found in Osage and Coffey counties east of Tallgrass Prairie National Preserve, and in Wabaunsee and Geary counties to the north. A typical Pomona settlement consisted of small scattered structures constructed of light thatch located along streams and creeks, but most sites are believed to be short-term campsites associated with food gathering. Pomona people probably were farmers who supplemented their diets with bison, deer, and elk. Another Middle Ceramic Period culture, the Smoky Hill Complex, dated between A.D. 1000 and 1300, dominated the region to the north of Chase County.[20]

Contact with Europeans after 1541 revolutionized the Plains societies. Across eastern Kansas, Late Ceramic groups brought the horse into daily life while maintaining parts of their pre-horse society. Ancestors of the horse lived in North America during earlier geological eras, but overhunting or climatic changes had wiped out the species. The animals that traveled over the Bering land bridge to Asia eventually spread eastward into Europe, and Spaniards brought their descendants to the New World. The reintroduction of the horse to North America by the Spanish during this period precipitated the beginning of widespread and comprehensive changes in plains life. The horse harnessed unbelievable potential. This new form of transportation revolutionized Plains life, increasing bison hunters' efficiency and people's range and creating new possibilities to augment sedentary horticulture and mobile gathering.[21]

Long before Europeans entered the Chase County area, cultures that later became the Wichitas, Osages, and Kansas continued to modify outside influences such as the Kansas City Hopewellian to local environments. The Great Bend Aspect, the cultural group that developed into the Wichita Indians, emerged around A.D. 1450 to 1700, occupying small permanent settlements along waterways throughout south-central Kansas. The population relied heavily on maize crops, which were often very productive. It is likely that they lived near their maize fields part of the year, during planting, crop maintenance, and harvesting seasons, and roamed after bison herds at other times. Great Bend Aspect artifacts have been found south of Strong City, as well as along the Cottonwood River near Marion, about thirty miles west of Tallgrass Prairie National Preserve. The Marion sites, located both along riverways and on bluff tops,

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[20] W.T. Brogan, *The Roth Site: An Early Pomona Focus Manifestation in Eastern Kansas* (Topeka: Kansas State Historical Society Contract Archeology Publication 1, 1982); R.M. Thies, *Archeological Investigations at John Redmond Reservoir, East Central Kansas, 1979* (Tulsa: U.S. Army Corps of Engineers, 1981); O'Brien, *Archeology in Kansas*, 59-65.

[21] John Canfield Ewers, *The Horse in Blackfoot Indian Culture: With Comparative Material from Other Western Tribes* (Washington, D.C.: Smithsonian Institution Press, 1980); Frank Gilbert Roe, *The Indian and the Horse* (Norman: University of Oklahoma Press, 1955).

include storage pits and trash deposits which indicate the large harvests and material wealth of the protohistoric Wichitas.[22]

Many of these paleo, archaic, and protohistoric populations knew about and used the resources available in Chase County. At least four prehistoric archeological sites have been identified and studied within Tallgrass Prairie National Preserve, including three quarries and workshops and a twenty-five-acre field covered with scattered pieces of worked flint. The artifacts show technological adaptions to the changing environment and demonstrate how these early human populations successfully adapted to their environment, changing their way of life to incorporate new technologies such as pottery. That cultural flexibility met its strongest challenge with the most significant early events of the Late Ceramic Period (A.D. 1500 to 1825), the reintroduction of the horse onto the Plains, brought there by the entry of Europeans in 1541.[23]

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[22] Jones, *Archeological Overview and Assessment*, 30-33.

[23] O'Brien, *Archeology in Kansas*, 67; Alfred W. Crosby, *Germs, Seeds and Animals: Studies in Ecological History* (Amonark, NY: M.E. Sharpe, 1994): 180-91.

Chapter 3:

Native Populations and Newcomers

Golden in the sun, the Flint Hills were like much of the American West: to anyone who failed to recognize that the land did not always deliver what it appeared to promise, they could become a dangerous place. The Flint Hills were deceiving; their grasses looked lush, the hills high and expansive. There was and is a beauty to the place, an idyllic feeling that derives from looking out over the wide vistas and the curves of the hills as the open world of grasses sways in the wind. The shapes and forms create symmetry that is comforting, the blue of the sky and white and gray of clouds juxtaposed against the land's bright brown-gold protruding upward. Like great waves, the hills crest into deep valleys; to ride the crest of one is to feel close to the sky.[1]

The limits of nature – of geography, topography, and geology – were millions of years old when humans settled in the region's river courses. That age and the natural growth it spawned became a trap for the uninitiated, the cavalier, the arrogant, or even the foolhardy who reached beyond their grasp. The combination created an illusory lushness, a rich bounty that stood only on the surface, the result of thousands of years of natural action, and could not be sustained without considerable skill. Hundreds of generations learned to coexist with environmental limits before the Europeans entered the plains. For people and their societies who failed to heed the clues the land offered, the Flint Hills had the potential to inspire great despair.

The Flint Hills were an integral part of a larger complex, the long stretch where the semi-agrarian woodlands to their east and the grass-rich plains to the west met and became intertwined. Through much of human history, the people of both needed one another. Woodland agrarian peoples sought the meat of large animals, abundant on the grasslands but often scarce closer to home as a result of their own hunting. The nomads of the plains, stocked with protein from the animals they hunted, conversely craved the carbohydrates grown to the east. The Flint Hills became one of the many boundary areas between these two fundamentally different types of living, an area where both kinds of practices could be undertaken, but in different places and often at different times of the year. The hills stood between both modes of life and through its river courses and grassy hills, joined them. In this, they possessed a value far greater than most histories have accorded them.[2]

The ability to harness the Flint Hills changed dramatically as humans acquired physical and social accouterments that revolutionized their actions. The region's indigenous societies faced

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[1] William Least-Heat Moon, *PrairyErth* (Boston: Houghton Miffin, 1991): 13.

[2] Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado* (Lawrence: University Press of Kansas, 1998): 42-55; Urs Bitterli, *Cultures in Conflict: Encounters Between European and Non-European Cultures, 1492-1800,* Ritchie Robertson, trans. (Stanford: Stanford University Press, 1989): 20-51; James R. Mead, *Hunting and Trading on the Great Plains, 1859-1875,* Schuyler Jones, ed. (Norman: University of Oklahoma Press, 1986).

new circumstances when Indians expelled from other parts of North America came to the plains, followed later by Europeans and Americans. The plains, the endless miles of grass, remarkable flatness, and occasional undulating hills, initially must have been as foreign to most incoming native people as they were to the whites who followed. The river courses and lowlands offered much, but the Indian settlers also made use of highland areas, creating workshops near chert outcroppings and using ridge tops for trails. Indian people of the woodlands and the mountains had adapted to their previous environments and the plains presented new challenges as well as new possibilities.[3]

Chief among the catalysts of transformation was the horse, which made life possible in new and different ways. Only the horse gave native people power over this country, while the land provided the nutrition the fleet animals required. The Osage, Comanche and others in the south acquired mounts from Spanish colonies in the seventeenth century; by 1724 horses were in use in eastern Kansas and by midcentury the use of horses spread to the Lakota in what is now Minnesota. Mounted on horseback, Indian populations could triumph over the limits of pedestrian society. They could traverse the distances of the plains more quickly and more certainly, with much greater assurance that they could track game and carry their kill back to their people. Rather than the obstacle they had been, the plains became an opportunity, and the most tempting prizes were the immense bison herds that now were vulnerable to mounted human hunters.[4]

At about the time Indian peoples became accustomed to the horse, the Flint Hills became home to more than scattered populations existing on grassland resources. By the time the Spanish were ensconced in New Mexico nearly 700 miles to the west, the plains were part of a large regional trade and social network. The Wichita, Osage, Pawnee, and Kansa, also called Kaw, groups already shared long and often intertwined histories in the Flint Hills. Despite their cultural differences, the Osage and the Kaw shared a common Siouan language family arising out of the Oneota tradition, one of the Upper Mississippian cultures that developed during the Ceramic Period. Archeologists believe the Oneota tradition dated to about 900 A.D., and evolved from a combination of societies, including peoples of the Woodlands, Mississippian, Caddoan, Central Plains, Middle Missouri, and Coalescent traditions. They represented one cultural vector that reached the Flint Hills. The Pawnee and Wichita came from another common tradition. They shared a Caddoan background, with the former possibly developing out of Upper Republican River communities in north-central Kansas and southern Nebraska. The Wichitas likely grew out of the Great Bend Aspect, which developed in south-central Kansas, near the great bend of the

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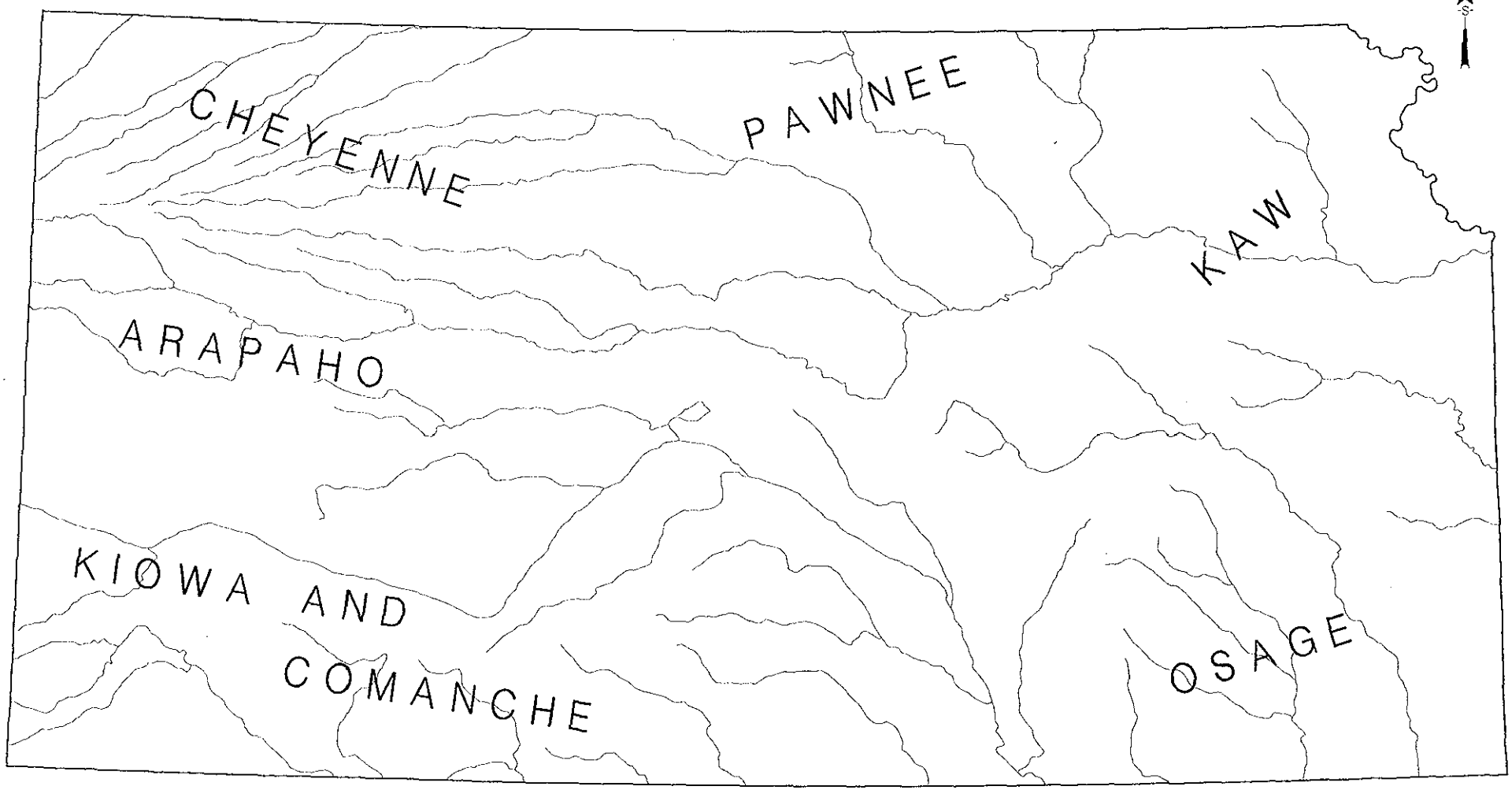
[3] West, *The Contested Plains*, 44-50; James H. Vandergriff, ed. *The Indians of Kansas* (Emporia: Teachers College Press, Kansas State Teachers College, 1973); William E. Unrau, *The Emigrant Indians of Kansas: A Critical Bibliography* (Bloomington: Published for the Newberry Library [by] Indiana University Press, 1979).

[4] Anthony McGinnis, *Counting Coup and Cutting Horses: Intertribal Warfare on the Northern Plains, 1738-1889* (Evergreen, CO: Cordillera Press, 1990); Frank Gilbert Roe, *The Indian and the Horse* (Norman: University of Oklahoma Press, 1955): 56-71, 78. General bibliographies that discuss the Indians of the Great Plains include George P. Murdock and Timothy O'Leary, *Ethnographic Bibliography of North America* (New Haven: Human Relations Area Files Press, 1975): vol. 5, and E. Adamson Hoebel, *The Plains Indians: A Critical Bibliography* (Bloomington: Indiana University Press, 1977).

EARLY INDIAN TRIBES IN KANSAS



Source: Homer E. Socolofsky and Huber Self.
Historical Atlas of Kansas
(Norman: University of Oklahoma Press, 1988)

Big Arkansas River and thrived between about 1450 and 1700 A.D. These two different traditions, each with a number of manifestations, coexisted between the plains and the more humid and timbered land to the north and east. The Flint Hills became a meeting zone, an edge area between differing cultural traditions, one traveling south and east, the other moving north and east.[5]

By the time of contact with the Americans, the Kaw may have been the primary inhabitants of the Flint Hills. They appear to have left their homelands sometime before 1673, the year of their first mention by the French expedition led by Fathers Marquette and Jolliet. Native tradition suggests that the Kaw moved from east of the Mississippi River, where they lived with similar-speaking groups that included the Osage. Anthropologists posit that the search for better agricultural lands or a westward pursuit of the bison herds became the underlying reason for their migration, while others suggest that a factional rift caused a dissident band to seek its own territory. Still others dispute this chain of causation, recently suggesting that the Kaw may have developed on the plains from the indigenous Pomona Variant, the Middle Ceramic/Early Plains Village culture that has been identified in western Missouri and eastern Kansas. The history of the Kaw before European arrival is unclear. French explorers reported the band as living in the area on a 1718 map, and in 1724 Etienne Véniard de Bourgmont visited a Kaw village north of modern Atchison, Kansas. Between 1800 and 1830, the primary Kaw village was located on the banks of Blue Earth River, near modern Manhattan, Kansas. American explorers Meriwether Lewis and William Clark noted the village's approximate position in their expedition report, and countrymen Zebulon Pike included it in his 1805 map.[6]

Kaw expansion into the Flint Hills suggested a geopolitical change within the American Indian world. The Upper Arkansas Valley, which the Kaw claimed as their hunting ground for seasonal pursuit of bison, previously had been Osage territory. The Kaw relocation to the Flint Hills offered better access to trapping and hunting opportunities to their west, as well as the threat inherent in the presence of more powerful Apachean plains tribes – the ones Spanish explorer Vazquéz de Coronado in the 1540s called the "Querechos." For more than a century, the Kaw ably sustained their claim to control of the region that surrounded the Flint Hills. As late as the early 1800s, French trader Auguste Choteau described Kaw influence as pervasive. It reached parts of Nebraska and Kansas in the Nemaha and Blue River drainages. In Kansas, their reach extended to the lower Republican River water system. Even in the early nineteenth century, the

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[5] Preston Holder, *The Hoe and the Horse on the Plains: A Study of Cultural Development Among North American Indians* (Lincoln: University of Nebraska Press, 1970): 23-88, compares the agricultural and hunting aspects of Plains life; Dale R. Henning, "The Oneota Tradition" and Richard R. Drass, "The Southern Plains Villagers" in *Archaeology on the Great Plains*, W. Raymond Wood, ed. (Lawrence: University Press of Kansas, 1998): 345-414; 415-56; Garrick Alan Bailey, *Changes in Osage Social Organization: 1673-1906* (Eugene: University of Oregon Anthropological Papers No. 5, 1973): 34-35.

[6] Waldo R. Wedel, *An Introduction to Kansas Archeology* (Washington, D.C.: Government Printing Office, 1959): 50-54; William E. Unrau, *The Kansa Indians: A History of the Wind People, 1673-1873* (Norman: University of Oklahoma Press, 1971): 12-13, 22; Henning, "The Oneota Tradition," 391, 393; Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815* (Cambridge: Cambridge University Press, 1992): 47.

Kaw could claim a firm hold on parts of the Flint Hills.[7]

Like their Kaw neighbors, the Osage were one segment of Dheigian-Siouan speaking peoples who lived in the forests along the Ohio River. By the mid-seventeenth century, they split from their linguistic cousins and settled between the eastern forests and the western plains. Their new location straddled the cultural divide between plains and woodlands, adding new strategies and practices to the ones that they brought from the east. Osage society showed the result of divergent influences. Their clan system, political organizations, material culture, and religion also revealed their proximity to people of different ways and the ease with which they adapted other cultural ideas and practices to their circumstances. Initially, the Osage maintained agrarian practices, but soon added seasonal forays onto the plains to hunt buffalo. In time, they developed a pattern that came to typify peoples between the woodlands and the plains. They took advantage of both environments on a seasonal basis, planting crops in the spring near their home villages along the rivers and roaming the plains in search of buffalo in the summer and fall.[8]

The Osage learned the advantages of a position between two worlds very quickly and exploited this niche for more than a century. For most of the eighteenth and the early nineteenth centuries, they established and maintained control over much of the area between the woodlands and plains. In close contact with the French, they traded for firearms, simultaneously preventing their neighbors to the west from receiving these power-giving accouterments. Military preeminence allowed them to expand into the territory of their Dheigian-speaking cousins as well as other peoples. The Osage made the area between the Missouri and the Red rivers their homeland during the eighteenth century, acquiring a reputation for being the most flexible and innovative of the prairie-plains peoples, the ones best able to negotiate the new influences that Europeans brought to the West and Southwest.[9]

After 1800, maintaining power and position became more difficult. Expanding European influence forced the Osage to redefine their status, and a significant rift among them followed. The presence of French traders, especially Pierre Choteau, and the promise of European goods presaged a conflict over changes in behavior that material acquisition demanded, and the struggle ultimately led to a division in the population around 1802. One band moved to villages in modern Oklahoma along the Arkansas River, while others moved north and by about 1808, established what were called Big Osage villages, south and east of Tallgrass Prairie National Preserve in what is now southwestern Missouri.[10]

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[7] Unrau, *The Kansa Indians*, 23-24; Auguste Choteau, "Notes on the Boundaries of Various Indian Nations," in *Glimpses of the Past* (Missouri Historical Society 7, n. 9-12): 119-140, cited in Bruce A. Jones, *Archeological Overview and Assessment for Tallgrass Prairie National Preserve, Chase County, Kansas* (Lincoln, NE: United States Department of the Interior, National Park Service, Midwest Archeological Center, 1998).

[8] Willard H. Rollings, *The Osage: An Ethnohistorical Study of Hegemony on the Prairie-Plains* (Columbia: University of Missouri Press, 1993): 2-5; Joseph B. Herring, *The Enduring Indians of Kansas: A Century and a Half of Acculturation* (Lawrence: University Press of Kansas, 1990): 13-28.

[9] Rollings, *The Osage*, 7.

[10] Alice Marriott, *Osage Indians II: Osage Research Report and Bibliography of Basic Research References*, American Indian Ethnohistory, Garland Series (New York: Garland Publishing Inc., 1974): 110-239;

After Lewis and Clark began American exploration in earnest, the Osage found themselves positioned between individual traders and the aspirations of the American nation, making its way west after the War of 1812. Americans' ability to attain their goals exceeded both the French and the Spanish before them. Of all the whites, only the Americans had the resources and the numbers to settle and keep the lands that belonged to people such as the Osage. The French and Spanish could eye the interior with desire, anticipating the opportunity to reap their agricultural bounty, but the weak superstructure of New Spain made this opportunity into mere longing. The French presence on the plains was never strong enough for conquest. American arrival meant a challenge to the order of the plains world. Americans used trade goods and networks to curtail Osage power. By 1808, as part of an effort to control trading across the plains, the Americans replaced the private European traders with a government-run system. Originally authorized in 1796, the trading houses known as factories sought to complement other federal efforts to impose Euro-American values and mores on the Indians. Not incidentally, the new system took away the power of the individual traders who had dominated Indian-white exchange, many of whom had greater affinity for their own goals than allegiance to any national imperative.[11]

The factory system broke not only the power of individual traders, but also of Indians such as the Osage who functioned as middlemen. Instead of trading through local intermediaries, Indians had to travel great distances, often through hostile territory, to trade. The American government also found new favorites, decidedly not the groups who had been favored by the French and Spanish before them. In the spring of 1811, the U.S. government sent Indian agent George C. Sibley, who lived at Fort Osage, to negotiate an end to conflict over hunting territory in the Lower Republican and Middle Kansas valleys and forge a peace accord between the Pawnee and Kaw peoples. Sibley held a series of peace conferences at the Kaw village on Blue (Earth) River and then at the Pawnee' village on the Loup and Platte rivers. His presence was a show of concern and implied force, and growing American influence spelled the beginning of the end of Osage power. The new more powerful Americans increasingly usurped their role and by 1820, on the eve of Missouri statehood, the Osage had been moved out of Missouri and resettled in southeastern Kansas and northern Oklahoma.[12]

The Wichita, a Caddoan group, faced similar circumstances. Most scholars regard the Great Bend Aspect as the root culture for the Wichita people. Great Bend Aspect sites dot south-central Kansas, with one of the most significant located near Strong City, just south of Tallgrass Prairie National Preserve. The people of the Great Bend Aspect depended upon maize and other

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Carl H. Chapman, "Osage Village Locations and Hunting Territories to 1808," in *Osage Indians III: The Origin of the Osage Indian Tribe,* American Indian Ethnohistory, Garland Series, David Agee Horr, ed. (Ne w York: Garland Publishing, 1974); C.H. Chapman, "The Little Osage and Missouri Indian Village Sites ca. 1727-77 A.D.," *Missouri Archeologist* 21, no. 1 (1959); C.H. Chapman, *The Archaeology of Missouri* Vol. 2 (Columbia: University of Missouri Press, 1980): 1-65; Jones, *Archeological Overview and Assessment*, 33-34; William H. Goetzmann and Glyndwr Williams, *The Atlas of North American Exploration: From the Norse Voyages to the Race to the Pole* (New York: Prentice Hall, 1992): 144.

[11] Francis Paul Prucha, *The Great Father: The United States Government and the American Indians*, abridged edition (Lincoln: University of Nebraska Press, 1984, 1986): 35-40.

[12] Unrau, *The Kansa Indians*, 86-89.

domesticated crops, but most groups also pursued bison herds in the seasonal fashion that typified the societies that lived between the plains and the woodlands. They also hunted elk, white-tailed deer, beaver, and rabbit, and fished and collected mussels and turtles. Some Wichita lived near the Flint Hills in semipermanent and permanent encampments. A site near Marion, Kansas, just west of Tallgrass Prairie National Preserve, was certainly home to a Caddoan-speaking Wichita band. It shows the remains of dwellings and other activity areas, storage pits and trash deposits, and illustrates the nature of ongoing semipermanent habitation. Excavations at the Marion site have uncovered pottery remains and other ceramic artifacts such as pipes, small vessels and effigies as well as significant numbers of chipped stone tools — large and small hafted bifaces, beveled knives, scrapers and drills, showing the cultural utilization of regional natural resources.[13]

Linguistic cousins of the Wichitas, the Caddoan-speaking group called the Pawnee emerged from the northern plains. The proto- and prehistoric predecessors of the Pawnee relied on a mixed economy based on hunting and gardening, supplemented by gathering of wild plants. Bison provided their primary source of nutrition. By the sixteenth century, when Europeans arrived, the Pawnee appear to have been in the middle of a significant burst of cultural and tribal organization that was independent of European influence. They lived along the Loup and the Platte rivers in Nebraska, moving west to hunt bison in the summer and winter. As Apaches, Southwestern nomads who followed the bison, settled in the Upper Republican River valleys, the Pawnee had to compete for their hunting grounds.[14]

The first white travelers on the plains, accustomed to the endless trees that covered most of the land east of the Mississippi River, regarded the horizon-to-horizon grasslands that made up the continent's middle section as deficient. Americans sought to find a reason for the lack of trees; one early theory held that fires ignited by Indians killed the forests. What the visitors failed to discern was that lower precipitation rates and lightning-sparked fires were the main circumstances that kept the area free of trees. American Indians on the prairie did use fire for a number of purposes, including plant management to foster the growth of young plants that improved grazing conditions, acts of aggression against other Indians, hunting techniques that used flames to drive bison toward enclosures or cliffs, and communications. There is little existing evidence that fire was used as a contributor to Indians' subsistence regimes, but clearly it was used as a management tool when the opportunity presented itself.[15]

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[13] Unrau, *Indians of Kansas*, 20-28.

[14] Richard White, *The Roots of Dependency: Subsistence, Environment, and Social Change Among the Choctaws, Pawnees, and Navajos* (Lincoln: University of Nebraska Press, 1983): 147-49; West, *The Contested Plains,* 45-48, 151-52.

[15] Stephen Pyne, *Fire in North American Tallgrass Prairie* (Norman: University of Oklahoma Press, 1990): 84-99; according to Victor Tixier's 1844 account of traveling with the Osage Indians, "Toward nightfall, fire was set to the prairie to let the band of Ouachinka-Lagri know of the return of our warriors. A cool wind pushed forth the flames with great rapidity and when it was quite dark we saw a long trail of fire burning through the prairie with a crackling similar to that of crumpled dry branches stirred by the wind. Here the blazing line on the other side of a hillock seemed to be interrupted suddenly and fall to the foot of another hill. A reddish light, gradually lost in the smoke, crowned this huge picture, against which stood out the passing shadows of runaway horses and night birds." Tixier, *Travels on the Osage Prairies*, John Francis McDermott, ed., Albert J. Salvan,

Nomadic Indian use of fire to create better hunting has been credited with the spread of grasslands. The widespread use of fire opened land up to grasses, which in turn led to an expansion of the bison range far to the east of the Mississippi River. In the seventeenth century bison lived in Pennsylvania and Massachusetts; the evidence of their presence is closely linked Indian burning of forests. Yet fire was a drastic strategy, one not tried lightly. Indians who attempted to control their environment with fire sometimes faced the consequences of their choice. Fire could rarely be controlled or stopped. It sometimes destroyed vegetation needed for animals, and it could destroy the very animals for whom people tried to clear grazing lands. Fire played a key role in Indian societies, in the fabrication of many items, in rituals and religious ceremonies, and as a military tactic, but it was always a risk.[16]

By 1800, the plains looked far different than they had a century before. A range of peoples had moved onto the grasslands and made it home, incorporating its resources into their culture and way of life. Most were mounted, which allowed them to fashion a new kind of living and may have encouraged them to accept the social customs of new neighbors and trading partners, including Europeans and later Americans. Indians brought their animals and acquired more, hunting bison and measuring wealth by the number of their horses and the hides they traded for manufactured goods, weapons, and sometimes liquor. Most had completely reshaped their culture, life, and traditions to accommodate their new transportation and the opportunities it created. They moved east onto the plains, fashioning it to their needs and adjusting to the limitations of their surroundings. As Indian populations increased, the competition for available resources also intensified. Stronger tribal groups fought to expand their influence while their weaker neighbors struggled to at least maintain favored hunting grounds.[17]

The Americans changed the politics of intra-Indian conflict. The Spanish, French, and British brought animals and goods to trade, but rarely did they seek to become neighbors, to inhabit the same lands. The Europeans had been interested in the riches of the land, but mostly to take those resources away with them. Even the Spanish, with their interest in the souls of native peoples, needed to remove the wealth they found, be it from the famed cities of Cibola or elsewhere in the New World. While the region was influenced by European nations, Indian-to-Indian conflict centered on corralling natural resources for exchange. After they entered the plains, Americans followed the axiom "to populate is to govern," and in the end, their combination of ideas, patterns of living, and fierce and often avaricious compulsion for land inexorably altered the face of the plains. Once Americans arrived on the plains, its inhabitants faced attacks on their possession of their homeland from the newcomers while old neighbors still

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trans. (Norman: University of Oklahoma Press, 1940): 238.

[16] Pyne, *Fire in America*, 71-83.

[17] West, *The Contested Plains*, 86-91; James E. Sherow, "Workings of the Geodialectic: High Plains Indians and Their Horses in the Region of the Arkansas River Valley, 1800-1870," *Environmental History Review* 16 no. 2 (Summer 1992): 61-84; Frank Raymond Secoy, *Changing Military Patterns of the Great Plains Indians* (Lincoln: University of Nebraska Press, 1953 and 1992): 65-73.

competed for living space.[18]

The growing Euro-American population along the eastern seaboard created an ongoing ripple that forced changes in the lives of even the people of the plains, one thousand miles to the west. After the United States won its independence from Great Britain in 1781, its expanding population crossed the Appalachian Mountains in growing numbers and eyed the agricultural possibilities of western lands. Underpinning the American advance was a restless breed, the tens of thousands of agricultural families who packed up and headed toward the center of the continent to establish farms. They brought their portmanteau biota, the collection of animals, plants, and seeds, along with their traditions of agriculture and perceptions of culture. In a world filled with nomadic and semi-sedentary people, their sense of permanence was a powerful statement, and they became an inexorable addition to the plains. In a transformation that happened with remarkable rapidity, the explosion of settlers and the need for some form of control of newcomer-native interaction forced the American government to step up its presence. As part of the quest for more information about the new territories purchased from France, the United States Army sent Capt. Zebulon Pike to find the headwaters of the Arkansas River in 1806. Leaving St. Louis, his small expedition traveled southwest through Missouri and Kansas, heading to the northwest after crossing the Neosho River. Pike's recollection of the sharp flinty rocks that cut into his boots may be the reason for the name Flint Hills.[19]

East of the Mississippi River, the clash between American imperial objectives and native territorial rights defined the early nineteenth century, and solutions to that dilemma pointed westward. Possessed of a sensibility and culture that relied on wood and coming from the humid lands of the eastern half of the continent, Americans typically regarded the plains as a vast and largely useless desert. Pike's bleak assessment of the Southwest in his expedition report of 1810 and later the accounts of Major Stephen Long's expedition, which noted the country between the Missouri River and the Rocky Mountains as "almost wholly unfit for cultivation," enhanced an already common perception. As a result of the apparent low value of the middle of the continent, federal officials consistently looked for ways to use the region to further national needs. One solution was to remove eastern Indians to these lands. They could conceive of no more valuable purpose for them.[20]

Following the War of 1812, American citizens demanded land. They believed they earned it in their battles against Britain and its Indian allies and their insistence dominated national policy

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[18] Elizabeth A. H. John, *Storms Brewed in Other Men's Worlds: The Confrontation of the Indians, Spanish, and French in the Southwest, 1540-1795* (College Station: Texas A & M University Press, 1975): 58-97; David J. Weber, *The American Southwest Under Mexico, 1821-1846* (Albuquerque: University of New Mexico Press, 1982): 122-146.

[19] West, *The Contested Plains*, 46; Alfred W. Crosby, Jr., *Ecological Imperialism: The Biological Expansion of Europe, 900-1900 A.D.* (Cambridge: Cambridge University Press, 1986): 193-94.; the definitive overview of the federal government's early Indian policy remains Francis Paul Prucha's *America's Indian Policy in the Formative Years: The Indian Trade and Intercourse Acts, 1780-1834* (Lincoln: University of Nebraska Press, 1962). See also Reginald Horsman, *Expansion and American Indian Policy, 1783-1834* (East Lansing, Michigan State University Press, 1967) for a detailed examination of earlier policies.

[20] Unrau, *Indians of Kansas*, 44-45, 102.

toward internal Indian groups. Everywhere from Kentucky and Tennessee west, veterans of American wars sought the land they believed would give them personal independence and wealth. When they found it, the territories they inhabited used the increase in population to move more quickly toward statehood. One of these was Missouri, which began its quest to transform territorial status into statehood in 1818 and won that coveted designation three years later. Soon after Missouri entered the Union, many of its restless settlers again began looking west, and eastern and central Kansas soon became a target for those seeking lands.

Missouri's entry into the Union served as a catalyst for further western expansion. Securing title to the lands set aside for Indians by the federal government was crucial to the process, and Indian Bureau officials soon instructed its agents to begin land cession talks with tribes inhabiting Missouri and Kansas. In September 1818, George Sibley, the factor at Fort Osage, reached preliminary agreement concerning cession with the Kaw. In June 1824, one day before American negotiators signed a cession treaty with the Kaw, the Osage signed a similar treaty relinquishing their remaining lands in Kansas, Missouri, and Arkansas. They retained only a strip of Kansas land fifty miles wide from the Missouri border west to the 100th meridian, across more than two-thirds of the future state. Even with their retained right, Osage presence in Kansas diminished. After the treaty, the Osage almost certainly ceased to hunt bison on the Kansas prairies and gradually became less frequent visitors on the plains.[21]

The Kaw fell victim to similar pressures to give up their lands. They held what the federal government regarded as a legal claim to northwestern Missouri and the northern half of Kansas. A typical seduction effort began, one that sought to find the weakest links in the Kaw structure and persuade those individuals to promise away their heritage. White Plume, the leader of the Kaw mixed-blood faction, visited Washington, D.C., in 1821 to negotiate the status of his people's lands. Finding the city quite remarkable and already predisposed to make concessions, he paved the way for the Treaty of June 3, 1825, in which the Kaw ceded about twenty million acres that comprised their ancestral homeland in exchange for a two-million acre stretch of land thirty miles wide, running east to west from Kansas City to the headwaters of the Solomon and Saline rivers near present-day Salina. The United States also promised a gift of $2,000 at the signing, followed by an annuity of $3,500 for twenty years and commitments to agricultural instruction. The offer was substantial but it transformed Kaw life. Even money and the promise of other ways to live could not take away the sting of the loss of Kaw land.[22]

Negotiations with Indian tribes were complicated processes that tended to omit as much as they specified, engendering severe misunderstandings and unhappy consequences. The 1825 Kaw treaty guaranteed free and unrestricted American access to rivers and streams on the new Kaw reservation, but it failed to protect overland traffic, a problem that increased in significance as more and more American merchants traveled the Santa Fe Trail. In search of a remedy, on March 3, 1825, Congress authorized a survey of the trail and new negotiations with the several tribes along the route. In June 1825, Osage leaders taken to St. Louis for treaty talks ceded all

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[21] Unrau, *Indians of Kansas*, 51-53; Herring, *The Enduring Indians of Kansas*, 15, 18; Rollings, *The Osage*, 211-25.

[22] Unrau, *The Kansa Indians*, 105-107.

their lands in Missouri, Arkansas, and to the west in exchange for a fifty-mile strip of land in the north of Kansas that reached the western edge of their cession. On August 16, Indian agents B. H. Reeves, George C. Sibley and Thomas Mather, accompanying the federal surveyors, met several Kaw leaders in council about five miles south of McPherson. The Indians agreed to allow ongoing white travel along the route in exchange for $800 in cash or merchandise. Traffic along the Santa Fe Trail expanded rapidly during the following decades, and by 1845 hundreds of Missouri traders traveled across Kansas on their way to Santa Fe, using Council Grove in the Flint Hills as one of the principal stopping points along the trail.[23]

By the time large numbers of American traders headed down the road to Santa Fe, the idea of Manifest Destiny, the belief in the divine countenance of American continental domination, spurred the United States into a more than fifty-year pattern of displacement of American Indians not only in the Flint Hills, but throughout the nation. The increasingly muscular American nation flexed its newfound strength, creating an American republic out of lands that had been contested for hundreds of years. As American Indians watched soldiers arrive, settlers follow, and traders pass across what used to be, and what many still believed, were their lands, the people who used the region as part of their regime found their choices curtailed and their movements limited. Compounding the appearance of the Americans and demonstrating their power was the arrival of displaced peoples from the Southeast, the Choctaws, Cherokees, Seminoles, Chickasaws, and Creeks. These new groups at the southern end of the tallgrass prairie also sought to find a way of life, and along with arriving Euro-Americans, operated at the limit of environmental possibilities. Resources that had once sustained the peoples of the region were soon wiped out.[24]

Before the 1830s ended, the Americans asserted their growing power in dramatic fashion. In fits and starts, often dictated by the complicated national political climate and the limits of resources the nation could devote to its frontier, American power coalesced and influenced the lives of people who used the Flint Hills. As the American frontier moved west, national power came to be represented by the U.S. Army instead of the unorganized civilian vanguard that had so long been in the forefront of settlement. The military, infused with a broader national view of issues than regional or state-level organizations, brought different directives and entirely new tactics to the conflicts on the nation's periphery. Throughout the first half of the nineteenth century, an increasing professionalism in the officer ranks supported a national sense of purpose. Army posts such as Fort Leavenworth and Fort Scott represented the earliest federal attempts to

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[23] *Brief Summary of the Santa Fe Trail through Kansas, With Report of the Committee Appointed to Prepare a Correct Map,* reprinted from the *Eighteenth Biennial Report of the Kansas State Historical Society,* 1911-1912, Kansas State Historical Society archives; Unrau, *The Kansa Indians*, 109; Rollings, *The Osage,* 254-55.

[24] The concept of "Manifest Destiny" is credited to New York newspaperman John O'Sullivan, who in December 1845 proclaimed America's right "to possess the whole of the continent which Providence has given us for the development of the great experiment of liberty." Cited in Richard White, *"It's Your Misfortune and None of My Own": A New History of the American West* (Norman: University of Oklahoma Press, 1991): 73-75; Anders Stephanson, *Manifest Destiny: American Expansion and the Empire of Right* (New York: Hill and Wang, 1995): 23-26; Symmes C. Oliver, *Ecology and Cultural Continuity as Contributing Factors in the Social Organization of the Plains Indians* (Berkeley: University of California Publications in American Archeology and Ethnology 48, no. 1, 1962).

impose a centralized response to the frontier's continuous conflicts between the two societies.[25]

To Americans, the western lands perceived as useless were ideal for uprooted Indian populations. American culture had not yet come to grips with the plains and the mountains beyond; the West was still unusual, dramatic, strange, and foreboding. As the new nation assimilated the West's presumed worthlessness for agriculture, it simultaneously pulled backed from the words – if not the intent – of its founders. A widening perception of Anglo-Saxon superiority superseded the nominally egalitarian sentiments of the Revolutionary Era. These sentiments evolved into Manifest Destiny. Indian tribes across the nation were among the first to experience the impact of this attitude. After treaty talks with the Osage and Kaw in 1825, seventeen reservations in the Indian Territory were established to house relocated Indians from east of the Mississippi River. Aside from Osage and Kaw peoples pushed out of Missouri, American Indian groups removed to Kansas included members of the Otoe, Missouri, Iowa, Sauk and Fox, Chippewa, New York, Cherokee, and Quapaw tribes.[26]

The international market system that disrupted North America's ecology with its demands for pelts in the seventeenth and eighteenth centuries still affected the American interior in the nineteenth century. American-grown cotton became the staple of British clothing factories and global demand drove cotton prices upward. Massive demand for raw cotton made ejecting Indians from fertile lands in the South an urgent need. It led to massive removals of Indians to reservations west of the Mississippi River. The culmination occurred in the late 1820s, when Andrew Jackson, whose supporters were precisely the people who most coveted land, used the presidency as a vehicle to further expulsion. In 1830, Jackson persuaded Congress to appropriate one-half million dollars for negotiations with Indian leaders. He planned an acre-for-acre land exchange of eastern lands for those in the west. This policy culminated in the "Trail of Tears," when the Cherokee of Georgia were forced to march to their new and unwanted homes in Indian Territory, now Oklahoma. Other peoples were sent west as well. Before 1840, more than ten thousand Indians from the Old Northwest territory north of the Ohio River were settled on lands assigned them in eastern Kansas. During his presidency, Jackson moved almost 46,000 Indians across the Mississippi River and arranged for the departure of a similar number after he left office. Removal eventually cost almost $70 million, but the United States took possession of more than 100 million acres of Indian land. Almost one-third of that land was in the West.[27]

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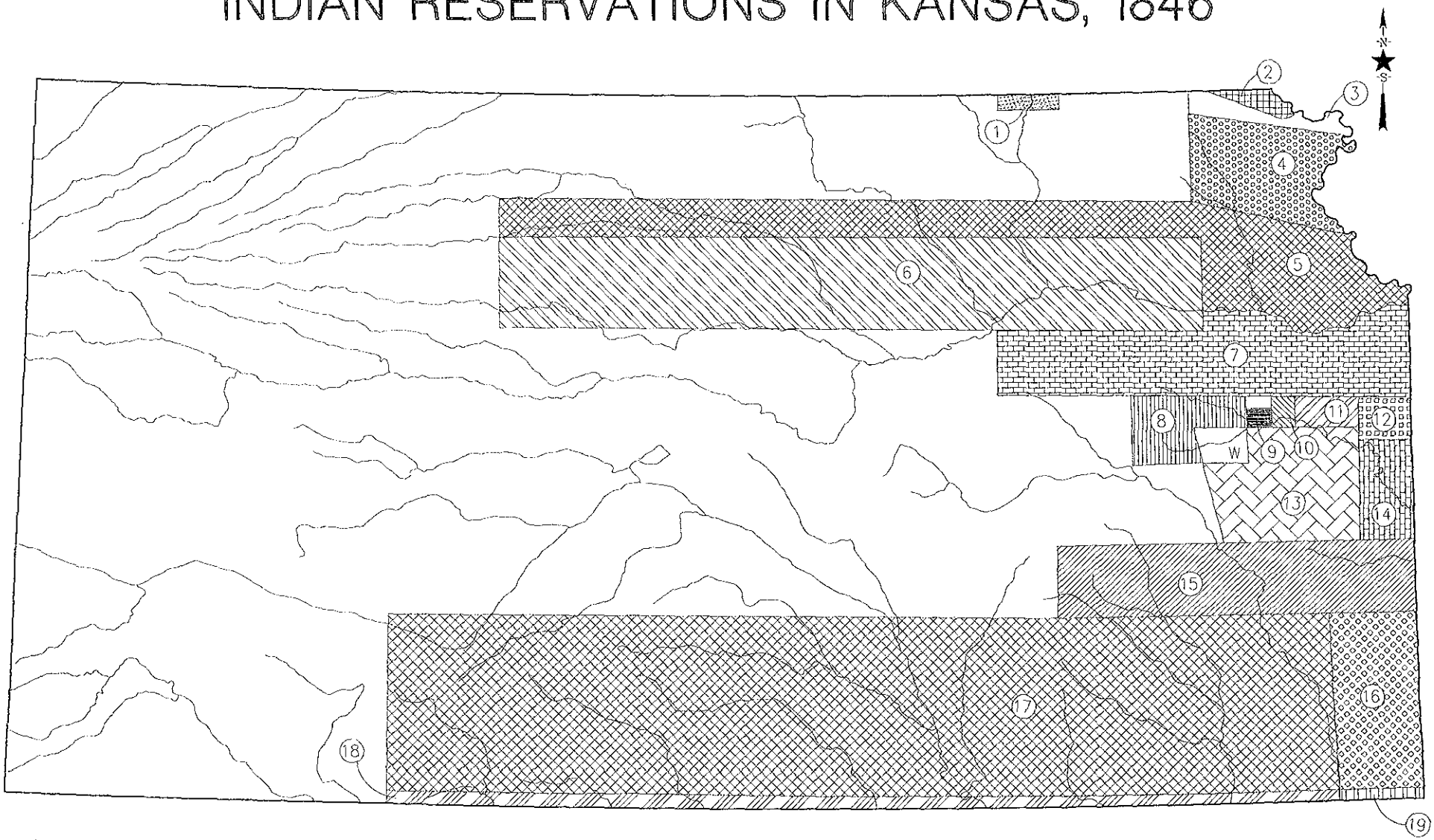
[25] Robert M. Utley, *The Indian Frontier of the American West 1846-1890* (Albuquerque: University of New Mexico Press, 1984): 31-64.

[26] William Earl Weeks, *Building the Continental Empire: American Expansionism from the Revolution to the Civil War* (Chicago: Ivan R. Dee, 1996): 63-64; Reginald Horsman, *Race and Manifest Destiny: The Origins of American Racial Anglo-Saxonism* (Cambridge, MA: Harvard University Press, 1981): 189-207.

[27] Mary E. Young, "Conflict Resolution on the Indian Frontier," *Journal of the Early Republic* 16, no. 1 (Spring 1996): 1-19; Donald B. Cole, *The Presidency of Andrew Jackson* (Lawrence: University Press of Kansas, 1993): 109-120 [quote from 116-117]; see also Robert V. Remini, *The Legacy of Andrew Jackson: Essays on Democracy, Indian Removal and Slavery* (Baton Rouge: Louisiana State University Press, 1988): 45-82; Weeks, *Building the Continental Empire*, 80-81; Old Northwest Indian communities moved west included Kaskasia, Peoria, Shawnee, Ottawa, Wyandot, Miami, Potawatomi, Menominee, Delaware, Sas and Fes, Piankashas, Wes, Kickapoo, Chippew, Sioux, and New York tribes. From Prucha, *The Great Father*, 88-9.

INDIAN RESERVATIONS IN KANSAS, 1846



1. Otoe and Missouri
2. Iowa
3. Sauk and Fox of Missouri
4. Kickapoo
5. Delaware and Wyandot Reserve and Delaware Outlet
6. Kaw
7. Shawnee
8. Sauk and Fox of Mississippi
9. Chippewa
10. Ottawa
11. Peoria and Kaskaskia
12. Wea and Piankashaw
13. Pottawatomie
14. Miami
15. New York Indians
16. Cherokee Neutral Lands
17. Osage
18. Cherokee Strip
19. Quapaw Strip

W Lands in common use by 8 and 9

Source: Homer E. Socolofsky and Huber Self.
Historical Atlas of Kansas
(Norman: University of Oklahoma Press, 1988)

For the Kaw Indians, the arrival of relocated peoples spelled disaster. Newcomers inaugurated a fierce round of competition for resources between newcomers and inhabitants with longer histories. After 1829, the needs of emigrant Indians stressed the limited resources available to the native Kaw. Combined with pressure from external sources, these demands eventually undermined Kaw subsistence. As late as 1859, some tribal members exchanged wolf, beaver, and other furs from the plains for food staples and tobacco with traders such as James Mead, but such practices had become an exception to the general patterns of Kaw life. The federal annuities promised during treaty negotiations also helped separate most of the Kaw people from their traditional ways of living. By 1835, the Kaw became almost totally dependent upon the largess of the federal government. As Americans relied on Army soldiers to selectively enforce those treaty provisions favored by incoming settlers, the Kaw position worsened.[28]

As the Indians found traditional survival strategies curtailed or blocked, government officials augmented their growing control of Indian life and American citizens continued to exploit the opportunity. Under government auspices, Indians were moved off of productive lands that could easily be farmed and grazed and onto less desirable acreage. After the 1825 cession of their twenty-million-acre homeland, the Kaw were sent to a small reserve east of Manhattan, Kansas. There they were organized in several villages, including some within the Flint Hills, before being relocated to a much smaller reservation along the Neosho River following the Mission Creek Treaty of 1846. The Kaw occupied three villages near Council Grove northeast of Tallgrass Prairie National Preserve until the federal government bowed to pressure from American squatters and reduced their Kansas land holdings again. Shortly after the United States established this diminished reserve, the Kaw were uprooted one final time. They were sent south to Indian Territory where they were forced to buy land from the Osage. An added factor that helped persuade the Kaw to move was the gradual loss of their bison hunting lands in the western half of the state. Located in an area central to the west-to-east pattern of diminishing bison herds, the lands had been essential to Kaw subsistence. Without them, and without their homelands, they had few choices. The continuing system in which American merchants capitalized on cash annuities to keep neighboring Indians in perpetual debt eliminated any chance of climbing out of their cycle of poverty.[29]

Emigration during the first half of the nineteenth century entirely changed the population and environmental balance of the Great Plains and brought about the end of Indian Kansas. Between 1820 and 1840, Indian groups including the Cheyenne and Lakota moved west in search of new hunting opportunities, unsettling the social structure of the northern plains. Their movement was in part a response to population pressure from the east. In a parallel shift at the same time, Indians involuntarily displaced from east of the Mississippi River moved onto the central plains. The different groups quickly began to compete for access to water, timber, and animals. Nor were Indian populations the only groups entering the grasslands. After the myth of the "Great American Desert" was exposed as fallacy late in the 1830s by traders returning from

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[28] Mead, *Hunting and Trading on the Great Plains*, 73; Unrau, *The Kansa Indians*, 27, 40.

[29] Craig H. Miner and William E. Unrau, *The End of Indian Kansas: A Study of Cultural Revolution, 1854-1871* (Lawrence: Regents Press of Kansas, 1978): 101-102

the fertile northern provinces of Mexico and the Oregon Territory, farmers began crossing the Great Plains. Many of those who set out for the Pacific Coast instead settled on the Great Plains. Later news of gold and silver strikes in California, Colorado, and Nevada sparked massive emigrations during the 1850s, and thousands of those hurrying to the Pacific Coast crossed Kansas, further depleting the area's resources. The combination of Indians forced onto designated reservations and Midwestern peoples who relocated to sections of Kansas available for settlement made for complex relationships that put pressure on the societies of the Kaw, Osage, and other earlier inhabitants of the region.[30]

Incoming settlers brought a dramatically different attitude toward natural resources. For thousands of years, those living on the plains took animals, plants, and minerals that the land offered. They were proprietary about their lands and resources, but a combination of small initial population, large space, and cultural restraint enabled them to respect the region's environmental limitations. Gradually, customs and social regulations developed to balance tribal needs and resource availability. With the arrival of Americans in the region, the older systems were superseded by American law and its measures. Legally defined possession of the land became paramount in establishing patterns of use and control, allowing the owner a monopoly on the attributes of privately held lands. This new phase required a different system of control, and the Americans brought their legal and political structures to Kansas. The initial problem for these settlers was removing Indians from the land. Afterwards a chain of title that began with Anglo-American settlers could be imposed and development initiated. As part of Indian removal, the bison were pushed north and south of Kansas, allowing incoming Americans to introduce their own agricultural practices and domesticated cattle. The new herds grew to enormous numbers, but even at their fullest extent they never rivaled the rivers of bison they replaced. The supreme irony of the grassy Flint Hills is that the little untrammeled prairie survives today because the economic limitations of American society replaced those of earlier societies. The new emphasis of Americans dictated undisturbed prairies for feeding the newly introduced herds of cattle.[31]

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[30] W. Paul Rodman, *The Far West and the Great Plains in Transition, 1859-1900* (New York: Harper & Row, 1988): 124-38; Herring, *The Enduring Indians of Kansas,* ; John D. Unruh, Jr., *The Plains Across: The Overland Emigrants and the Trans-Mississippi West, 1840-1860* (Urbana: University of Illinois Press, 1979): 93-4.

[31] Elliott West, *The Way to the West: Essays on the Central Plains* (Albuquerque: University of New Mexico Press, 1995): 13-51; Francis Haines, *The Buffalo: The Story of American Bison and Their Hunters from Prehistoric Times to the Present* (Norman: University of Oklahoma Press, 1995), 80-89.

Chapter 4:

White Settlement and its Consequences

As the American presence on the plains solidified during and after the Civil War, a cultural upheaval took place that disrupted and stressed the natural environment more than had ever before. The newest arrivals brought technologies such as the railroad, access to the surpluses of a larger and more powerful society, and the luxury of a large population. They could demand and seek more in ways prior inhabitants could not. They could hunt, collect, retrieve, and otherwise develop all kinds of resources on a grand scale. They brought a different concept of property, agricultural techniques that used metal and machined tools and sources of energy previously unimagined. As the construction of the railroad proceeded into central Kansas, it fashioned a new series of links with the outside world. These agents of change were crucial to the Flint Hills. The social and economic patterns that began in the nineteenth century influenced Chase County into the twenty-first century. [1]

One product of those forces was Stephen F. Jones, prominent cattleman and owner of the Spring Hill Ranch, president of the local bank, and developer of a host of Strong City's commercial enterprises. Jones, born in Tennessee, brought the expertise acquired by years of building and maintaining herds in Texas and Colorado to Chase County in 1878. During the decade that he operated the Spring Hill Ranch, he was one of the leaders in the national trend to improve beef animals in enclosed ranches. Across the West, barbed wire was one of the primary agents responsible for ending the era of open ranges, but Jones capitalized on the abundant quantities of Chase County limestone and enclosed his pastures with stone fences. In addition to the miles of fences that still line the Flint Hills, Jones' legacy includes a visually striking headquarters complex including a multistory home and massive barn, maintained by the Tallgrass Prairie National Preserve.

By the 1840s, the onslaught of Americans and eastern Indians pushed west in front of the new settlers broke the power of the existing Plains populations, the Osage and the Kaw. After the 1820s, the Permanent Indian Frontier, the line of forts from Fort Snelling in Minnesota to Fort Gibson in the Indian Territory, was dotted with reservations for Indians relocated from Illinois, Indiana, Ohio and sometimes even further east. In some cases, these allotted lands stretched far into the interior of the plains. Although Chase County was not chosen for such reservations, the patterns of that process affected its future inhabitants. When Americans settled emigrant Indians in Indian Territory, the Kaw people occupied a large portion of the northern Kansas Territory. The Mission Creek Treaty of 1846 limited the Indian presence near the main emigrant trails, which teemed each year with travelers. The Kaw were among those cleared from the immigrants' path. In return for $202,000 and a twenty square-mile reservation centered on Council Grove, they gave up their claims to the northern third of Kansas. Nearby, east of the Flint Hills, the Sauk

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[1] John D. Unruh, Jr., *The Plains Across: The Overland Emigrants and the Trans-Mississippi West, 1840-1860* (Urbana: University of Illinois Press, 1979): 267-301.

and Fox reservation was consigned to Illinois peoples forced west by the expansion of white settlement and the end of the Black Hawk War in 1833. Native people could see the Flint Hills, once their land, from the nearby places where they had been sent to live. They watched with dismay as Americans streamed into the void created by the reservation system.[2]

Before Kansas became a territory in 1854, the scene facing prospective settlers was daunting. West of the Missouri state line, huge tracts of land were legally inaccessible, set aside for relocated Indians after of twenty years of negotiations with tribes throughout the Old Northwest. Those anxious to secure farmlands applied pressure to open those lands, as did Americans with a national vision who hoped to personally profit from a transcontinental railroad. They joined with those who possessed a local vision to search for town sites to sell to newcomers. The synergy was powerful. Even though they could not legally attain title to the lands they settled, Americans moved into Kansas Territory in search of desirable homesteads and town locations. Settlement started in the vicinity of Fort Leavenworth, on the Missouri River in northeast Kansas, and along the emigrant trails. Despite its location within the Kaw Indian reservation, Council Grove was part of this initial and illegal rush. As Kansans took land in the state's interior and a series of treaties divested Indians of their rights, the Indians of Kansas eventually followed the "Five Civilized Tribes" and other Indians forced to the Indian Territory.[3]

Before the Civil War, the federal government had few agencies with which to apply its will. To control the endemic violence of its border areas, officials in Washington, D.C., turned to the Army. They sought to minimize Indian-white conflict as well as strife among incoming settlers. The Permanent Indian Frontier was an attempt to solve this problem. The military planned that these outposts would separate Indian peoples and their lands – the seemingly worthless plains – from settlers moving west to fashion their own place in the vast open spaces that took up the continent's midsection. The presence of the military at Fort Leavenworth and Fort Scott in Kansas enhanced the sentiment that the edge of the plains was both a boundary of culture as well as of geography. The chain of forts could not fulfill this expectation. Retaining a semblance of order had been one primary objective of the westward-spreading nation, but this goal was easily attained with the limited resources of the military. The Permanent Indian Frontier was a dismal failure, a symbolic fiction that only heightened the tension associated with expansion. A boundary policed by the military that was supposed to keep American citizens from open lands had unlikely prospects of success in the age of Manifest Destiny.[4]

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[2] William E. Unrau, *The Kansa Indians: A History of the Wind People, 1673-1873* (Norman, University of Oklahoma Press, 1971): 80-111; William E. Unrau, *Indians of Kansas: The Euro-American Invasion and Conquest of Indian Kansas* (Topeka: Kansas State Historical Society, 1991): 65.

[3] William E. Unrau and Crag Miner, *The End of Indian Kansas: A Study of Cultural Revolution, 1854-1871* (Lawrence: Regents Press of Kansas, 1978); Robert A. Trennert, *Alternative to Extinction: Federal Indian Policy and the Beginnings of the Reservation System, 1846-51* (Philadelphia: Temple University Press, 1975): 131-92.

[4] Francis P. Prucha, "Distribution of Regular Army Troops Before the Civil War," *Military Affairs* 16 (Winter 1952): 169-73; Henry Putney Beers, *The Western Military Frontier, 1815-1846* (Philadelphia: Porcupine Press, 1975): 91-149; Samuel J. Watson, "The Uncertain Road to Manifest Destiny: Army Officers and the Course of American Territorial Expansion, 1815-1846," in *Manifest Destiny and Empire: American Antebellum*

Spurred by the twinned senses of destiny and economic opportunity, Americans moved west in ever-growing numbers during the 1840s. At first the Great Plains were to be crossed rather than settled. Emigrants traveled the Oregon Trail to new American possessions along the Pacific coast. The little towns of Westport and Kansas City, little more than a few stills for producing trade whiskey on the extreme western edge of Missouri a few years before, became the departure point for several important routes heading west, including the Santa Fe and Oregon trails. Between the 1830s and the middle of the 1840s, the towns grew in importance and extended their economic reach into the interior, establishing relationships all along the water courses that crossed the plains. Among the earliest American settlements in central Kansas were Council Grove, to support merchants' wagon trains traveling to and from Santa Fe, and St. Mary's Mission, on the Oregon Trail, where stock-raising and crop production was introduced to support the surrounding Pottawatomie Indians and Americans bound for the Pacific coast.[5]

Indian dispossession resulted from American expansion. Between the mid-1820s, when pressure on Indian people accelerated, and the Medicine Lodge Treaty of 1872, the Indians of Kansas were systematically removed and usually sent to Indian Territory, which later became Oklahoma. Each Indian population suffered loss of land in a unique way, but the dispossession of the Kaw people illustrated the common strategies of American society. In most cases, a few Indian leaders or mixed-bloods were subverted by promises of special privilege and induced to sign land cession treaties. For the Kaw, White Plume, son of a famous Osage chief, was the focal point of white efforts. Recognized by the United States government as the principal Kaw chief in 1825, White Plume signed the initial cession treaty, which included a provision for the granting of 640-acre allotments to twenty-three mixed-bloods, including four of his grandchildren. After a second cession treaty in 1846 and the opening of the Kansas Territory in 1854, the Kaw reservation was overrun by squatters and railroad promoters.[6]

These early settlers were heirs to a tradition with deep roots in the American past, but a dubious position in statute. As elsewhere on the peripheries of the United States, settlers saw what they liked and took it, assuming that they could later secure title. Called "squatters," both a pejorative and a label that granted a certain identity when applied to themselves, these settlers made land their own through occupation, operating on the premise that they were far enough from the power of government to do as they pleased. By the time authorities arrived, squatters reckoned, their improvements would make the land in question their own in the eyes of any American. Squatters viewed themselves as pioneers, and in their view, their contribution to the

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Expansionism, Sam W. Haynes and Christopher Morris, ed. (College Station, TX: Published for the University of Texas at Arlington by Texas A&M University Press, 1997): 68-114.

[5] William E. Unrau, *White Man's Wicked Water: The Alcohol Trade and Prohibition in Indian Country, 1802-1892* (University Press of Kansas, 1996): 45-46; Peter C. Mancall, *Deadly Medicine: Indians and Alcohol in Early America* (Ithaca: Cornell University Press, 1995): 1-10; James C. Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," *Kansas Historical Quarterly* 11 (1942): 8.

[6] Unrau, *The End of Indian Kansas*, 16-18, 101-2.

spread of American civilization more than superseded any niceties of law they failed to follow.[7]

Squatters emerged as a response to land speculation and as an assertion of the idea of yeoman agrarianism as the backbone of American liberty. Building on Thomas Jefferson's ideas, the landless created powerful grassroots enthusiasm for their actions. One of their early champions, David Crockett of Tennessee, rode the crest of his support for such rights to become an American folk figure well before his death at the Alamo. The Preemption Act of 1841, a seminal piece of American land law, made the practices of the squatters legal in most places and further encouraged egalitarian pretense. Squatters used their presence on the land as a way to challenge the power of dilatory absentee landlords, forming local governments, taxing absentees for improvements, and then seizing the land when the assessments were not received. Western legislatures were often sympathetic, even before 1841.[8]

Law and practice remained at odds for more than a decade after 1841. The Preemption Act of 1841 permitted settlement on surveyed lands, a decision with vast impact on the West alone. The area that became Kansas had not yet been surveyed, complicating life for settlers who could not legally claim unsurveyed land even if they improved it. Only in 1854, after the passage of the Kansas-Nebraska Act changed federal surveying requirements, could preemption take place on unsurveyed lands. The lack of control accelerated the already fierce competition for land between southern and northern sympathizers. Either could claim any land that they saw, and to people who believed that their actions would determine the future of the region, this was a powerful enticement to stretch not only the law, but any form of human interaction.[9]

The Indian reservation system under the *de facto* attack of squatters increased the importance of traders, who worked with a confined population supported by regular federal annuities that were usually paid in cash. Plains peoples were accustomed to seasonal movement and found the reservations especially confining; the cash they received meant little in comparison to the loss of mobility. Forced to depend on commerce and exchange as a primary source of sustenance, reservation people found their choices unfamiliar and their options limited. Traders set the tone of these relationships, exchanging goods and serving as the vanguard of settlement. Near every reservation, traders appeared, and the region encompassing the Flint Hills was no exception. Near Council Grove, the Choteau Brothers, Charles and Frederick, arrived in 1848, and a trader named Kennedy followed in 1849. Outside of Council Grove, J. C. Munkres settled on what is now called Munkres Creek in 1854. North of Chase County, a loosely knit trading community that catered to both Santa Fe Trail travelers and Indians on the reservation became an important institution in an otherwise wide-open world. Government Indian agencies soon filled a crucial role. They supported federal policy without the presence of the Army, which might have been compelled to address illegal squatting and the sometimes dubious transactions of merchants. An

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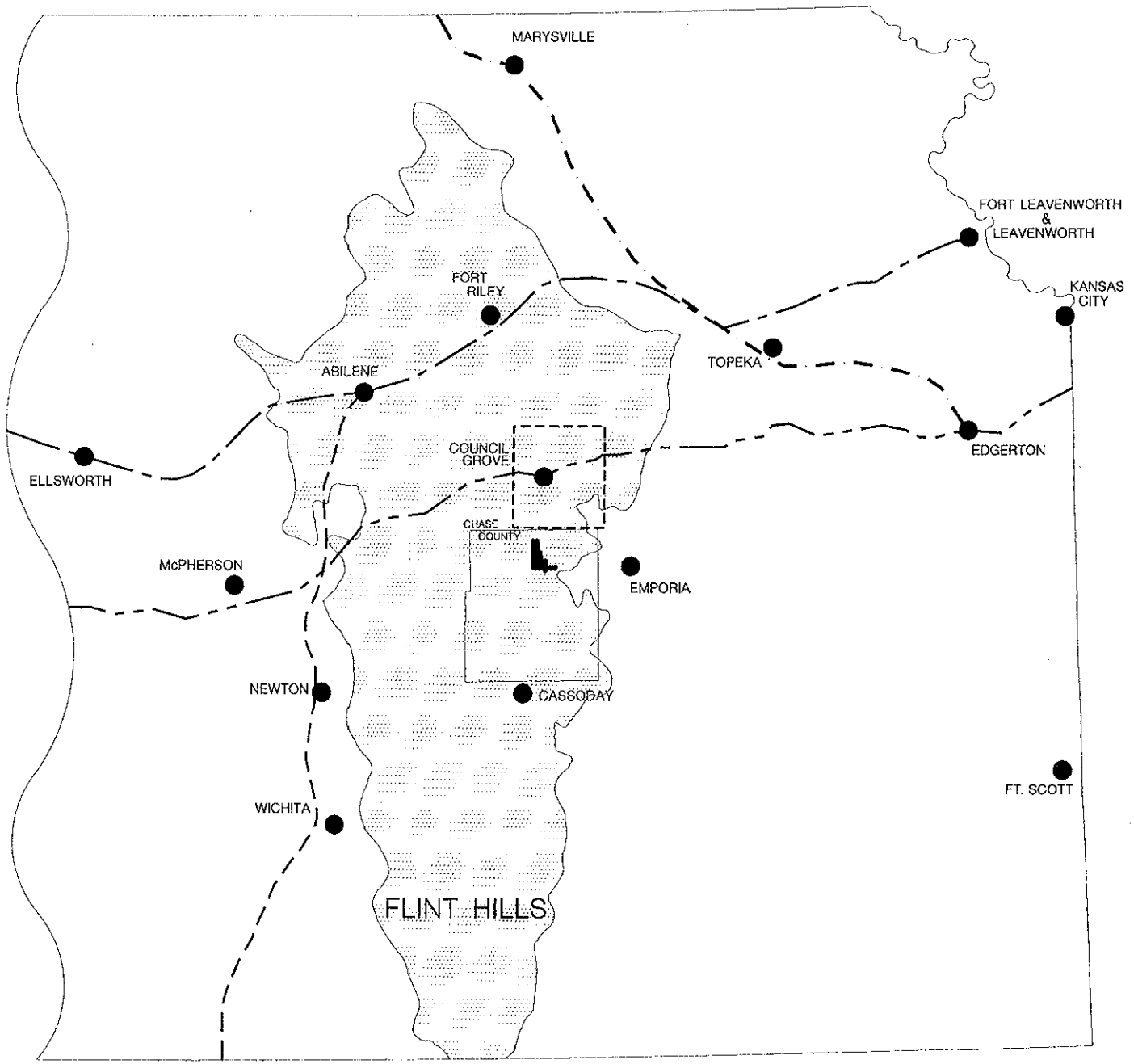
[7] Paul Wallace Gates, *The Farmer's Age: Agriculture, 1815-1860* (New York: Holt, Rinehart, and Winston, 1960): 88-89.

[8] Gates, *The Farmer's Age*, 88-90; William C. Davis, *Three Roads to the Alamo: The Lives and Fortunes of David Crockett, James Bowie, and William Barret Travis* (New York: HarperCollins, 1998): 74-90, 128-39, gives a thorough account of Crockett's advocacy.

[9] Lawrence Bacon Lee, *Kansas and the Homestead Act, 1862-1905* (New York: Arno Press, 1979): 45-7.

TERRITORIAL AND CATTLE TRAILS OF KANSAS



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LEGEND

- TALLGRASS PRAIRIE NATIONAL PRESERVE
- CHISHOLM TRAIL
- OREGON TRAIL
- SANTA FE TRAIL
- SMOKEY TRAIL
- KAW INDIAN RESERVATION

Source: Homer E. Socolofsky and Huber Self. *Historical Atlas of Kansas* (Norman: University of Oklahoma Press, 1988)

Indian agency operated in Westport from 1834 to 1848 and another served Council Grove from 1855 to 1872. Missions also played a similar role. A Methodist mission built near Council Grove in 1850 served as a harbinger of greater control of Indian life. With the development of these institutions, Americans took control at the expense of native peoples, and the vast majority of Indian land title in Kansas was soon extinguished.[10]

The pivotal figure in Council Grove, Seth M. Hays, was an integral part of this initial wave of transformation. In the fall of 1847, the thirty-six-year-old bachelor and native of Callaway County, Missouri – one of famed backwoodsman Daniel Boone's great-grandsons – obtained a government license to trade with the Indians and came to the Kaw reservation to establish a trading post. His move to Council Grove was a reaction to the changing economic climate on the frontier. In 1845, Hays and Charles B. Choteau had been in charge of Frederick Choteau's trading post, located on what is now Mission Creek, about two miles west of the Kansa Indian Mission. Hays recognized that the Mission Creek Treaty, under discussion, surely eliminated the need for the trading post where he worked. He sought another posting. When Albert G. Boone, one of Boone's grandsons, and James G. Hamilton of Westport, Missouri, opened a trading post at Council Grove, they placed Hays in charge. Hays built a log cabin, and with his entourage, which consisted of a Mexican teamster who served as a handyman and an interpreter, a freed slave called Aunt Sallie, and Hays' adopted daughter, the trading post opened for business. By 1853, travelers described the post as large and well-furnished, fully stocked with "all kinds of goods needed by the constant stream of teamsters" who followed the Santa Fe Trail.[11]

Native populations resisted the newcomers with the limited resources available, and fire proved to be a tool that sometimes improved the strategic situation of Indians against enemies. In one instance that typified military uses of fire, a group of Kaw Indians used fire to attack U.S. Cavalry troops in the fall of 1852, as they were camping on highlands just east of Diamond Springs, in Morris County north of what would become Tallgrass Prairie National Preserve. According to Col. Percival Lowe, one of the officers leading the patrol, the soldiers camped on high ground east of Diamond Springs. The location was hardly choice for their purposes. The dense grass growth in the area heightened the troops' danger from a sudden blaze from their campfires or from human enemies. The sentries nervously scoured the landscape. As a stiff wind blew in from the south, a guard suddenly saw flames twenty feet high rolling toward the camp. Aware of their vulnerability, the soldiers hastily responded. "Quickly we commenced firing the grass outside of camp," Lowe reported, "whipping out the fire next to it, thereby burning a circle

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[10] William G. Cutler, *History of the State of Kansas* (A. T. Andreas, Chicago, 1883): 803; Unrau, *The Kansa Indians,* 22; Unrau, *Indians of Kansas*, 88-91; William Least Heat Moon, *PrairyErth* (New York: Houghton Mifflin, 1991) 66-70, 547-60; Bruce A. Jones, *Archeological Overview and Assessment for Tallgrass Prairie National Preserve, Chase County, Kansas* (Lincoln, NE: United States Department of the Interior, National Park Service, Midwest Archeological Center, 1998): 37-8.

[11] Louise Barry, *The Beginning of the West – Annals of the Kansas Gateway to the American West, 1540-1854* (Topeka: Kansas State Historical Society, 1972): 1153.

around it."[12] The countermove succeeded in driving off the attackers. The skilled use of fire in the 1850s suggested a long history of similar use.

As the 1850s drew to a close, Americans intensified their settlement of the eastern part of Kansas territory for both economic and political reasons. Many sought agricultural opportunities on the prairie sod, but hundreds poured into Kansas seeking to determine its status as a slave or free territory. Despite growth around Council Grove that resulted from the Indian reservation and the Santa Fe Trail, nearby Chase County lagged in both settlement and development as the hilly topography held little attraction for emigrants. The county lacked the key attribute that attracted settlers, the open land for farming easily available in the surrounding counties. It was easy to look at the Flint Hills and dismiss them when thousands of acres of more easily tillable bluestem prairie beckoned. Perched along the edge of the plains, the Flint Hills offered a challenge, but one that the first wave of settlement did not rush to embrace.

By the mid-1850s, the Flint Hills came to the attention of the commercial forces that bolstered settlement. After settlers took possession of the more attractive lands along Kansas' waterways, the Flint Hills became more appealing. Guide books presented noticeably more sympathetic descriptions of the land than had been common earlier. One such volume published in 1855 described Chase County with a zest and fervor uncommon in mid-nineteenth century descriptions of the plains. "Fine land and timber presents every inducement to the farmer to make locations," the text informed those who looked forward to a new life in the West. "Several settlements are made, but a vast domain remains unclaimed. To describe the adaptedness of this portion of the territory to agriculture is wholly superfluous, it is rich and abounds in timber, rock coal, and good water."[13]

Descriptions of such attributes, either real or imagined, prompted settlement no matter what the law permitted. The 1855 Territorial Census revealed that American settlers had arrived, and the process through which the Flint Hills became integrated into the Kansas Territory began in earnest. In 1859, after considerable population growth, the territorial legislature created Chase County out of Wise and Butler counties, and renamed Wise "Morris County" at the same time. A small coterie gave legitimacy to the new status. In March 1859, Chase County held elections for local officials in which seventy-two votes were cast. In the November 1859 state election, one hundred and twenty-five residents voted.[14]

By the end of the 1840s, the goals of settlers reflected national political positions, aided by provisions of the Kansas-Nebraska Act of 1854, introduced into the U.S. Senate by Stephen Douglas on January 23, 1854. The act allowed territorial residents to decide if their state would permit or forbid slavery. The heightening tension about slavery and the battle for control of Kansas Territory contributed to the reduction in disdain for the plains. Newcomers after 1854 saw land not only as the means to make a living, but also as a way to create formidable realities that

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[12] George Pierson Morehouse, "Diamond Springs: 'The Diamond of the Plain,'" *Kansas Historical Collections* 14 (1915-1918): 797-98.

[13] J. Butler Chapman, *History of Kansas and Emigrant's Guide* (Akron: Teedsale, Elkins & Co., 1855): 64.

[14] Cutler, *History of Kansas,* 796, 1355, 1430.

reflected their political and social points of view. Free State and pro-slavery settlers rushed into the new territory. They recognized that their presence could define the future, and people on both sides of the question pushed westward, aided by political supporters in large urban areas along the Eastern seaboard.[15]

This shifting perspective made positive and equitable relationships with Indians far from a primary objective. The settlers swept onto the plains, first along the trails, then along nearly every river course without regard for previous inhabitants. Southern uplander and Yankee alike, they saw only each other, not the people who preceded them on the plains. The focus of this struggle changed the Flint Hills, this periphery of the plains. The need for institutions that supported political points of view became a basis of Euro-American settlement and a pattern that defined the future both of the Flint Hills and the Great Plains soon took shape.[16]

Solidly in the Free Soil camp at its founding, Chase County was one of many jurisdictions created as a direct or indirect result of the question of the spread of slavery. The environmental conditions of much of Kansas best fit a yeoman farmer population, the kind of people who believed in the agrarianism Thomas Jefferson advocated. They rarely believed in the equality of African Americans. Instead, free soil advocates were certain that slave labor undercut free labor and even though many of them believed that slavery was morally wrong, they did not seek African Americans as neighbors or relatives. Their political choices revealed this complicated perspective. In the Territorial Election held November 8, all 126 Chase County voters supported the Republican candidate for Congress, J. Parrott. At the election under the Wyandotte Constitution held December 6, 1859, Chase County gave Republican anti-slavery supporter Charles Robinson 109 votes for governor; Democrat Samuel Medary received only 10. The new county lined up with the ideology of Free State Kansas, with individual settlement and republican virtue as its highest ideals.[17]

Social conditions in the country helped fuel both this ideology and the expansion it surely demanded. The Jeffersonianism left long after the death of Thomas Jefferson retained a vision of yeoman farmers using land fruitfully, honestly, and for human betterment. The economic depression of 1857 countered that vision. It forced people seeking livelihoods to the west, for their possibilities elsewhere in the nation diminished with the economic catastrophe. Westward movement, always compelling, became even more exciting. A surge to the open lands beyond the fractured tension of sectionalism followed.[18]

By the late 1850s, Kansas Territory had become the centerpiece of the battle over slavery, the apocalyptic "Bleeding Kansas" that spurred the conscience of the nation. By this time, the Permanent Indian Frontier was gone, its forts no longer relevant to the separation of Indians and

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[15] Brian Dippie, *The Vanishing American* (Wesleyan: Wesleyan University Press, 1982): 61, 77, 81-94.

[16] Nicole Etcheson, *The Emerging Midwest: Upland Southerners and the Political Culture of the Old Northwest, 1787-1861* (Bloomington : Indiana University Press, 1996).

[17] Cutler, *History of Kansas*, 1355-6.

[18] Elliott West, *The Contested Plains: Indians, Goldseekers, and the Rush to Colorado* (Lawrence: University Press of Kansas, 1998): 6-14.

settlers. The Mexican-American War of 1846-1848 altered the significance of frontier forts. The United States sent soldiers through Indian territory on the way to battle, which upset Indian people and reinforced the idea that their treaty-protected lands were not entirely off-limits to whites. The California Gold Rush of 1849 provided the catalyst of transformation; not only did it bring a flood of travelers to the Oregon-California Trail, it redefined the way Americans and the world perceived the attributes of the West. The addition of California and New Mexico and later, the Gadsden Purchase of 1854, placed Kansas at the hub of westward expansion. Nearly all the westward routes passed through it, leaving settlers and traces of their passages all along its course. At the geographic center of the pivotal process of westering stood the trading town of Council Grove.[19]

The sectional crisis intruded even further on reserved Indian lands. The Kansas-Nebraska Act changed the equation that facilitated expansion and settlement. Instead of the controlled process created under the Missouri Compromise of 1820, which kept slavery to the south of 36 degree 30 minute longitudinal line, settlement became a free-for-all. The act allowed territorial governments, not federal officials, to decide the question of slavery. Based on the choice of its voting residents, territories could choose their admission to the Union as free or slave states. Signed into law by President Franklin Pierce on May 30, 1854, the Kansas-Nebraska Act established two new American territories, but ignored established treaties with the Osage, Cherokee, Cheyenne, Chippewa and other Indian nations.

The Kansas-Nebraska Act became a pivotal moment in the transition of Kansas and the Flint Hills from Indian country to an American state. The act guaranteed a rush for land by white settlers of differing political and cultural persuasions, even though the unsurveyed lands they sought could not yet legally become theirs. Sectional strife also accelerated the plans of southern and northern sympathizers to make the new territories their own. Both sides recognized that their presence gave them an advantage in the decision to make the new state choose slavery or free soil ideology. The sense of urgency that accompanied their move made them even more cavalier than usual about the rights of Indians in their path, while simultaneously foisting new and tension-fraught responsibilities on the military. With the arrival of competing migrants, soldiers had to keep contentious political sympathizers apart, a difficult and complicated duty that helped them overlook and neglect their treaty obligations to reservation peoples.

Officials of the new Kansas Territory promoted the idea that reservation land could be appropriated. Kansas' first territorial governor, Pennsylvania lawyer Andrew Reeder, disrupted chances for orderly settlement in the territory when he gave tacit approval to settlement on Indian lands. Although the territory's organic act excluded Indian land from the jurisdiction of territorial officers, Reeder located several Indian reservations in election districts, creating the assumption that Indian land was part of the state rather than separate and distinct. He also openly speculated in land developments. As a result, white settlers who believed their claims to land were legitimate settled in visible numbers on Indian land. Among such claimants, the Census of 1855 showed

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[19] Malcolm J. Rohrbough, *Days of Gold: The California Gold Rush and the American Nation* (Berkeley: University of California Press, 1997); Unrau, *Indians of Kansas*, 65.

thirty white families with established claims on the Kaw reservation at Council Grove.[20]

Kansas remained the center of conflict throughout its seven-year territorial period. Between the formation of the territory and statehood in 1861, six territorial governors succeeded Reeder. In addition, eight communities served as territorial capital during the brief, contentious era. The seemingly constant turnover reflected ongoing political turmoil, and in some instances, a lack of stability in the territory. Economic conditions complicated the plight of the territory as well. The Panic of 1857, one of the most severe economic calamities of the nineteenth century, hurt Kansas as much as anywhere in the country. The Midwest and the newer territories enjoyed the greatest benefit from growth in the 1850s. Within 100 miles of the Missouri border, towns flourished as slavery and free state advocates wrestled over the bluestem prairie, newly perceived as an agriculturalist's paradise. Most of the newcomers bought farms and supplies on credit and fell first when economic contractions occurred.[21]

At nearly the same time, gold strikes further west brought many more people to the Kansas Territory. A discovery of gold along Cherry Creek near modern Denver, Colorado, in 1859 made Kansas the staging point for another of the massive rushes of people in search of wealth that dotted the psychic and physical landscapes of the nineteenth century. Almost all the routes to the Colorado goldfields went through Kansas. The southernmost of the three within the state passed by Council Grove and proceeded almost due west, following the Arkansas River nearly 300 miles to Bent's Fort before continuing to Denver. Already established as an important Santa Fe Trail conduit, Council Grove benefitted greatly from the Colorado gold rush trade.[22]

Although the gold rush breathed life into the Kansas economy, it further distanced the territory from questions about the Indian presence. Not only did farmers come to seek good land, but commercial travel along the new trails to Colorado and established routes to New Mexico made goods, if not always specie, available. In 1860, Hays & Co. reported 5,984 men, 2,170 wagons, 464 horses, 5,933 mules, and 17,836 oxen at Council Grove directly involved in the Santa Fe trade. In the aftermath of these energetic economic surges, Indian people who had been promised Kansas lands as homelands once again bore the brunt. In 1859 and 1861, the Kaw signed new treaties that ceded even more land. The cession again reduced their reservation and allowed new inroads by settlers and the railroad. Added to the sectional conflict that took primacy over all other disputes, much of eastern Kansas became a land erased of prior human presence by the tensions among those who arrived to claim it as their own.[23]

Even though the Homestead Act of 1862, which offered all citizens who were heads of families title to 160 acres of public land following five years of continuous residence and payment

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[20] Unrau, *Indians of Kansas*, 70.

[21] West, *The Contested Plains*, 6-9.

[22] Ibid., 116-19.

[23] J.N. Holloway, *History of Kansas: From the First Exploration of the Mississippi Valley, to its Admission into the Union: Embracing a Concise Sketch of Louisiana; American Slavery, and its Onward March; The Conflict of Free and Slave Labor in the Settlement of Kansas, and the Overthrow of the Latter, With all Other Items of General Interest* (Lafayette, Ind., James, Emmons & Co., 1868): 92; Unrau, *Indians of Kansas*, 83.

of a registration fee, formalized the practices of squatters, their actions pushed the state and the nation closer to the precipice of chaos. In 1850s Kansas, sectional tensions exploded in violence across the landscape. The actions of squatters served to deepen the maelstrom, contributing to disorder rather than the virtuous order envisioned by Thomas Jefferson and other agrarian advocates. That the practices of squatters were derived from the ideas of a prominent signer of the United States Declaration of Independence and were later codified in law only served to demonstrate how convoluted the political situation in Kansas Territory had become. Settlers came for all kinds of reasons, economic as well as political, but found a world where from the acquisition of land to the safety of an individual's life, no law seemed to hold.

The chaos deterred neither those who came to further their political views nor those who simply sought land. Many of the first Kansas settlers were pro-slavery activists from Missouri who moved into the state before it was opened for settlement in an effort to prevent a powerful free-state presence. The Missourians tended to take the best country along the waterways, limiting the choices of subsequent, and more likely free-state, settlers. The land chase was equally an economic affair. A broad combination of immigrants newly arrived from Europe, Americans leaving the chaos of the Panic of 1857 behind, and others who set out for the territories to make a new start added a strictly economic dimension to the political chaos of sectional conflict. The result was a territory of mixed allegiance and purpose, where politics took on a significance that could turn deadly even as many simply sought to get ahead.[24]

Political or economic in their reasoning, Euro-Americans brought a culture, a system of organization, and way of seeing that valued land for the riches it could deliver. Their vision of the land and the manner in which they used it greatly differed from prior native inhabitants. For the nomadic plains people, who held that the land belonged to everyone and no one, the Euro-American concept of private property was foreign and totally incomprehensible. Commercial concepts and values dominated the American approach. Their cultural and legal structure demanded a system of metes and bounds that described, measured, and gave land to individuals to possess. In this view, land was far more than subsistence. Instead it was the essence of material being, the source of sustenance and profit.[25]

The actions of many settlers reflected this instrumental approach. In Council Grove, Seth Hays held a government permit to sell beef to Indians. During the very dry summer of 1854, he needed additional feed for his animals. One team of his men cut hay about twenty-five miles south of Council Grove at the mouth of Diamond Creek and along the Cottonwood River. His men also built a cabin beside the Cottonwood River across from the mouth of Diamond Creek and a feed lot on the north side of Cottonwood River. During the winter of 1854, Hays sent cattle south to the river. His sense of possession was soon enhanced by law. In 1856 Hays preempted the 160 acres on which the feed lot was located. The pattern of Hays' progress typified Euro-American settlement. He found land, raised commodities on it to trade or sell, added land to his holdings

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[24] Holloway, *History of Kansas*, 106; Russell Banks, *Cloudsplitter* (New York: HarperFlamingo, 1998): offers a penetrating novelistic account of the chaos.

[25] William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983): 159-70.

that helped him raise commodities, improved that land, and then claimed it as his own.[26]

Hays' enthusiasm was typical; at mid-century, Kansas was more enticing to American eyes than it had ever before been, but its landscape also posed problems for new settlers. To the people of the Age of Wood, who fashioned their tools and implements from wood and relied on it for shelter and heat, a dependable physical world was a prerequisite for success. Trees were prima facie evidence of fertility in the minds of these settlers, but they found few on the plains. Greater fluctuation and little regularity in temperature and frequency of rainfall, which in itself disturbed the rhythms of agrarian and pre-industrial life, accentuated the feel of difference. Early and late frosts, deluges of rainfall combined with extended periods of drought, dried-up creek and river beds and deceptively similar-appearing climates that were in reality far different from those of memory offered clues that this world required different skills and altered cultural preconceptions.[27]

To Euro-American farmers, the Flint Hills beckoned. Glistening in the aftermath of the Little Ice Age and sporting tall deep grasses that also signaled fertility to nineteenth-century eyes, the hills looked a paradise. Subsistence farmers who lived chiefly along river valleys and other bottom lands did reasonably well on their new lands. Some grew crops for family consumption or sale to the market, but the most common farm product was winter feed for livestock. Farmers practiced the time-honored traditions of their culture, and many saw the land with a vision shaped by the farming communities in which they grew up. For Kansas, that chiefly meant corn farmers from the states that comprised the Old Northwest. Out of forty-four households listed on the 1860 state census, twenty-four identified themselves as farmers, and the largest proportion, nine, were from Ohio. They sought the remaining river courses, and as they recognized the region's suitability for agriculture, American farmers developed the area that became Chase County. By the end of the 1850s, the beginnings of Euro-American society in the Flint Hills were apparent. Typical of the initial generation was Gabriel Jacobs, a Dunkard preacher who followed his son from Indiana in 1856 and settled along Jacobs' Creek in what is now called Grandview. By most accounts, Jacobs was intent if impractical, and when the Cottonwood River ran dry in 1859 and 1860, he floundered. Plentiful harvests of the previous years could not be equaled and even his profound faith could not ward off economic privation.[28]

On the homestead of Ohio native John H. Scribner, which would become the earliest segment of the Spring Hill/Deer Park Ranch purchased by Stephen Jones, he, his wife Betsy, and four children farmed 160 acres. According to the 1865 Kansas agricultural census, Scribner

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[26] Mildred Mosier Burch, "Story of the First Log Cabin Built in Chase County," in Chase County Historical Society *Chase County Historical Sketches*, Vol. 1 (1940): 105.

[27] Terry G. Jordan and Matti Kaups, *The American Backwoods Frontier: An Ethnic and Ecological Interpretation* (Baltimore: Johns Hopkins University Press, 1989): 135-78; Hal K. Rothman, "The Indians, Wolves, and Deer Here Seem to have Things Their Own Way: Settlement and Community in Mclean County Illinois, 1821-1830," (unpublished paper); John Mack Faragher, *Sugar Creek: Life on the Illinois Prairie* (New Haven: Yale University Press, 1986): 64-5, 132; John Perlin, *A Forest Journey: The Role of Wood in the Development of Civilization* (New York: W. W. Norton, 1989).

[28] Least Heat Moon, *PrairyErth*, 66-70.

fenced 125 acres and improved thirty-five more. Scribner, heavily involved in the freighting business, was absent most of the time. His real estate was valued at $1,400, and he owned $1,130 in livestock, including ten horses, six milk cows, and thirty-two other cattle. The 1865 Kansas State Census listed 1,692 cattle in Falls Township, the political subdivision surrounding Scribner's holdings. The three stock operations in the township held a total of 417 cattle. Scribner had 32 head, one of the largest holdings by any of the small farmers. To support himself and his livestock, that year, Scribner and his family harvested thirty-four bushels of wheat, eighty bushels of corn, and one hundred tons of hay, and listed agricultural equipment at $100. While not wealthy, he had become reasonably prosperous, and thanks to his outside income able to sustain his family in a comfortable style. The Scribner family lived there in a log cabin for six years before moving to a farm east of Cottonwood Falls.[29]

Among other early Chase County settlers was Francis Bernard, a farmer and stock-raiser. The 32-year-old Bernard emigrated from France to the United States in 1854. In August 1857, he arrived in Kansas, locating on 160 acres on the Cottonwood River in Cottonwood Township. His farm grew to 440 acres and included three frame dwelling houses, two of which he rented, along with a "good barn, corn cribs, a wheat granary and an orchard of about two acres." At his peak, Bernard cultivated almost 300 acres in wheat, his principal crop. Timber covered another 100 of Bernard's acres, and he raised cattle and horses. This mixed regime of agriculture and animal husbandry reflected the time and place, typical of the people who placed their stamp on the American continent during the nineteenth century.[30]

William J. Keller followed a similar pattern. Keller was born in Illinois in 1836 and settled on the north side of the Cottonwood River in 1858. He initially purchased 120 acres, adding 80 adjoining acres and later, more land. Keller preferred animal husbandry to agriculture, keeping about sixty-five acres in crops to feed his stock and using the rest as pasture for his cattle, horses, and hogs. Keller became the prototypical Flint Hills rancher, invested in animals with agriculture as support.[31]

Another of the first generation of Flint Hills farmer-ranchers, Ephraim W. Pinkston, filed a claim on the Cottonwood River in Cottonwood Township on August 12, 1857. Hailing from Sullivan County, Indiana, he built a log cabin on his claim nine months later. In subsequent years, he added to his farm until it reached 545 acres. Pinkston also owned 160 acres on the Cottonwood River about one mile east of his farm. Within a few years, he built a substantial stone house, a barn, granary and other farm buildings and planted an orchard that covered about three acres. Pinkston cultivated about 300 acres and like his neighbors, also owned about 100 acres of timber. He raised corn, wheat, and rye, and kept about 250 head of cattle, including thoroughbred and high grade shorthorn stock.[32]

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[29] *1865 Kansas State Agricultural Census*, Falls Township, Chase County, KS, Microfilm R 312, Reel 2, pg. 12; Topeka Genealogical Society, *Kansas Pioneers,* (Topeka: Topeka Genealogical Society, 1976): 298.

[30] Cutler, *History of Kansas*, 1363.

[31] Ibid., 1364.

[32] Ibid., 1364

By the end of the Civil War, cooler temperatures and higher levels of precipitation began to be replaced by a slightly warmer and drier cycle on the plains. Persisting into the 1880s, this warm spell compounded the lush look created by the extended cool wet period that followed 1500 A.D. To settlers, the land seemed both moist and fertile and the climate more pleasant.[33] Combined with sheer expansiveness, climatic conditions further accentuated the appearance of economic potential, convincing many farmers and ranchers that they encountered a paradise similar to the ones previously uncovered by their parents, grandparents, and great-grandparents in Missouri, Illinois, Indiana, or Iowa.

Soon after the agriculturalists came the development of institutions that nearly always characterized settled agricultural towns on the fringes of nineteenth-century American society. In 1859, increasing populations prompted the Kansas Territorial Legislature to create Chase County from neighboring Wise and Morris counties. Cottonwood Falls, which later became the county seat, had been incorporated by Free Soil supporters on February 6, 1858, laying the basis for the institutional future. Among the incorporators of the Cottonwood Falls Town Company, one of the hundreds of enterprises set up to promote and sell town lots, were Lawrence resident Columbus Hornsby and George W. Deitzler, a Pennsylvania native who was an active participant in the free-soil politics. The two men helped establish Emporia the previous year. Q.N. Randolph; John Gilmore; S.F. Tappan Jr., a twenty-seven-year-old mechanic from Massachusetts; A.D. Searle, a member of the second group dispatched from Boston by the New England Emigrant Aid Society; and Samuel N. Wood, a Free-State supporter who arrived in Lawrence even before the New England groups and who went on to become one of the most important figures in early Kansas history, were all involved in the birth of Cottonwood Falls.

With the formation of the town, the institutions of American society rapidly followed. Following establishment of the county, five townships were created in 1860; Diamond Creek in the northwest corner of the county, Falls, in the north central; Toledo, in the northeast and eastern; Bazaar, in the southeast and south central; and Cottonwood, in the southwestern. The first post office was located in the home of Charles S. Hills, near today's Strong City. In 1859, the post office was moved to Cottonwood Falls, where Sidney Breese, an Ohio native who worked in Samuel Wood's Lawrence law office before moving to Chase County, became the first postmaster. The county's educational and moral needs were important to early settlers. School District No. 6 was organized in Chase County in 1862. The first courthouse was a small log building built in 1863, and thrifty residents also used it as a school. One of the first teachers was Mary Hatten, mother of William Allen White, the famous Emporia, Kansas, newspaper editor. These rudimentary organizations became the backbone of the community. A few years later, the churches were established in Cottonwood Falls. The Congregational Church organized in 1870, one year ahead of the Methodist Episcopal Church. [34]

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[33] Harold C. Fritts, *Reconstructing Large-scale Climatic Patterns from Tree-ring Data: A Diagnostic Analysis* (Tucson: University of Arizona Press, 1991): 129-32; Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900 AD* (Cambridge: Cambridge University Press, 1986): 1-7; Cronon, *Changes in the Land,* demonstrates clearly the difference in practice.

[34] Cutler, *History of Kansas*, 1355-8; Chase County Historical Society, *Chase County Historical Sketches*, Vol. 1 (1940): 30-32.

Commercial institutions followed population growth in Chase County. The county's first newspaper was the *Kansas Press*, printed in Cottonwood Falls on May 30, 1859, and edited by Samuel Wood. It described the city as having but two cabins, with only one possessed of a board floor. Following the politics of its editor and most of the county's founders, the newspaper espoused a free-state perspective. The dynamic Wood did not stay in Cottonwood Falls long. The leaders of Council Grove persuaded him to relocate his newspaper to their town on September 5, 1859. They offered to buy two hundred and fifty copies of each edition of the newspaper at $1 per copy, and gave him space for the press free of charge for six months and a free lot for his office as well as another for his home. Nor did Council Grove tax the sale of the newspapers to the town. Despite the loss of the newspaper business, Cottonwood Falls continued its commercial development. L.D. Hinckley opened a grocery store in 1859, the same year that Isaac Alexander gave him and J.B. Smith land in exchange for constructing a dam, saw mill and grist mill along the Cottonwood River. The two men built a wooden dam, later replaced by one made of stone. Alexander was one of the town's earliest builders, and he owned a quarry that he established in 1856. In 1860, Hinckley returned from Ohio with a circular saw, and he and Smith produced lumber to build both mills. Despite their efforts, a drought that year dropped the river level too low to operate the saw and milling had to wait until the following year. Both mills were ready for full operation in 1861.[35]

As did many Kansas counties, Chase County built public buildings to announce its arrival among the civilized. For this sparsely populated county as for many others, a distinctive courthouse became the pivotal symbol. By the mid-1860s, the county moved its institutions from an initial structure to a new one, purchased for $175 on April 3, 1863, from George W. Williams. The log house and the adjacent court house were situated northwest of the town square. In 1871, the county began its defining structure, a courthouse built in the Renaissance style of Louis XIII architecture, southwest of the old log structure. With John G. Haskell of Lawrence serving as the architect, contractor James Bannan of Leavenworth erected the new courthouse for $36,945, completing it on November 13, 1873. The three-story structure defined the county, both by its impressive size and its construction of limestone from the immediate area, giving it full status among similarly self-defined peers.[36]

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[35] Carrie Breese Chandler, "A History of the Old Mill at Cottonwood Falls," *Chase County Historical Sketches*, Vol. 1 (1940): 61-63; Clara Brandley Hildebrand, comp., "Newspapers of Chase County," *Chase County Historical Sketches*, Vol. 1 (1940): 68-70; John Malay, *History of Morris County, 1820 to 1890* (Council Grove: Morris County Historical Society, 1981): 13; State of Kansas, *The Official State Atlas of Kansas* (L.H. Everts & Co., 1887): 45.

[36] Cutler, *History of Kansas*, 1357; James Shortridge, *The Middle West: Its Meaning in American Culture* (Lawrence: University Press of Kansas, 1989); Bannon let subcontracts to John Emslie, formerly of Leavenworth, for stone and brickwork; Byers and Russell of Lawrence for tin and sheet iron work; M. Madden Leavenworth, painting; W.M. Cronan, Cottonwood Falls, plastering and moulding; Bannon personally supervised the carpenter work. The courthouse used fine magnesium limestone from a quarry on property of Isaac Alexander on Spring Creek, just east of Cottonwood Falls. Alexander donated the property in Cottonwood Falls for the courthouse. Stone cutters were paid $3.50 per day, and laborers from $1.75 to $2.25. Carrie Breese Chandler, "Building Chase County's Courthouse — A Monument to Pioneer Fortitude." *Chase County Historical Sketches*, Vol. 1 (Chase County Historical Society, 1940): 56-58.

The courthouse construction was both affirmation of the county's position and proof of its increasing size and stature. Its construction occurred during the middle of a twenty-five-year period of extended growth. The territorial census of 1855 showed only thirty families in the county, but rapid growth followed after a change in law allowed squatters to preempt unsurveyed federal land, the status of most Chase County lands. In 1859, 549 people called Chase County home. The following year, one of the most tense in the sectional conflict, the number nearly doubled to 1,046. The entrance of Kansas into the Union as a free state in January 1861 and the Civil War slowed growth, but by 1870, the population again nearly doubled to 1,989. During the 1870s the pace of growth dramatically increased. By 1875, 3,116 people lived in the county and by 1880, the population tripled from the previous decade. The 1880 census recorded 6,081 people in Chase County, a number that paralleled most agricultural counties on the Great Plains.

Roads and other networks of transportation provided crucial support for the development of Chase County and the Flint Hills. Without the means to go elsewhere, the region's population was forcibly parochial, unable to gain the benefits of interaction with the outside world. The Flint Hills had long been a place that people – from the earliest inhabitants to the travelers along the various trails – passed through. The Kaw Trail from Council Grove to Sycamore Springs, the Mormon Trail on which wagon trains traveled on their way to Utah between 1848 and 1852, and the Texas cattle trail, which led north through Arkansas City, Winfield, and El Dorado, and into the hills, were all integral in the process of creating commerce and contact with the outside world. As Euro-American settlement increased throughout Kansas, a network of trails on which commercial conveyances carried freight and people and immigrants and others made their way defined the patterns of regional transportation. This network was both interregional and intra-regional: one trail left Emporia for Sycamore Springs, El Dorado and Wichita; one connected Cottonwood to Emporia, Lawrence, and Leavenworth; another left Council Grove for Strong City, Cottonwood Falls, Bazaar, Matfield Green, and then continued southwest to El Dorado and Wichita. These trails became the backbone of transportation, the lines that connected the Flint Hills with the outside world, and several became paths for roads, highways, and railroads.

As it was for the nineteenth-century United States, the railroad became the catalytic factor in the Flint Hills. No single technology could transform a place or region more completely and comprehensively, could create more possibilities, or make previously remote and usually economically worthless land increase in value like the railroad. It also provided an entire range of social, cultural, and economic experience that was usually beyond the reach of people in any region before its arrival. The mere thought of a railroad made land speculators salivate; the sound of a train whistle spelled a new future for places as remote as the Flint Hills.

Driven by economics as much as politics, Kansans recognized the importance of railroads well before statehood. The *Kansas: Emigrant's Guide* in 1855 noted the shortcomings of transportation in the territory. Its rivers could not easily be navigated; even the most prominent, the Kansas River could not be navigated during the dry season. Throughout the state, the guidebook stressed, "the main thoroughfares must be railroads" to compensate for the limits of climate. This was both a portent of an optimistic future and a concession to the realities of prairie life, where the weather could create a quagmire one day, a frozen blizzard the next, and then deliver a hot, dry spell that sucked moisture from the ground and made overland travel by wagon sheer torture. Railroads could negate much of the difficulty of bringing immigrants, of conveying

produce to markets and of receiving the goods from the centers of American society. With such obvious advantages, it came as no surprise that a railroad was high on the list of the desires of territorial Kansas.[37]

Railroads also altered the equations of regional development. Prior to the railroad, geography played an enormous role in the location of communities. Most were founded along water, for it was an essential mode of transportation as well as a source of necessary sustenance. Railroads used a different calculus in determining the locations of towns, and financial considerations became the dominant factor. The economics of the railroad loomed so large that it prompted some communities to change their location to acquire access to the steel rails at the heart of nineteenth-century technology.[38]

Railroads played a key role in development of regional economies and the communities that grew to depend upon them. Rails allowed ranchers and farmers alike to participate in the national economy in ways they could not without access to the railroad. Before rails, agriculture emphasized cattle or swine that could walk to markets over rough roads. As the transportation system improved, farmers, who were largely self-sufficient, sold or bartered crop surpluses to local merchants, who could transport the goods to sell in nearby cities. Instantly the railroad allowed important changes in the choices of agricultural life and played a catalytic role in its transformation. The demands of the market economy determined crop selection after the arrival of rails, which also made possible the speedy, effective movement of crops to regional markets. Farmers could also begin to use larger, more capable farm machinery that could only be efficiently transported by rail and they could grow and sell more of their produce as well. Rails caused the same kinds of changes in the cattle industry. From the wide-open cattle drives of the 1860s, a tightly organized industry emerged. A vertical infrastructure for the meat industry, in which cattle were born, raised to maturity, and fattened for slaughter in different places, became the norm. Without railroads, such organizational concentration could not occur.[39]

The crucial business development of 1860s Kansas was the initiation and spread of the Atchison, Topeka and Santa Fe Railway (AT&SF). A railroad was seen as the key to the territory's growth, a stark and clear reality apparent to both pro-slavery and free state advocates. In the tension of 1850s Kansas, the only entity that brought together southern sympathizers and Union proponents was the original group of hard-headed pragmatic businessmen that planned the railroad. Colonel Cyrus K. Holliday, an avid free-stater, became the railroad's catalyst. An active participant in territorial politics and avid promoter of the city of Topeka, Holliday wrote a charter for the new road, then called the Atchison and Topeka, in January 1859. He collected a list of names for his board of directors; picking wisely he included most of the powerful people on both sides of the sectional conflict. Among them was Samuel C. Pomeroy, who became a U.S. senator

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[37] Chapman, *History of Kansas and Emigrant's Guide*, 6.

[38] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991): 324-32; Rothman, *Devil's Bargains: Tourism in the Twentieth Century American West* (Lawrence: University Press of Kansas, 1998); Lewis Mumford, *The City in History: Its Origins, Its Transformations, and its Prospects* (New York: MJF Books, 1989): 458-65, 503-09.

[39] Cronon, *Nature's Metropolis*, 97-119.

when Kansas attained statehood. Despite subsequent financial and legislative setbacks, Holliday believed in his railroad and continued to promote it despite a lack of capital. In 1860, he and future senator Edmund G. Ross, approached the Kaw River at Topeka in September 1860 on their way to register the railroad company's charter. Between them, they lacked the fare to pay for ferry passage, and so were forced to ford the river on horseback. The ferry owner, Jack Curtis, father of the future United States Vice President Charles Curtis, was livid, but the men's empty pockets reflected the morbid condition of their railroad's finances.[40]

Nearly a decade passed before the railroad became reality. Strapped by a lack of funds, Holliday could do little until a federal aid package authorized early in 1863 created possibilities not previously available to the struggling railroad and its proponents. Part of the delay stemmed from a severe drought in 1859 and 1860 and the beginning of the Civil War. The drought and the war combined to slow and the number of settlers coming to Kansas, and a lack of enthusiasm delayed construction of the rails. Even the departure of southerner representatives in Congress, who routinely blocked efforts to fund northern railroads with federal dollars, did not immediately help the railroad. Only when Holliday's aspirations coincided with those of the reunified nation did real progress begin. When the name of the line became the Atchison, Topeka, and Santa Fe to reflect larger regional goals, the tide seemed to turn, although its owners faced a ten-year deadline to reach the western boundary of Kansas to earn the grant of land on which their economic success depended. Finally in 1868 construction began.[41]

The railroad faced ongoing financial difficulties during grading and track-laying, and its leaders worried that they might not build west fast enough to satisfy their land grant obligations. Railroads were eligible for enormous federal grants of land that helped make construction profitable. After considerable wrangling, in 1863 Congress granted the Atchison and Topeka Railway three million acres of land west of Emporia, Kansas, in alternating sections of one square mile. The grant made the railroad into a land company and to a lesser degree, put it in the land development business. The grants themselves were huge, almost incomprehensible sources of wealth, but the wealth was deferred. The payoff for the AT&SF came only after construction was completed. In the late 1860s, the railroad owners needed immediate funds. The solution to the financial crisis was obvious: reach the Arkansas River Valley as quickly as possible to capitalize on the cattle business. Transporting cows, which at the time were headed to the Kansas Pacific Railroad at Abilene, offered the cash necessary to build further west. The attempt to develop new shipping outlets for the cattle trade put Cottonwood Falls, with its combination schoolhouse and jail, directly in the path of the steel rails.[42]

As the first rails of AT&SF Railroad were laid, the town of Cottonwood Falls already had the look of a community. In 1871, the railroad neared Cottonwood Falls. The Cottonwood Falls

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[40] Joseph W. Snell, and Don W. Wilson, "The Birth of the Atchison, Topeka and Santa Fe Railroad." *Kansas Historical Quarterly* 34, no. 2 (Summer 1968): 113-142; Keith L. Bryant Jr., *History of the Atchison, Topeka, and Santa Fe Railway* (New York: Macmillan, 1974): 8-10.

[41] *United States Statutes at Large* (37th Congress, 3d Sess., 1862-1863): 772, cited in Snell and Wilson, "The Birth of the Atchison, Topeka and Santa Fe," 117.

[42] Bryant, *History of the Atchison, Topeka, and Santa Fe Railway*, 105-15.

area had always been well represented in the AT&SF; Samuel N. Wood, one of the town's organizers and once the newspaper editor in Cottonwood Falls for a brief time, was named vice president of the company in 1863 as a reward for his success in selling company stock. Wood tried to bring the rail line directly through Cottonwood Falls, but his opposition to a railroad bond defeated that proposal. As a result of the railroad's need to push forward construction without delay, the line was located one and one-half miles to the north. In addition to Wood's opposition, the Cottonwood River itself proved to be an obstacle that helped turn the railroad aside. Seeking to minimize construction time and cost, the Santa Fe opted to turn west on the north side of the river. The depot built to serve Cottonwood Falls, Cottonwood Station, which was renamed Strong, after Henry Strong, president of the Atchison Topeka and Santa Fe Railroad, in 1881, and later Strong City, served as a nucleus for community development. Within a few years Strong City was competing with its southern city neighbor for businesses and residents.

The AT&SF gathered an important share of the cattle trade. On March 21, 1871, the Topeka *Commonwealth* reported that the railroad planned to use Newton as its southern terminus during the coming year. By April 8, rail lines reached seven and one-half miles past Cottonwood Falls, almost completing the process that would link the little Flint Hills community to the larger nation in profound ways. Less than three months later, the first Santa Fe train steamed into Newton. During the first year as a trail head, 40,000 head of cattle were shipped to eastern markets from Newton, with many animals unloaded in the Flint Hills for fattening before finishing their trips to the slaughterhouses. The animals that passed through on their way east signaled the transformation of Chase County. Cottonwood Falls had become a stop on the great national connection of modernity, the combination of interconnected railway lines that followed the Union Pacific and the Central Pacific in reaching from coast to coast.[43]

The land that the railroad stood to receive created a range of tensions in Kansas. The railroad offered 6,400 acres per mile of track to settlers, but title to the land could not be secured until the AT&SF met its obligation to build track to the western border of Kansas. When rail lines reached the border at the end of 1872, just ahead of the deadline established in the original legislation, the availability of land posed questions for the future of communities in the state. Cheap and abundant railroad land offered to potential settlers posed a problem for existing communities that sought growth. New lands available to farmers near rail lines spread people across the landscape, fostering new towns and sometimes drawing business away from existing ones. Others who liked their lives the way they were felt threatened by the arrival of travelers surveying the country for choice home sites. In most cases, a booster spirit took hold, with each town or locale touting its assets and attributes. In Chase County, growth was the primary goal; the county coveted new residents. "An unusually large number of persons visited this county last week, looking for homesteads, or improved farms for sale," the Chase County *Banner* observed on May 28, 1869. "We hear of several pieces of real estate changing hands. Probably no county in the State offers superior inducements to settlers than this; there are thousands of acres of fair, tillable land yet vacant, open for homesteads, and good valley farms with improvements, can be bought for from ten to twelve dollars per acre." This booster spirit typified western counties in the nineteenth century. No place was better suited for settlers than theirs, and the *Banner* remarked

[43] Bryant, *History of the Atchison, Topeka, and Santa Fe.*

with aplomb: "It is surprising that persons from the East looking for homes, do not take a more general view of the State before purchasing; that they should pay high prices for rolling Prairie east of here, when they can get as good or better here as homesteaders."[44]

AT&SF land contained a disproportionate amount of Kansas' population growth during the 1870s. Initially, railroad land sold slowly. By 1872, settlers had purchased only 74,000 acres, but in the following year a boom in sales began that continued until the end of the decade. Positive assessments of the land in question helped, propelling visitors to see Kansas and comment favorably on its agricultural attributes. Newspapers assisted this process. The Topeka *Commonwealth* noted on May 30, 1871, that the railroad lands soon to be available were a "choice lot of lands, being well watered by streams in every direction, and first-rate prairie and bottom soil." Such an endorsement offered not only hope for settlers, but affirmation of the locals' perspective.[45]

The railroads operated on a rigorous schedule that made them harbingers of new ways of thinking about and living life. The technological achievement of the age, railroads also introduced late-nineteenth-century attitudes about time and distance. Where frontier residents lived with a vague preindustrial sense of time, the railroads brought a culture where time was measured by the minute. Even in 1881, published schedules were widely disseminated, and the appearance of a train might break up a farmer's day. Completing certain activities took on an urgency that could not have existed before the arrival of the tracks; other tasks could wait until the train's departure. Since trains operated on a fixed schedule, farmers who had produce to sell had to be prepared when the train arrived.

The AT&SF schedule revealed precision timing even during the year the tracks first reached Cottonwood Station. The No. 3 Mail left North Topeka at 1:20 p.m. and was scheduled to arrive at Cottonwood, 81.8 miles away, at 5:45 p.m. The pace of nearly twenty miles an hour was inconceivable. On horseback, twenty miles might be an entire day's ride. Leaving Cottonwood Station, the train continued to Newton, arriving there at 8:35 p.m. The No. 2 Mail left Newton at 5:20 a.m. and arrived at Cottonwood at 8:10 a.m., a distance of 53.7 miles, and reached North Topeka at 12:35 p.m. Trains ran daily except for Sunday. A stock express left Newton every evening at 4:30, arriving in North Topeka at 3:30 a.m.[46]

The rail system, crucial to the region when it started construction, grew into an integral part of Kansas' economic machinery. It initially supported the regional economy by permitting the easy export of native limestone. In 1879, the county exported 1,462 railroad cars of limestone, compared to only eighty of cattle. Land sales also drove the county's economy. By 1882, J.W. McWilliams, who established the Chase County Land Agency in 1869, was the special agent for

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[44] Richard White, *"It's Your Misfortune and None of My Own:" A New History of the American West* (Norman: University of Oklahoma Press, 1991): 145-147; Bryant, *History of the Atchison, Topeka, and Santa Fe*, 65-66; Chase County *Banner*, Cottonwood Falls, May 28, 1869.

[45] Topeka *Commonwealth*, May 30, 1871; Least-Heat Moon, *PrairyErth*, 469; Bryant, *History of the Atchison, Topeka, and Santa Fe Railway*, 65-66.

[46] L.M. Hurley, *Newton, Kansas, A Railroad Town: History, Facilities and Operations, 1871-1971* (North Newton, KS: Mennonite Press, 1985): 5; AT&SF timetable in effect July 17, 1871.

the sale of the AT&SF lands, of which there were nearly 100,000 unsold acres in the county. By late 1887, the Chicago, Kansas and Western line, which had been taken over by the Santa Fe, completed its 150-mile northwest branch from Strong to Concordia and on to Superior, Nebraska, with a sub-branch running from Abilene to Salina. Strong City became an important junction for passenger, freight and mail trains. Other railroads in the area included the Missouri Pacific and Missouri, Kansas and Texas lines. Support industries for the railroad systems developed in the Flint Hills. Local workers helped construct and maintain the rails, as well as new loading facilities for cattle built in the towns. Area businesses supplied food and lodging for railroad workers, whose paychecks became a significant factor in town development.[47]

Chase County received the ultimate community prizes in June 1882 as two banks came into being. Prior to that year, N.J. Swayze operated a private bank in Cottonwood Falls, and local newspapers ran advertisements for loan companies. In January 1882, Stephen F. Jones, owner of the Spring Hill Ranch, and local merchant E.A. Hildebrand began construction of a two-story building in Strong City. After completion, one side became a banking facility and the other was used as a mercantile store. Hildebrand owned the lots used for the building, which cost $10,000. The private Strong City Bank opened in June with Jones as president and Hildebrand as cashier, and an application was filed for national bank status. The bank's capital was reported at $100,000. A charter was received the following June and the facility became the Strong City National Bank. The eight members of the board of directors included Barney Lantry and Peyton Jones, Stephen Jones' brother. Another bank, the Chase County National Bank, opened for business in August 1882 in Cottonwood Falls with an initial capital of $50,000. It moved into a new bank building in January 1883.[48]

Other businesses in Cottonwood Falls and Strong City showcased the area's economic development. By 1882 Cottonwood Falls boasted two hotels, two bakeries, two billiard rooms, two confectioneries, two meat markets, two livery stables, two coal yards, two blacksmith shops, two millinery establishments, two furniture houses, two music and sewing machine stores, two hardware stores, two drug stores, two newspapers, the *Leader*, a Republican paper, and the *Courant*, Democratic in its views, one lumber yard, one brickyard, one feed store, one barber shop, one shoe shop, one paint shop, one harness shop, one carpenter shop, and seven general stores. In Strong City, Jones and Hildebrand financed a stone building for the Hildebrand Bros. & Jones Hardware Co. Barney Lantry & Sons, a stone contracting firm, had a monthly payroll of $40,000 and material from its quarries helped build San Francisco and Mexico City, as well as numerous railroad projects across the United States.[49]

As soon as national interests integrated central Kansas into the county's market economy, technology became crucial to overcoming frontier limitations of time and distance. The timelessness of earlier societies in the Flint Hills had been replaced by the synchronized regularity of the Santa Fe's train schedule. The region's farming and ranching population was ready to

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[47] Cutler, *History of Kansas*, 243-5, 1355.

[48] Cutler, *History of Kansas*, 1357; Strong City *Independent*, April 7, 1882, July 12, 1883; interview with Julia Hobbs, August 12, 1999.

[49] Cutler, *History of* Kansas, 1357, 1361.

throw away the limits imposed by the environment. Waiting to replace the confines of seasonal temperatures and precipitation were the economic parameters of a national market system, controls that could prove almost as difficult to negotiate. The integration of the Flint Hills into the national market economy had only begun.

Figure 1: The main house at the Z Bar/Spring Hill Ranch built by Stephen Jones (Photograph courtesy of Deone Benninghoven)

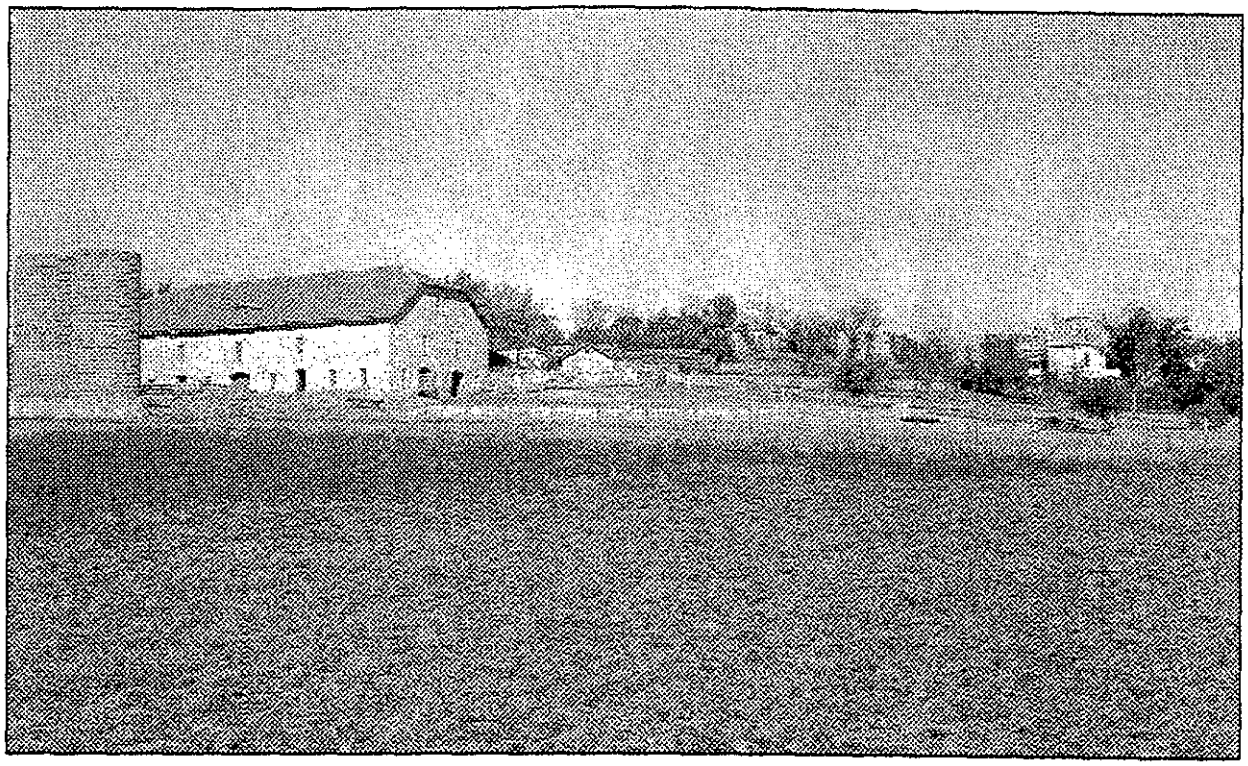

Figure 2: The main house and barn at the Z-Bar/Spring Hill Ranch during the Benninghoven ownership (Photograph courtesy Edith Kinucan)

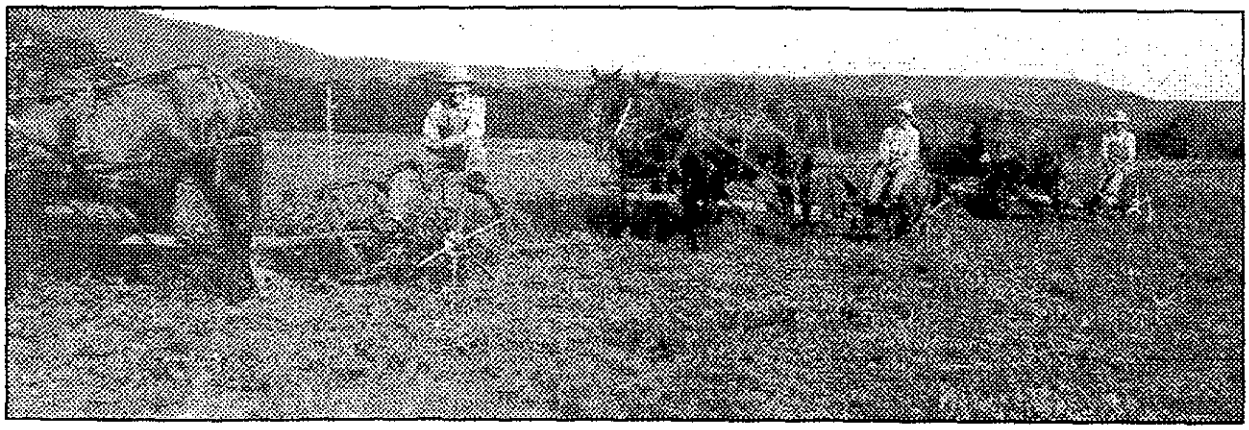

Figure 3: Workers on the Benninghoven ranch operate horse-drawn farming equipment. (Photograph courtesy Deone Benninghoven)

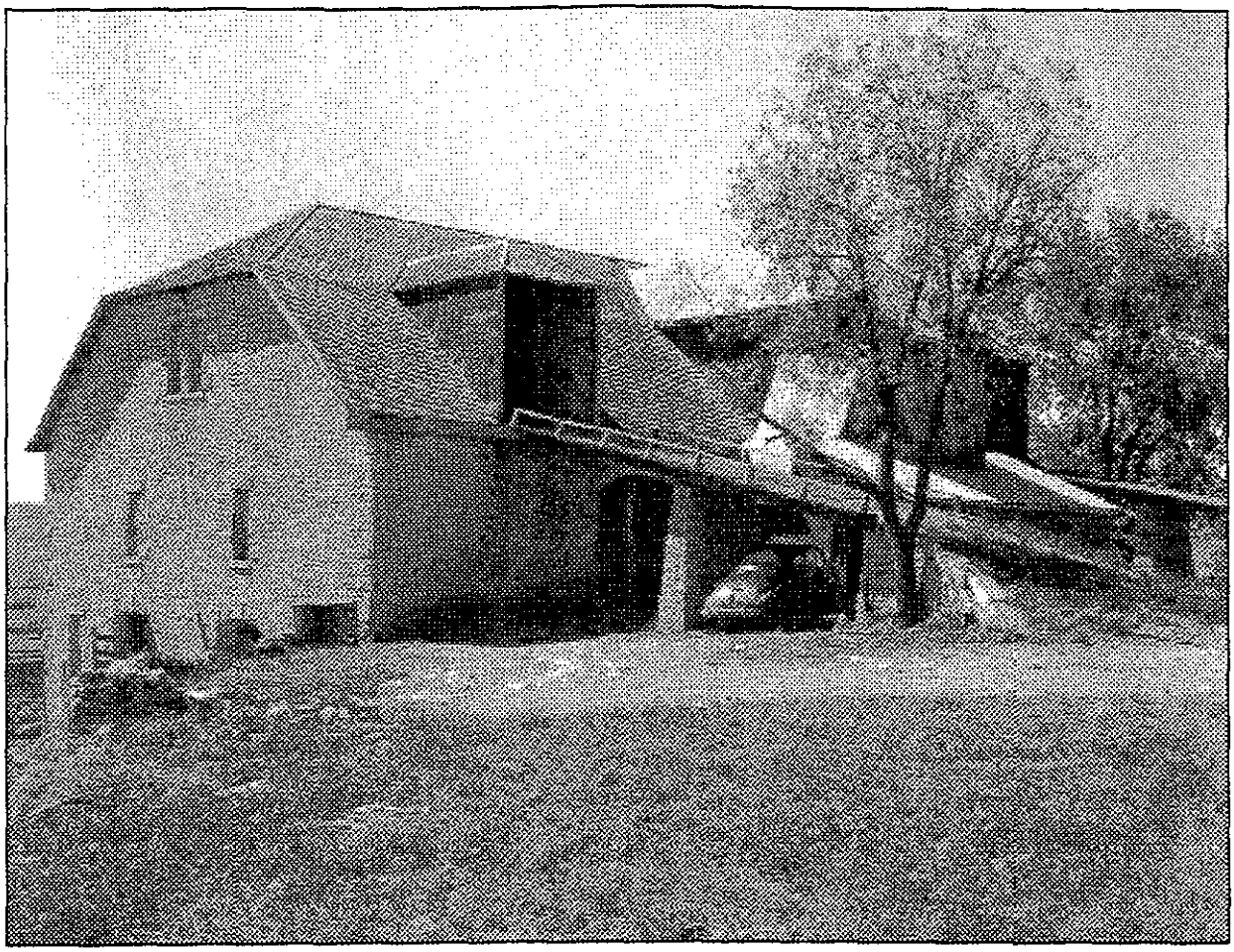

Figure 4: The main barn, showing the ramps to the upper floor (Photograph courtesy Edith Kinucan)

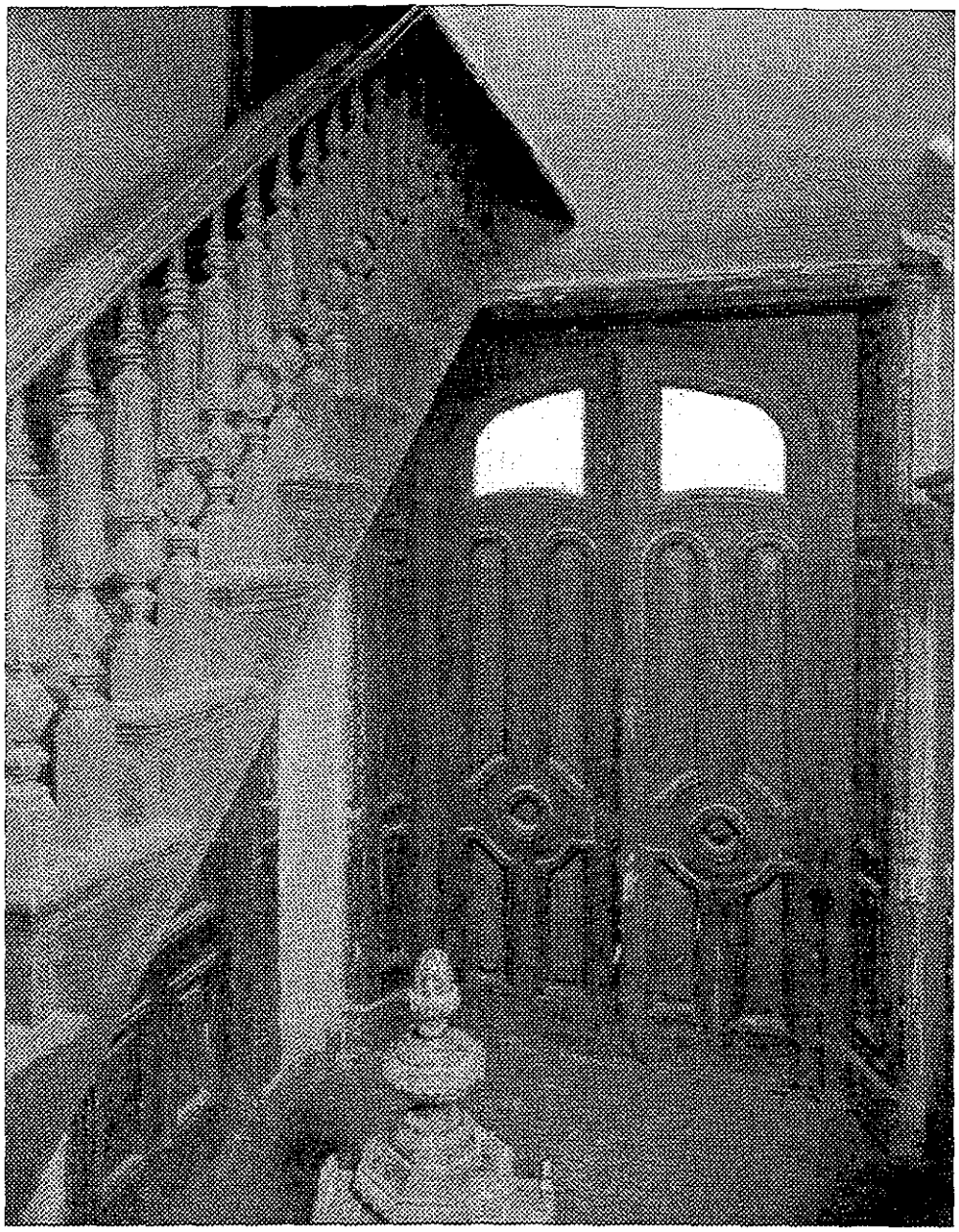

Figure 5: The front door and foyer of the main house when it was owned by the Benninghovens (Photograph courtesy Edith Kinucan)

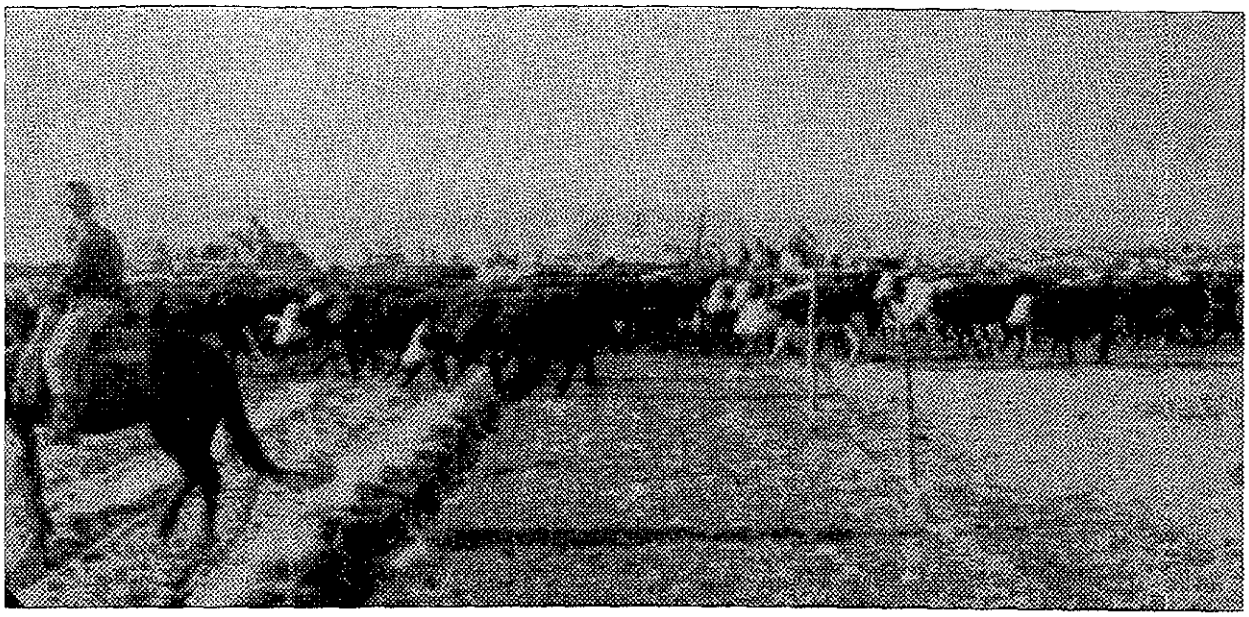

Figure 6: A Chase County cattle drive in May 1938. (Photograph courtesy Fred Howard II)

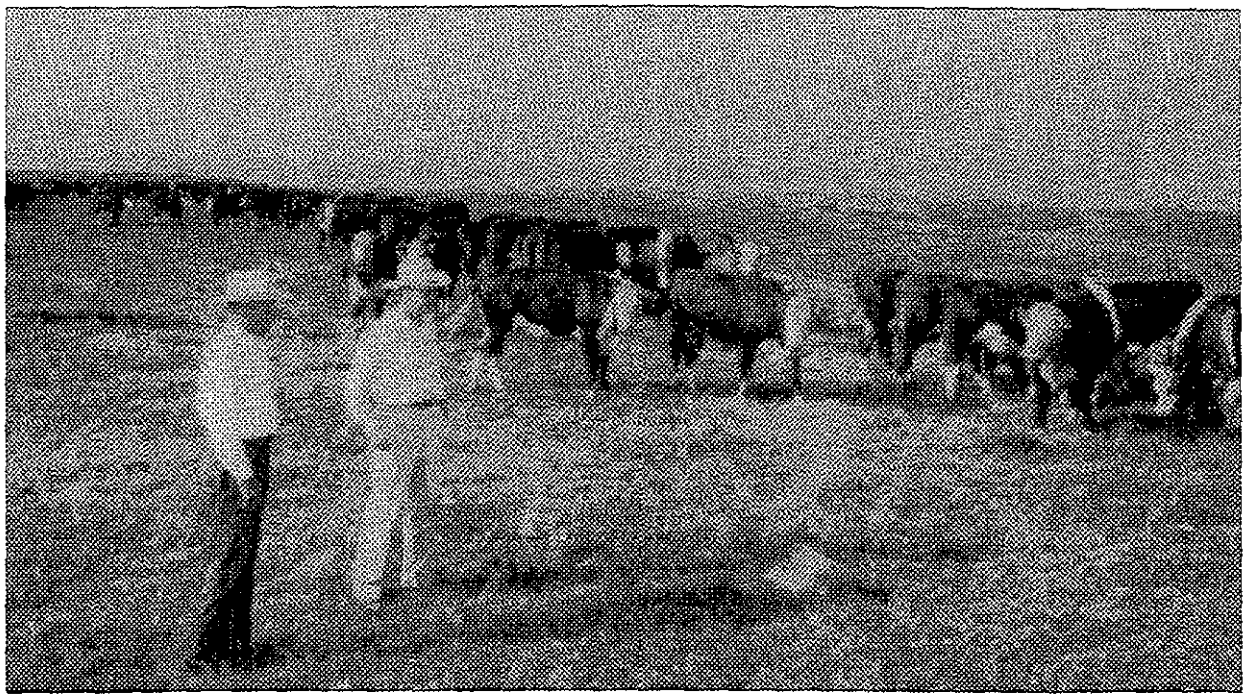

Figure 7: Fred Howard Sr. (left) and E.C. Crofoot, owner of a Chase County feed lot, inspect the Z Bar stock around 1955. (Photograph courtesy Fred Howard II)

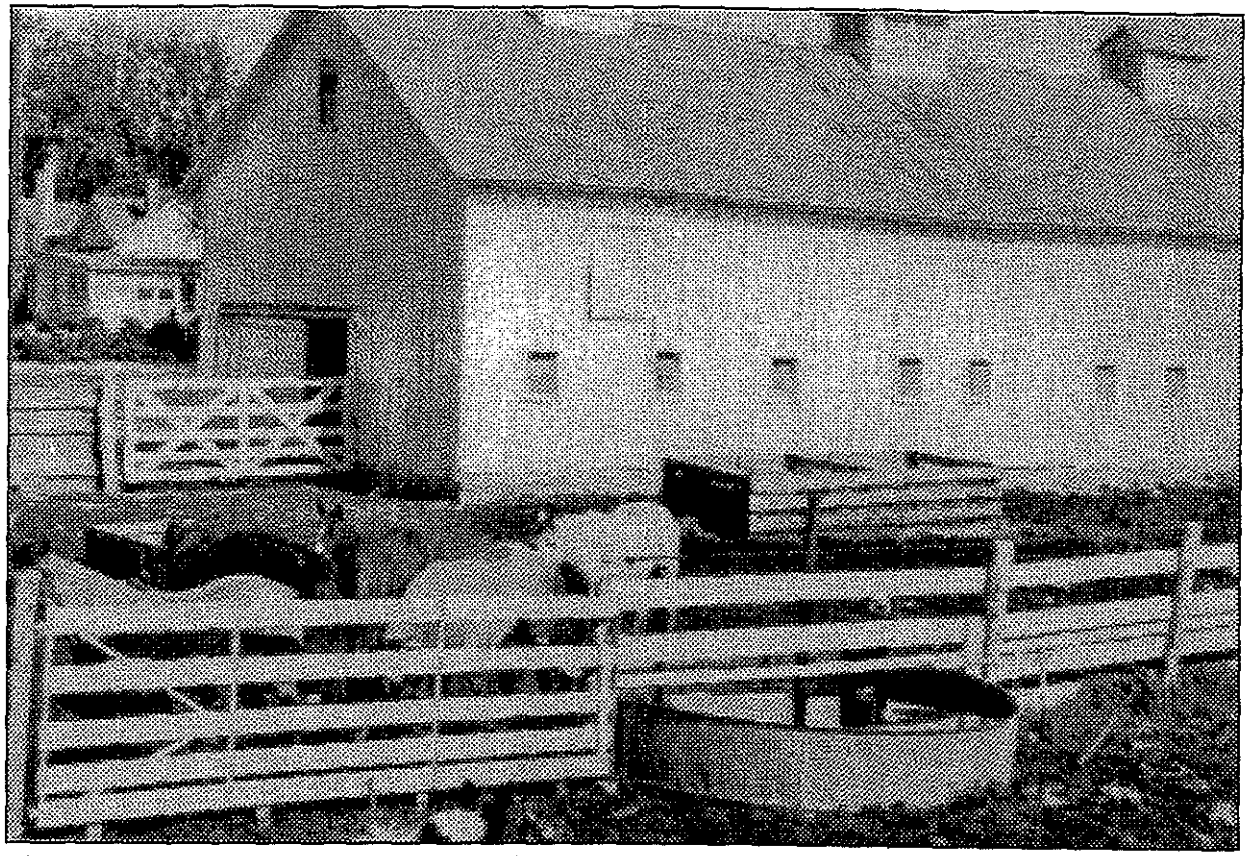

Figure 8: Horses in a corral near the main barn on the former Deer Park Place, about 1940. (Photograph courtesy Fred Howard II)

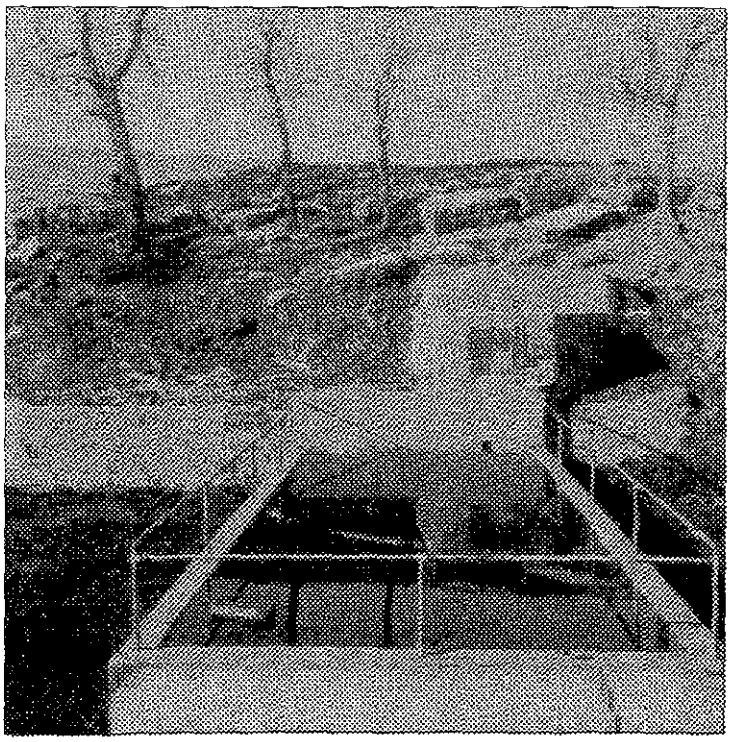

Figure 9: A concrete catering trough for watering cattle built on the Davis ranch. (Photograph courtesy Fred Howard II)

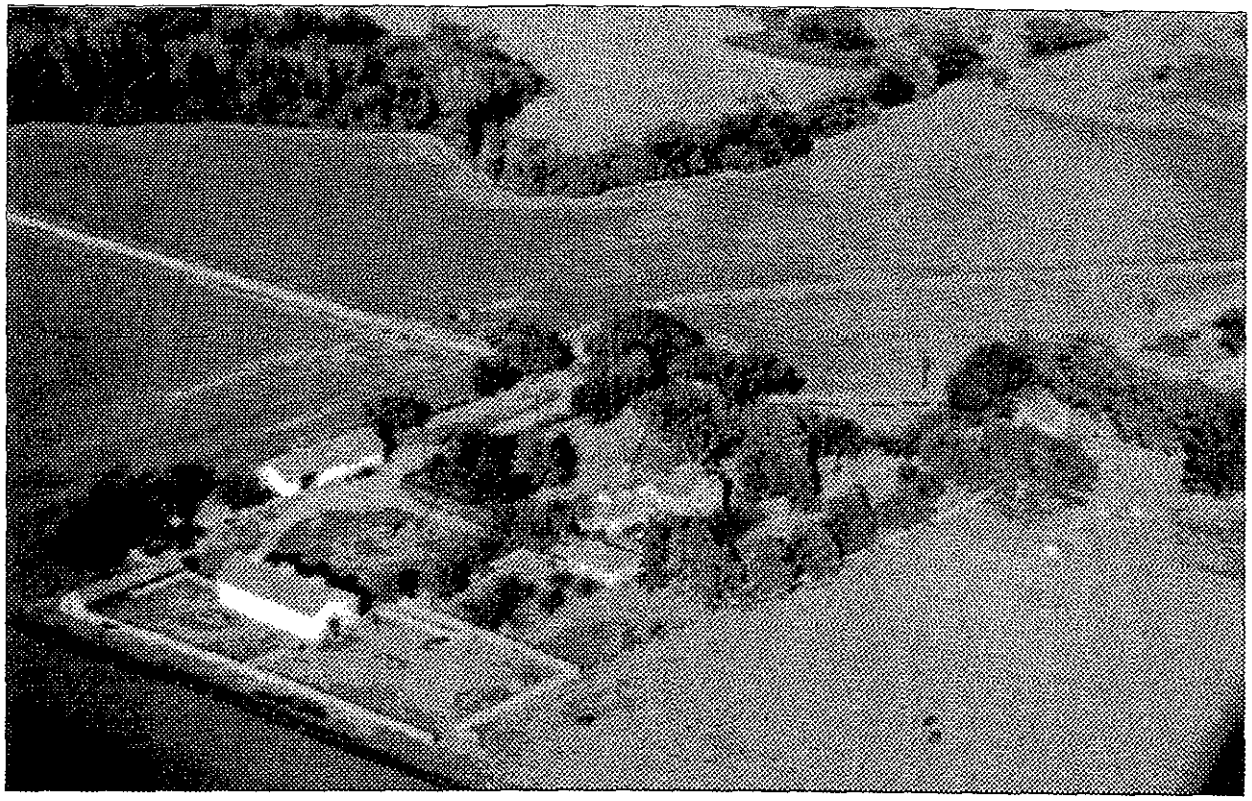

Figure 10: An aerial view of the Davis ranch main complex in the early 1940s. (Photograph courtesy Fred Howard II)

Chapter 5:

Cattle and Culture

As Euro-Americans established a toehold in the Flint Hills, they took its unique topography and gave it a commercial value dependent upon the mechanisms of an industrial society. The grasslands of Kansas were fused with the appetites of Chicago, Philadelphia, New York, and the other great cities of industrial America as its lands raised cattle with great economic value when transported to market. In this equation, the lands in the Flint Hills derived their value from their location as well as the grasses they contained. Close to the railroad and lying between the great cattle-breeding areas of Texas and the Southwest and the eastern cities, the grasslands made for excellent pasture, a way to inexpensively add weight – and value – to cattle traveling long distances to market. The cattle drive, one of the great mythic events of the American West, was central to this story of transformation, but it mostly bypassed the Flint Hills, where only short drives of several miles from ranch to railhead took place. Instead, a ranching system that took advantage of the attributes of the Flint Hills emerged. Ranchers grazed their own cattle and fattened traveling herds on their lands, finding considerable profit in a niche in the national cattle system. Proximity to the rails saved local ranchers the expensive out-of-pocket costs of the drives as well as the lost revenues in the decrease in weight of each cow that had to be driven from the *llanos* of Texas to railroad depots further north.[1]

The Spring Hill Ranch — today known as the Z Bar Ranch — became one of the most prominent examples of the Flint Hills cattle industry. In the economic and environmental context of the time, the Flint Hills served as prime grazing land, attractive to wealthy and sophisticated cattle entrepreneurs, people with extensive experience in the beef trade. These entrepreneurs were attracted to the plains, many after driving cattle from Texas, and they quickly recognized the economic benefits of interrupting their drives for a period of fattening close to their destination. The Flint Hills became a haven for cattle, at a fee paid by drovers who stood to gain more than they laid out from the increased weight of their beeves, and Chase County quickly became a favorite destination for the market-bound animals. By 1875, the county harbored more than $100,000 in cattle, a substantial valuation in the aftermath of the Civil War.[2]

These entrepreneurs-in-place also shaped the region's economic culture and its social style, creating of the Flint Hills a rural paradise for them and their families reminiscent of the novels of Sir Walter Scott and the mythic "Lost Cause" of the Old South from which so many hailed. In the post-Civil War world, cattlemen with southern roots sought more than mere wealth. They needed a sense of control – of land, of life – that the war had cost them. Others traveled with less cultural baggage and simply saw the Flint Hills as a place to generate wealth.

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[1] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991): 46-54; Richard White, *"It's Your Misfortune and None of My Own:" A New History of the American West* (Norman: University of Oklahoma Press, 1991): 270-297.

[2] *Cottonwood Falls Leader*, December 8, 1866.

Capitalizing on his experience in the cattle industry in Texas and east Colorado, Stephen F. Jones, seeking to fulfill "a lifelong desire to establish a stock-farm for the breeding of blooded cattle," as one early account recorded, came to the Flint Hills with a businessman's eye, and left behind a memorable legacy. With a beautiful stone main house built to rival the most elegant structures in the West, Jones' Spring Hill Ranch was the ultimate expression of how the region's treasures could be captured and utilized. The region also attracted those solely interested in making money, drawing the attention of many well-financed syndicates, including several overseas capitalists. Many of these investors never even saw Kansas, relying on managers to run their operations.[3] Although crucial to the industry, the syndicate members imprinted far less of themselves on the social and cultural style of the Flint Hills.

Life in the Flint Hills was also affected by the collision between two distinctly different styles of cattle raising: Texas and Midwestern. Descended from practices developed in Iberian Spain, derived in part from the Carolinas and Mexican stock-raising and perfected in Louisiana before it spread west, the Texas cattle tradition was shaped by the state's vast acreage and open spaces. Texas ranchers let their animals run over a vast range bounded by the most marginal of enclosures, providing minimal maintenance and supervision for the herd and simply rounding them up when it was time to drive them to market. While Texas cattlemen never really quite turned 'em loose in the spring and rounded 'em up in the fall as so much western lore indicates, they exercised little direct supervision during much of the grazing season. The combination of large numbers of animals and the vast expanses of west Texas placed such management beyond the reach of most outfits. Midwestern cattle-growers learned their centuries-old trade from practices developed in the more confined spaces of Great Britain, and after importation to the United States coastal states the techniques diffused across North America's central farming regions. More often Midwesterners tended their stock more carefully, producing tamer cattle who were usually found in smaller numbers closer to home in enclosed pastures. Midwestern ranchers also routinely fenced fifty to one-hundred acres of hay meadow for winter pasture, while the Texans more often relied on wild hay freely available on the plains. More likely to be fixed in one place, Midwestern ranchers created permanent organizations such as the Cherokee Strip Live Stock Association, while Texans tended to regard their relationship to place in more transitory fashion.[4]

Cattle did not complete the array of new residents raised in the Flint Hills. Cows and steers became the backbone of the regional economy as well as a significant component in the national mythic landscape, but even their owners persisted in the tradition of mixed animal husbandry that defined America's westward movement. American settlers were always

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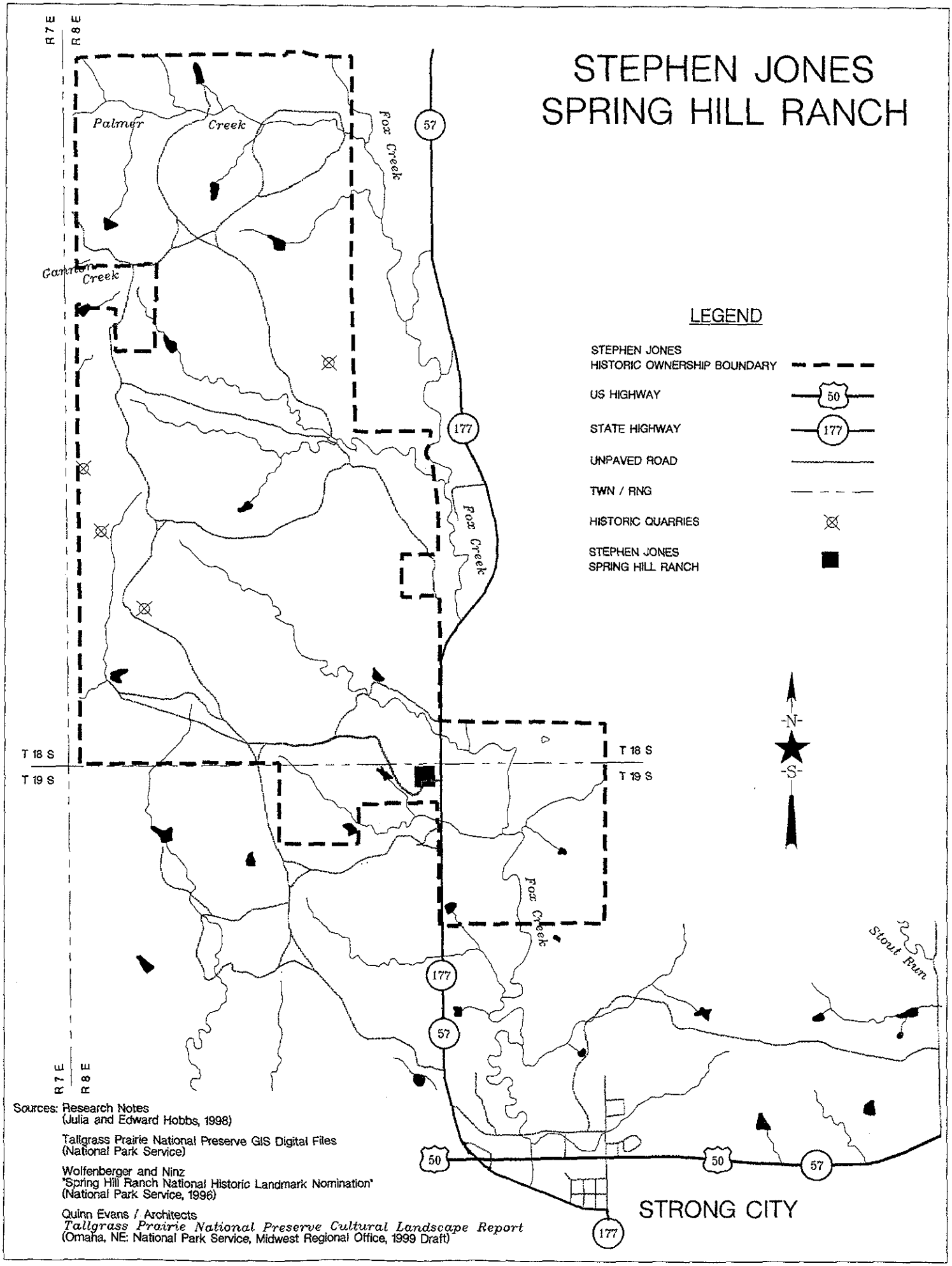
[3] Rollin G. Osterweis, *The Myth of the Lost Cause, 1865-1900* (Hamden, CT: Archon Books, 1973): 3-15; C. Robert Haywood, *Victorian West: Class and Culture in Kansas Cattle Towns* (Lawrence: University Press of Kansas, 1991): 11-32; quotation from G.E. Tewksbury, "The Jones Ranch," *Kansas Picture Book* (Topeka: A.S. Johnson, 1883): 41-45.

[4] Terry G. Jordan, *North American Cattle-Ranching Frontiers: Origins, Diffusion, and Differentiation* (Albuquerque: University of New Mexico Press, 1993): 221-22; Charles L. Wood, *The Kansas Beef Industry* (Lawrence: Regents Press of Kansas, 1980): 52.



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(Julia and Edward Hobbs, 1998)

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Wolfenberger and Ninz
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Tallgrass Prairie National Preserve Cultural Landscape Report
(Omaha, NE: National Park Service, Midwest Regional Office, 1999 Draft)

surrounded by their *portmanteau biota*, the complex of crops and animals essential to their lives.[5] When they settled the Flint Hills, its potential for ranching was enormous, and newcomers brought practices and customs that helped assure their security. In the thick grasses of the Flint Hills, they grew crops, at first on a subsistence basis but later, many grew feed crops. The settlers raised pigs, sheep and horses as well as cattle. This pattern strongly reflected Midwestern traditions, where mixed agriculture and animal husbandry were exceedingly common, rather than the open range traditions of Texas and the grasslands to the north and west of southeastern Kansas. Across the West the grain-producing farmer eventually dominated the agricultural industry, but in Chase County the stock producer remained the predominant force well into the twentieth century.

Stephen F. Jones, the founder of the Spring Hill Ranch and one of the catalytic figures in Flint Hills ranching, amalgamated the Texan and Midwestern styles. A large-framed man with dark hair even in his later years, he came from a family that was characteristic of the nineteenth-century American cattle industry and reflected its most powerful expansionist objectives. Extensive and far-reaching, the Jones family in North America reached back to the colonial era. The progenitor, Robert Jones, a Welshman, first immigrated to Hingham, Massachusetts, about 1636. As the seventeenth century ended, some of the family moved south to Bedford County, Virginia. Erasmus Jones II, Stephen Jones's father, descended from this branch. He was born in Campbell County, Virginia, on December 19, 1799, and moved to Montgomery County, Tennessee, several years before he married Christina Bond there in 1824. Their marriage produced five children during the 1820s alone: John Michael "Jehu," on August 3, 1825; Stephen, on November 6, 1826; and Peyton, on October 28, 1829, along with two daughters, born in 1827 and 1828. A family with some economic means, the Joneses embraced the traditions of the South. The 1830 census listed two slaves living with the household. By 1830, the Jones family had moved to Cannon County, Tennessee. Four boys and six girls lived at home, providing a great deal of the labor necessary for their ventures and cementing the strong family ties that later influenced the founding of Spring Hill Ranch. When he was twenty-three, Stephen Jones moved to Tallapoosa County, Alabama, where he found work as an overseer on a cotton plantation. He married Louisa Barber in 1849, emigrating to East Texas by 1851, and moving again five years later to west Texas.[6]

Stephen Jones was not the first in his family to leave the safety and security of east Texas for the rugged plains to the west. In the decade before the Civil War, most of the Jones family migrated west, following each other in successive moves. John M. "Jehu" Jones, the oldest brother, was the first family member to depart to the Red River country in east Texas in 1851; Stephen Jones' father Erasmus followed later that year. Four years later Jehu Jones moved further west to Parker County on the Texas frontier, settling four miles southwest of present-day Weatherford. Erasmus Jones and the rest of the family again followed. The Joneses stuck close

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[5] Alfred W. Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900 AD* (Cambridge: Cambridge University Press, 1986): 2-16.

[6] Federal Census, Wilson County, Tenn., microfilm M19, R 182, 138; Julia and Edward Hobbs, *Outline of Jones History*, 7-8; Julia and Edward Hobbs, *General History: Jones Families, Their Associated Neighbors, Land & Cattle, 1635-1889* (private printing, 1999).

together, a necessity in that dangerous time. Erasmus Jones' property adjoined his son Stephen's, and both engaged in farming and raising stock. On the periphery of the nation, they faced a hard future that weathered them into a potent unit in economic and social terms. Staunch secessionists, five of Erasmus Jones' six sons — Jehu, George, Peyton, James, and William Debrill — served in the Confederate Army during the Civil War. In pursuit of economic opportunities and bound to each other by kinship and experience, the Jones brothers were likely candidates to move west in the aftermath of Southern surrender at Appomattox in April 1865.[7]

After the war, the Jones empire followed the primary pattern of the expanded cattle industry. The family grew wealthy as their herds grew larger. Many areas of the country, especially the Deep South, suffered enormous losses of cattle during the war. Marauding armies and the departure of ranchers and farmers who supervised the herds contributed to a lack of breeding stock as well as beef. The paucity of animals drove the price of beef to new heights, with no end to the increases in sight. While the other Southern states suffered from a lack of cattle, the Civil War isolated Texas from outside markets, and with a lack of supervision that stemmed from the military obligations of herdsmen and the vast amount of available range, the cattle population multiplied and ran loose. At war's end, large numbers of cattle roamed the western half of Texas, most without brands and running wild. Under Texas law, they belonged to whoever claimed and placed a brand upon them. Initially, there were few claimants. The abundance of animals in the state detracted from their value. The prices paid for steers in Texas remained very low even though meat was in great demand in other parts of country.

As did other Texans who returned from the Civil War, the Jones brothers found the plains full of unclaimed cattle and lacked only a market to make them wealthy. This was a terrific irony, for those who lived on the *llanos* of west Texas before 1860 did so at their own peril. Comanche abounded, and the tales of warfare became legends in the story of Texas. To find this wealth where before there had been struggle surely taxed the imagination of these grizzled veterans of the conflict that tore the nation apart.

Texas ranchers faced a quandary. They had the animals, but no market for them. The solution to the low price cattle commanded was to drive their steers north to the railheads that moved west. Delivery to shipping points guaranteed higher prices; the expanding urban areas of the north demanded meat. A way to link the market with the producers meant great wealth for all involved, as steers that they could often claim for free might net forty dollars at a railhead. When cattle in Texas sold for less than two dollars a head, markets in New York paid $39.46 on average for slaughtered beeves, Ohio paid $36.39 apiece, and Massachusetts $44.69. In a cash-poor state, $40 per head profit multiplied by a herd was real money, and many early cattlemen, including President Lyndon B. Johnson's ancestors, rounded up wild range animals and drove them north. Other Texans saw similar opportunities to the west. Oliver Loving and Charles Goodnight were among the first to drive cattle to New Mexico, Colorado, and Wyoming Territory, with Loving

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[7] N.a., *History of Texas, Travis County* (Chicago: Lewis Publishing, 1893): 414-415; H. Smythe, *Historical Sketch of Parker County, Texas* (St. Louis: Lavat Book & Job Printer, 1877): 10-13, 52-53; Nelson Millett and O.L. Baskin, *History of the Arkansas Valley, Colorado* (Chicago: O.L. Baskin & Co., 1881): 868-869; for the difficulties of life on the Texas plains, see John Graves, *Goodbye to a River* (New York: Alfred A. Knopf, 1960).

driving a herd into Colorado Territory in 1860. There is some evidence that Stephen Jones first saw Colorado when he took part in an 1868 trail drive with Goodnight and Loving, his neighbors in West Texas. An industry was born, its goal commerce and the resulting wealth. The traffic in animals north and west out of Texas became the stuff of American legend.[8]

Cattle drives were always perilous. Moving a herd of animals as much as 1,000 miles was never easy, and the circumstances made a difficult situation even worse. Attacks by Indians increasingly bitter over their relationships with settlers in Texas and angered over the theft of their grass by traveling cattle men in "The Nations," as Indian Territory was called, were always a risk. Bad weather, stampedes, and hostility from ranchers and farmers along the route, who all too often saw their herds decimated by parasitic diseases such as "Texas fever" brought north, led the list of concerns. At the behest of farmers and ranchers, several states passed quarantine laws that prohibited animals from Texas. Unaware that the fatal disease was transmitted by small ticks that moved between animals herded together as well as in the excrement left behind, cattle drovers searched for ways to get their cattle to market without infecting local animals. In 1867, Joseph McCoy, a young Illinois livestock dealer, got word of the problem confronting Texas cattle owners and recognized an enormous opportunity. If he could get the animals to eastern markets, he could become wealthy beyond his wildest dreams. Ranchers had already observed that cattle moved by rail, isolated from surrounding herds, did not affect animals in the states through which they were transported. After examining other towns, McCoy started a cattle-shipping business at Abilene, Kansas, just west of the Flint Hills and about one hundred and forty miles west of Kansas City. He persuaded the Kansas Pacific division of the Union Pacific Railroad to lay an access siding to cattle pens, prevailed upon Kansas Governor Samuel J. Crawford to ignore the state's quarantine laws against transient Texas cattle, and began spreading the word among the cowboys driving the Texas herds north that they now had easy access to a railhead where they could sell cattle for Eastern prices. The route north from Red River to Abilene was marked by blazed trees and a plowed furrow running across the open prairie.[9]

The astute McCoy understood how location could drive profit, for Abilene stood near the geographic center of the Great Plains, and was surrounded by nearly a one-quarter-million square miles of largely unplowed grassland. McCoy, who in the words of an early Abilene resident

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[8] Robert Caro, *The Years of Lyndon Johnson: The Path to Power* (New York: Alfred A. Knopf, 1982): 17-20, 28-29; T. R. Fehrenbach, *Lone Star* (New York: Macmillan, 1968): 554-68; Jordan, *North American Cattle Ranching Frontiers*, 221; Jimmy M. Skaggs, *Prime Cut: Livestock Raising and Meatpacking in the United States, 1607-1983* (College Station: Texas A&M University Press, 1986): 50-90; G.A. Holland, *History of Parker County and The Double Log Cabin* (Weatherford, Texas: Herald Publishing Co., 1937); Julia and Edward Hobbs, *Summary of Jones General History from 1635 through August 1889* (privately printed, 1999).

[9] Joseph G. McCoy, *Sketches of the Cattle Trade of the West and Southwest* (Kansas City: Ramsey, Millett and Hudson, 1874). McCoy's book provides an excellent view of the early cattle industry, but an acquaintance of McCoy advised that "as a Historian he Extolled or Eliminated in his details those who had fallen under the Ban of his Displeasure or did not do as he wished." C.F. Gross to J.B. Edwards, May 4, 1925, J.B. Edwards Collection, Manuscript Department, Kansas State Historical Society Microfilm MS-1256, 1990; Robert W. Richmond, *Kansas: Land of Contrasts*, 3d ed. (Arlington Heights, IL: Forum Press, 1989): 123-4, 135-7; James C. Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," *Kansas Historical Quarterly* 11 (1942): 15-17; Gross to Edwards, April 13, 1922, J.B. Edwards Collection.

"never asked any Ones [sic] opinion of any act of his or any project he started or had in view," also managed to persuade the Illinois legislature to ignore state law and permit Texas cattle shipped by rail from his pens to enter the state, where Chicago meat-packing plants processed the animals. McCoy simultaneously created an American institution and a national myth. On September 25, 1867, the first rail shipment of twenty cars left Abilene for Chicago. In following years, the number of head coming up from the south grew and grew. Most drivers followed the Chisholm Trail, the primary route heading north to Abilene, bringing 75,000 head in 1868, 300,000 in both 1869 and 1870, and 600,000 in 1871. Joseph McCoy opened new possibilities for the ranching business, and his idea gave new value to the grass of the Flint Hills.[10]

At about the same time, Peyton, James and Stephen Jones – all three distinguished by the family trait of very heavy eyebrows atop their characteristic sharp, piercing eyes – caught western fever. They followed the migration of drovers and animals, albeit in a slightly different direction than many of their contemporaries. John Chisum pioneered the pattern of looking west instead of north in the late 1850s and the early 1860s, settling in the vicinity of the Bosque Redondo, the Navajo and Mescalero Apache reservation in eastern New Mexico. Chisum and a generation of cattlemen made their living selling cattle to the government for use by the Army and reservation Indians. Stephen, Peyton, and James Jones followed Chisum's lead. They raised stock at Fort Chadbourne, Texas, venturing north for the first time in 1869. That year, the brothers drove stock up the Goodnight Trail to the Arkansas River Valley in southeastern Colorado, settling in Bent County. After 1871, their entire operation was located in Colorado. The brothers ran their ranch on Nine Mile Bottom, a tributary of Purgatorie Creek, where their original herd of 4,200 increased to more than 35,000 and possibly 55,000. Splitting the responsibilities, Stephen handled marketing of the cattle, Peyton looked over the brothers' financial duties, while James managed the cattle raising. The operation, called Stephen Jones and Brothers in some business dealings, stood on unclaimed federal land in the Arkansas Valley, marked off only by fences immediately around the houses, crop lands, and horse grazing areas. Like many cattle operations in the American West, ownership of small pieces of land near water sources allowed for grazing across miles of scrubland, a free-range operation that typified land use in arid areas with few inhabitants and enormous tracts of federal property. The Colorado ranch consisted of only 16,000 acres owned by the brothers, but their 35,000 cattle – often referred to as "Colorado" or "American" cattle rather than as longhorns to reflect their higher-quality bloodlines from the tough, stringy Texas stock – roamed over a range that was fifty miles wide and thirty miles long. By 1871 the brothers had moved all of the cattle from their Texas operation to Colorado, with the original herd bearing a JJ brand. The three also had individual brands marking their separate herds.[11]

In Colorado, the brothers developed a significant cattle-raising operation that concentrated on improving the animals' breed. The three men became fixtures in Bent County, regarded by some as the first area family involved in cattle-raising. Recognized for his expertise, Stephen

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[10] McCoy, *Sketches of the Cattle Trade of the West and Southwest*, 287-306; Edward Everett Dale, *The Range Cattle Industry: Ranching on the Great Plains from 1865 to 1925* (Norman: University of Oklahoma Press, 1960): 49-92; Gross to Edwards, May 4, 1925, J.B. Edwards Collection, MS-1256, 1990.

[11] Harwood P. Hinton, Jr. "John Simpson Chisum, 1877-84," *New Mexico Historical Review* 31, no. 3 (July 1956): 184; Hobbs, *General History, Jones Family*.

Jones became president of the Bent County Cattle Association, formed to protect livestock interests in 1870. As the American population increased in southeast Colorado, Stephen Jones helped organize a political party, and the brothers eventually became aligned with the Democratic faction in Bent County. Outside the ranch, Stephen Jones was involved in commercial development of the new town of Las Animas. Yet the Jones brothers aspired to more within the cattle industry, and the opportunity for expansion soon arrived. The Atchison, Topeka and Santa Fe Railroad reached Las Animas in 1875, providing the booming range cattle industry a direct rail connection to eastern markets, with a through connection to Kansas City that passed through Strong City. Later that year the Kansas Pacific Railroad completed tracks to Las Animas, providing service to eastern markets through Denver.[12] Fortuitously, the Jones brothers were in the right location to discern the full impact of rail lines on the cattle trade.

The Jones operation soon expanded east to Kansas. In the late 1870s, to reduce weight loss on cattle shipped east to market, the brothers sought grazing property in the state near the railheads. In October 1877, James Jones bought a 480-acre ranch in Morris County. Within one week, he constructed wooden fences, a gesture that to his neighbors indicated his intent to graze cattle. The brothers soon discovered the ranch, about thirty miles north of the railroad line, was too far away from the railhead to comfortably drive cattle through the Flint Hills. The county also had a herd law, which held the animals' owners responsible for any damages to nearby crops or other property. Most western communities made the farmer accountable for protecting his fields from roving cattle; Morris County, settled first by farmers, held the herdsman responsible. This law made the Morris County ranch less than optimal for the Jones brothers, since any cattle drive would most likely result in damages caused by the herd. Settlers with fenced land dotted Morris County, which meant that the cost of passage would always be high.

Nearby Chase County, far less populated and lacking a herd law, answered the brothers' needs. Stephen Jones moved to Kansas, reversing the normal pattern of western emigration. In September 1878, he bought the William Langston farm on Fox Creek for $2,000. Later that month he began building a residence on the property and started transferring his Colorado cattle east to the new property, a process interrupted by the death of his son, Samuel E. "Bud" Jones, in November. Bud Jones died in Weatherford, Texas, while visiting relatives, two months after apparently being bitten by a rabid skunk. Although his son and heir could not succeed him, Stephen Jones expanded his Kansas cattle operation. He sold his Colorado brand and interest in the Purgatorie River operation to Peyton Jones for $125,000 on December 31, 1878 and bought brother James' Morris County ranch the following day.[13]

As Stephen Jones became settled, Kansas figured more and more in two of the Jones brothers' plans. In January 1882 the brothers completed the sale of their southeastern Colorado Territory cattle operation consisting of about 35,000 cattle, 300 horses, and 16,000 acres of rangeland adjacent to water to the Prairie Cattle Company, a Scottish syndicate, for $600,000.

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[12] William Least-Heat Moon, *PrairyEarth*, (Boston: Houghton Mifflin, 1991): 163; Bent County Book Committee, *Bent County, Colorado, History* (Los Animes, CO: Book Committee, 1986, 1987): 454-55; interview with Julia Hobbs; n.a., *Bent County History* (Las Animas, CO: The Book Committee, 1986): 454-455.

[13] Hobbs, *Summary of Jones General History*; Percy S. Fritz, *Colorado, The Centennial State* (New York: Prentice Hall, 1941): 275-276.

Despite his sale to Peyton Jones four years earlier, Stephen Jones received some of the money from the Prairie Cattle transaction. The Jones ranch became the nucleus of the expanding Prairie Cattle Company operation, which eventually became one of the largest American cattle companies. Stephen Jones retained the Morris County property until March 21, 1883, when he opted to concentrate in Chase County. James Jones remained in Las Animas, becoming a private banker at the same time investing in several businesses as well as a cattle and horse operation. He returned to central Texas in the 1900s, where a cattle ranch he established remains in the family in 1999. Peyton moved to Council Grove and became vice president of the Farmers and Drovers Bank, established in 1882. He returned to southeastern Colorado in 1887, where he continued as a businessman and stockman.[14]

With his Chase County land purchase, Jones initiated a regional pattern that reversed the characteristic trends of western land use: he took land from agriculture to ranching instead of the other direction. The acreage Jones purchased dated back to the initial Euro-American settlement of Chase County. His first property, two plots of eighty acres each that he bought from Rocker and Langston, had been originally homesteaded by John H. Scribner and his family late in 1860. Scribner sold the land to William Barton on February 22, 1866, for $800, and seven years later, on November 3, 1873, Barton sold it to Rocker and Langston for $2,000. The property spanned Fox Creek and contained mostly bottom land, valuable for agriculture because of its alluvial soil and access to water. Using the same principles with which he succeeded in Colorado, Jones envisioned the farm and its water as the core of a much larger cattle operation.[15]

The Scribner place was the first in a series of land transactions that made Jones one of the largest land owners in Chase County. Jones had ready cash and access to even more capital, crucial ingredients in building a nineteenth-century land empire, and within a short span, he purchased 7,000 acres in the county. He usually purchased land from individuals, such as the Chase County sheriff, but he also had the financial means to buy large lots with year-round access to water from sellers such as the Missouri, Kansas and Texas Railroad and the AT&SF Railroad. A typical purchase was four hundred acres on Palmer Creek, purchased from the AT&SF in three transactions in April 1879. Jones was not the only Colorado cattle owner who saw the advantages of moving into Chase County. D.B. Berry, a Colorado ranchman, bought the Beard ranch on Schaffer Creek in October 1879, the same month that the town newspaper reported polled cattle were beginning to replace the long horns in the county. Initially Jones brought many of his cattle in from Colorado. One newspaper account revealed that Jones brought eighty-two carloads of cattle, about 2,000 head, splitting them between his properties in Chase County and the Morris County ranch. Under Jones's direction, a full-fledged ranching operation in the Flint Hills took shape. By November 1878, he had ordered a new frame house built on the Chase County

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[14] Joseph W. Snell, "A Brief History of the Z-Bar Ranch," 6-7; *Chase County Leader*, June 11, 1881; The Book Committee, *Bent County History*; interview with Julia Hobbs, August 12, 1999; Paul Johnston and Rex Ashlock, Interim Resources Management Plan Scoping Session, Tallgrass Prairie National Preserve, March 10-13, 1997; Hobbs, *Jones Family, General History*.

[15] L.G. Beal, comp., *Abstract of the Lantry Ranch in Chase County, Kansas* (Topeka, KS, n.d.); Topeka Genealogical Society, *Kansas Pioneers* (Topeka: Topeka Genealogical Society, 1976): 298.

property, and construction of stone fences surrounding all of his property continued.[16]

Jones became a versatile businessman, engaging in most of the opportunities available in the Flint Hills and keeping an eye open to new ones. Besides the ranching operation, his workers operated the farm, planting ten acres of winter wheat and thirty acres of rye. He also raised corn, oats, potatoes, sorghum, and grasses as well as a small orchard with apple, peach, plum, cherry, and pear trees. The farm was likely a crucial dimension of Jones' cattle operation. Contemporary names for the property, which was alternately called the "Spring Hill Farm and Stock Ranch" and the "Jones Stock Ranch" while Stephen Jones owned the property, suggest the farm's centrality. He continued to buy land, adding nearly 3,000 acres in 1880 alone. Jones also branched into other local businesses, developing an increasing interest in the commercial opportunities of Strong City. Jones and George and Edward A. Hildebrand partnered in a number of ventures. In September 1878, the three men jointly purchased 100 head of local cattle, and in June 1882, Jones bought an interest in the Hildebrand brothers' lumber and hardware business. The transactions confirmed Jones not only as one of the leading cattleman in Chase County but also as one of its foremost entrepreneurs.[17]

The construction of the main house at the Spring Hill ranch illustrated Jones' status and position. In May 1880 Jones purchased eighty acres north of Strong City, the land upon which he planned to build his main house and barn, from the Missouri Kansas and Texas Railroad. Construction began in 1881, and the house became one of the showpieces of an increasingly affluent county as well as Jones' claim on a rural Arcadia. Overlooking the Fox Creek Valley, the eleven-room, three-story, mansard-roofed house constructed in the Second Empire style of the nineteenth century, suggested a cultural permanence, the self-proclaimed triumph of cattle culture in the Flint Hills. Flanking the house, built with locally-quarried white limestone, and set upon stone terraces, were several smaller outbuildings also built of limestone, including an ice house, a carriage house, and other structures. Water was piped from a nearby spring and gathered in a large cistern behind the house, uphill next to the ice house, or diverted to another cistern adjacent to the barn, the latter big enough to supply five hundred cattle for several weeks. When not earmarked for emergencies, the cistern could supply a fountain on the house's front lawn. Built just to the south of the house, Jones' huge, three-floor barn was equally as impressive, especially to the people of the Flint Hills. The stone barn covered 6,480 square feet and was tucked against a south sloping hill. During its construction workers hammered 5,000 pounds of tin to cover its roof. A windmill with four thirty-foot wings to generate power to run a grist mill, a saw mill, and other farm machinery arrived in Cottonwood Falls in January 1882. The cost of construction on the property was believed to reach $40,000, of which $20,000 to $25,000 comprise the expense of the house. The primary contractor on the project was David Rettiger, the contractor of the Chase County Courthouse and owner of a stone quarry north of Strong City. Jones utilized Rettiger's stone in constructing the buildings as much as possible, but he quarried stone ledges on

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[16] According to the Chase County Register of Deeds, Jones' first purchases were of the plots S2 SW4, S32, T18, R8 and N2, NW4, S5, T19, R8; Snell, "A Brief History of the Z-Bar Ranch," 4; interview with Julia Hobbs, August 12, 1999; Strong City *Independent*, October 2, 1879; Hobbs, *General History, Jones Family*.

[17] Snell, "A Brief History of the Z-Bar Ranch," 5; interview with Julia Hobbs, August 12, 1999.

his property for the fences surrounding his pastures, orchards and cultivated fields. As Stephen Jones became settled, Kansas figured more and more in the Jones brothers' plans.[18]

Although the ornate house attracted attention from curious locals, described by one as resembling "an elegant Hudson river mansion," the huge barn was even more compelling in a county increasingly devoted to the cattle industry. Like the house, the barn became a symbol of cultural permanence, and it also represented Jones' commitment to Chase County. There were economic reasons for its size. Stephen Jones planned a large cattle operation, and the bottom floor of the structure could shelter about one hundred animals during the winter. He wanted room to house the thoroughbred horses he loved as well. Neighbors admired the structure and recognized that it meant a new level of economic endeavor in their county.[19]

Among the most significant structures in the region, the courthouse and the ranch complex together offered a vision of the aspirations of the late-nineteenth century cattle and business culture in the Flint Hills. The ranch's main structures reflected both the labor supply and the nature of local architecture. Many of the workmen involved in building Jones' complex previously worked on the county courthouse in Cottonwood Falls. The buildings shared a pronounced physical resemblance, and as a result, an association in the public eye. A Strong City reporter detailing his travels on Fox Creek in October 1881 noted the house's resemblance to an old Scottish castle, an enthusiastic compliment especially in relation to other described homes he passed, which include "an old log cabin," a "stone dwelling" owned by Barney Lantry, "the ranch of a frontiersman," and other houses and outbuildings standing in "sad contrast with the well cultivated and fine looking fields that lay on either hand."[20]

The Jones' operation was atypical in the American West. Throughout the region, ranching and farming were often contradictory activities and the tension between practitioners of each could be palpable. Ranching in the West typically developed first in newly settled areas, as distances to market prevented the easy transportation of field crops, while animals could be walked over undeveloped roads to market. As transportation improved and after the large-scale environmental calamities to pastures and water sources that often followed consistent overgrazing, farmers arrived to eke a living from the ecological wreckage. Technological advances and market conditions gave the farmers the upper hand, as did the American cultural predisposition to value the Jeffersonian ideal of sedentary agrarianism above mobile pastoralism. The sequence was so apparent to the people of the nineteenth century that it was codified in Frederick Jackson Turner's frontier thesis. In it, the famed historian described a process where one group of resource-users succeeded the next, until civilization inevitably appeared. In Turner's formulation, trappers began the exploitation of an area, followed by ranchers and then farmers,

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[18] Snell, "A Brief History of the Z-Bar Ranch," 6-7; *Chase County Leader*, June 11, 1881; interview with Julia Hobbs, August 12, 1999; Paul Johnston and Rex Ashlock, *Interim Resources Management Plan Scoping Session, Tallgrass Prairie National Preserve*, March 10-13, 1997; Hobbs, *Jones Family, General History*.

[19] *Chase County Leader*, June 11, 1885; *Strong City Independent*, October 15, 1881.

[20] *Chase County Leader*, June 11, 1885; *Strong City Independent*, October 15, 1881; Snell, "A Brief History of the Z-Bar Ranch," 8.

and he made this progression the basis for his explanation of frontier society.[21]

Chase County and Flint Hills served as an exception to the dominant trend, as the sequence Turner found so compelling occurred in reverse order. Two external forces made the settlement of Kansas differ from a typical frontier. A large portion of state land, especially along its eastern edge, remained off-limits to white settlement as a result of treaties reserving sizable tracts for emigrant Indians. In addition, the national political crisis over slavery influenced who was drawn to the territory that became the Sunflower State. Early settlers sought to establish the territory's allegiance either to the pro-slavery South or the anti-slavery North. As white settlers forced their way onto Indian lands, Kansas' eastern counties initially filled with southern sympathizers from Missouri, with "homesteads" marked by stakes in the ground as the absentee claimants returned east to their working farms. Northern supporters responded by filling their own claims, and squatters' courts, a typical frontier mechanism for handling land conflicts, became part of the political struggle instead of a means to adjudicate individual ownership disputes.

Both sides sought to strengthen their claim to the ground. The first settlers took possession of the good soils along the river bottoms and raised crops, guaranteeing their permanence with access to water. The accouterments of farmers – the fences and rows of crops – gave their activities an air of stability that transitory ranching operations did not offer. In short, whatever their political persuasion, these first farmers claimed space in a fashion that suggested they planned to stay. Politics was never the only factor driving settlement. Many families came seeking to better their economic conditions. The N.J. Swayze farm purchased by Lantry had been rented out by Swayze until its purchase on July 13, 1885. W.J. Daugherty, another property owner who sold his land to Lantry, was a stone mason who owned property in the town of Cottonwood Falls and other pieces of Chase County land. Only after the Civil War bloodily resolved the political question of slavery, when the line of settlement moved far to the West and the environmental limitations of the Flint Hills became evident to agriculturalists, did large cattle operations replace the farmers. By then, most of the county's unclaimed land was again off-limits to emigrant farmers, this time as a result of land grants to the railroads.[22]

The evolution of farming in Chase County exemplified how pioneers adapted the land – and their perceptions – to their needs. Environmental attitudes played a key role in the agricultural development of Chase County. Cattle owners looked at the land in anticipation, clearly recognizing its grazing potential, while farmers regarded most of the extensive upland areas as unsuited for raising crops. They used the uplands as a common area for grazing their small herds of cattle and sheep. Only about 12 percent of the county was bottom land. Bound by nineteenth-century premises and ideas, settlers soon regarded most of the county's terrain as better suited to pasture than farm. By the time Jones arrived, the shift in perception was under way. An 1879 newspaper article reflected this perception when it noted that "enormous yields" of corn were

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[21] Frederick Jackson Turner, "The Significance of the Frontier in American History," in *The Frontier in American History* (New York: Henry Holt and Company, 1920).

[22] H. Craig Miner and William E. Unrau, *The End of Indian Kansas: A Study of Cultural Revolution, 1854-1871* (Lawrence:: The Regents Press of Kansas, 1978): 1-24; Wood, *The Kansas Beef Industry*, 4; White, *"It's Your Misfortune and None of My Own:"* 157-59.

frequent in the low lands, but predicted that the topography and climate indicated that stock raising was bound to be "a profitable and extensive pursuit."[23]

Local lore held that the rocky soil and steep slopes of the uplands made crop farming impossible, but large areas of Chase County used for pastures could be cultivated. Corn rarely grew well in the county's predominant soils, and unsuccessful attempts at its cultivation led to many of the unfavorable opinions about farming. Despite being the crop most familiar to the incoming settlers from their homes in the Midwest, corn simply was not suited to most of the region. Of the four soils that constituted most of the cultivable upland soils in the Flint Hills area, only one, Labette (Reddish Prairie), had the moderately permeable subsoil essential for corn. The soils of the Flint Hills had other agricultural drawbacks. Despite their evident fertility, because of the underlying topography a large portion of the soil contained coarse chert fragments larger than three inches in diameter. Erosion was a constant threat, especially where the grass cover was thin. Although a small percentage of Chase County's topography was stream bed, flood plains, and low terraces with slopes of less than 3 percent grade, a large portion, nearly 86 percent, was "uplands," small hills of less than five hundred feet in elevation, with slope gradients between 3 and 15 percent. The thin soils washed easily down in any rain once the grass cover was removed.[24]

Climate also played a key role in persuading people of the limits of agriculture. Before widespread irrigation, drought was the central plains farmer's ubiquitous nemesis. Seasonal drought remained a constant threat in the Flint Hills, and farmers could do little to counteract its impact. Chase County precipitation, which ranged from around twenty inches annually to more than fifty inches in the wettest years, normally occurred in spring and early summer. The average length of the growing period, between the last spring frost and the first killing frost of fall, was 180 days. In this climate, Chase County could produce a fairly wide range of crops, including corn, wheat and sorghum, as long as rainfall came in regular and seasonally distributed quantities. Without irrigation, when the rains did not come or came erratically, as is more typical than regular distribution on the plains, crops withered or failed to grow.[25]

After the Civil War, expanding farming activities pushed nearly all ranching operations in the United States onto lands deemed unsuitable for crops, mostly the drier, more rugged western portions of the country where drought-efficient grasses dominated. The reasons were equally economic and cultural, as railroads brought thousands of settlers to occupy the lands received as payment for building track. Those Kansans who hailed from Europe included Volga Germans, Mennonites, Swedes, and many others. Agriculturalists, they came to possess land in ways that excluded most kinds of ranching. Even the large ranches that bordered the Santa Fe Trail and

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[23] Chase County *Leader*, Cottonwood Falls, May 22, 1879.

[24] Thomas D. Isern, "Farmers, Ranchers and Stockmen of the Flint Hills," *Western Historical Quarterly* 16 (July 1985), 258-262; John C Frye, "The Erosional History of the Flint Hills," *Transactions of the Kansas Academy of Science*, Lawrence: State Geological Survey (Spring 1955): 79-86.

[25] Walter M. Kollmorgen and David S. Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures of Chase County, Kansas," *Annals of the Association of American Geographers* 55, no. 2 (June 1965): 270; Hickey and Webb, "The Transition from Farming to Ranching in the Kansas Flint Hills," 246-47.

supported its travelers were divided into farm plots. Although its farmers were not always as wealthy as their neighbors in Iowa or their peers east of the Mississippi River in Illinois, Kansas became a farmer's paradise, the Union state that consciously took as its clear and primary identity the values of Thomas Jefferson's virtuous ideal of yeoman farmers in an agrarian society.[26]

A large part of the Flint Hills resisted this trend. During the second half of the nineteenth century, ranchers managed to claim significant acreage across Chase County. Early mixed regime users, those who combined animal husbandry and farming, discovered in the uplands an optimal physical environment for ranching operations. Only the occasional severe winter or periodic drought stood in the way of their endeavors, such as the February 1881 blizzard that struck Chase County and left more than one hundred cattle dead on the D.B. Berry ranch alone, but large-scale ranching interests eventually superseded the surrounding small farming operations. The area's steep slopes and thin soil were geological reasons for the development of a grazing economy, but other factors contributed to its continuation.[27]

The Flint Hills retained economic value to the cattle industry while social reasons blocked expansion of farming. The Flint Hills occupied an intermediate position as a maturing ground between cattle-growing regions of the southwest plains and central markets for grass-fattened cattle. As a result, animals fattened on its grasses reached suitable market weights, and made dollars for ranchers that were otherwise lost. The proximity of the Flint Hills to railroad shipping points maximized flexibility; ranchers could quickly adjust shipping dates to take advantage of market fluctuations, holding animals back until prices climbed. Feed-lot finishing became a common practice in the Flint Hills, as corn, alfalfa, and other feeds supplemented grazing on prairie grasses or even became a substitute for grass feeding. This allowed young animals to mature through a winter, sometimes with grain added to their diet. Then they were pastured through the following summer. As cattlemen sought to increase the worth of their investments, the bluestem region also served as a breeding area for thoroughbred livestock.[28]

Cultural perceptions blinded early farmers to the agricultural potential of upland areas, and access to free grazing on public lands dissuaded them from considering purchase until after the grazing industry converted the uplands into private property. Chase County's earliest agricultural practices were dramatically shaped by contemporary cultural perceptions of the environment and not by the environment itself. Most of the county's upland areas were not settled or farmed during the first twenty years of settlement. Nineteenth-century farmers routinely sought land that mirrored the successful experiences of their past. For most Kansas emigrants, especially after the Civil War, that was the humid Midwest. In Chase County's Bazaar Township in 1870, twenty-five of sixty-three heads of households, or 39.8 percent, who listed farming as an occupation hailed from Ohio, Illinois, or Indiana. In Cottonwood Township, 25 percent of household heads also

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[26] Russell S. Kirby, "Nineteenth-Century Patterns of Railroad Development on the Great Plains," *Great Plains Quarterly* 3 no. 3 (Summer 1983), 157-170.

[27] Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 9; Kollmorgen and Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures," 260-261; Strong City *Independent*, February 17, 1881; Hobbs, *General History, Jones Family*.

[28] Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 6.

originated in those three states, while another 18 percent came from Pennsylvania, a state with similar topography. The background of farmers markedly shaped what they saw as valuable. Kansas experienced a population boom during the 1860s and 1870s, but most of the Flint Hills did not experience a sizable increase. Many settlers elected to bypass the visibly hilly and grass-covered area in favor of available flatter lands in the state's mid section that appeared to be more fertile and could more easily be brought under the plow.[29]

Based on the agricultural practices of their home states, the majority of these emigrants found only two types of land in Chase County, creeks and river valleys, suitable for settlement and crop production. Upland prairie was, in their view, for communal grazing. During the settlement period, those lands set aside for railroad land grants were informally available to all for the small number of milk cattle that were typically part of farming operations. Land surveyors typically priced bottom lands at two to three times the rate of upland fields, further persuading locals of their lack of value. Chase County farmers retained this age-old American prejudice against upland farming until the early 1870s, when bottom lands became scarce. Rising costs changed the value of land, and consequently the perception of its virtue. By the time most of the county's farmers recognized its worth, they could no longer afford upland acreage. During the late 1870s, drought conditions were the norm, and stock-raising seemed to be economic salvation. By 1880, many farmers stopped planting wheat altogether and ranching took on greater significance. Capital-rich syndicates and wealthy speculators captured what became prize grazing acreage, and many surrounding men were forced off their farms and into employment by the ranchers. By the end of the 1870s, the county newspaper embraced the shift away from crops, extolling the area's dairy and beef cattle potential. This attitude was later amplified by town speculators, boosters, and newspapers with an economic interest in promotion.[30]

Stephen Jones' ranching operation foreshadowed change, but was also part of an older ranching tradition. In his dualistic approach, Jones represented a middle ground in the Chase County cattle industry. His attitude differed from other area ranch owners, both individual and syndicate. While many land owners concentrated strictly on raising cattle, others viewed their Chase County operations as a part of a larger operation, a style termed "vertical integration" in the business vernacular of the age. Jones' 1878 purchase of the Langston farm represented the first step in such an operation, with he and his brothers shipping cattle east from their Colorado properties to the Flint Hills in preparation for market sale. One 1878 newspaper account reported that, on several occasions, Jones shipped, or planned to ship, thousands of head of cattle from Colorado "to graze on our fine prairie grasses." In this, Jones' operation had much wider reach than those of his agricultural neighbors.[31]

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[29] Fred A. Shannon, *The Farmer's Last Frontier: Agriculture, 1860-1897* (New York: Rinehart & Company, 1945): 6; Population schedules of the Ninth Census of the United States, National Archives Microfilm Productions, Microcopy 593, Roll 430, 1870 Federal Census for Chase County, Kansas.

[30] Joseph V. Hickey and Charles E. Webb, "The Transition from Farming to Ranching in the Kansas Flint Hills: Two Case Studies," *Great Plains Quarterly* 7 (Fall 1987), 248; Chase County *Leader*, April 22, 1880.

[31] Chase County *Courant*, August 23, 1878.

The leading example of the single-owner operation was the Clover Cliff Ranch, owned by J.R. Blackshere, one of Chase County's wealthiest men. Blackshere came to Chase County in 1860 and purchased 960 acres southeast of Elmdale, in the northwest corner of the county, before leaving for Virginia. He returned to Chase County in 1866 and expanded his cattle operation. By 1880, his herd primarily consisted of red shorthorns. Blackshere used his pasturage with the wisdom of experience. During the summer, his stock grazed on wild grass, with alfalfa – which Blackshere introduced to Chase County in 1875 – as a supplement in fall and spring. He generally sold his cattle in Kansas City, but sometimes shipped them further east to Chicago or St. Louis. As opportunities to sell animals further away developed, Blackshere found the new market unnerving. "Shipping is a business distinct from stock-raising," he observed. The high cost of shipping contributed to his discomfort. The sum of $25 per car, each carrying sixteen head of cattle, to ship to Kansas City was within his reach, but other destinations were considerably more expensive. The two activities were clearly different kinds of businesses and shipping cost altered the options of any cattleman – even one as well-off as Blackshere. By 1886, Blackshere moved out of Herefords and focused on breeding black Galloway cattle, a specialty animal that drew buyers to him and relieved him of many of the quandaries of the market.[32]

The syndicates, of which one of the largest was the 101 Ranch, also played a significant role in the rise of Flint Hills ranching. Most were financed by European investors, principally in Scotland or England, and often were managed locally by British cattlemen. Drawn into land speculation by reports of huge financial returns, the Western Land and Cattle Company, a London company capitalized at £115,000, initiated the pattern both in the American West and late in Chase County. With large amounts of available capital, the syndicates proved ready customers for large land sellers such as the railroads. By 1882, ten British-Scottish cattle companies had been incorporated for operation in North America. The largest, Matador Land and Cattle Company of Dundee, was capitalized at £400,000. By 1892 the Western Land and Cattle Company, along with the Eastern Kansas Land and Loan Company of Atchison, transformed Chase County's cattle industry into the large-scale system of grass-fattening Texas steers.[33]

The large syndicates soon dominated the regional cattle trade. Managed by Englishman H. W. Hilton, Western Land first purchased a 160,000-acre ranch along the Cimarron River northwest of Amarillo, Texas, for the company's breeder operation. The company decided it needed local, dependable pasturage adjacent to the Kansas City slaughterhouses to fatten its steers on grass. On December 14, 1882, the syndicate bought forty sections of open range grasslands northwest of Strong City, on land stretching from Diamond Creek west to the Chase County line and south to Middle Creek Road. Most of this, 75,000 acres, belonged to the Atchison, Topeka and Santa Fe; the 17,000 adjoining acres came from the Missouri, Kansas, and Texas Railroad. The total acreage amounted to almost 20 percent of Chase County. Hilton originally planned to call the operation the Diamond Ranch, but the diamond brand was already

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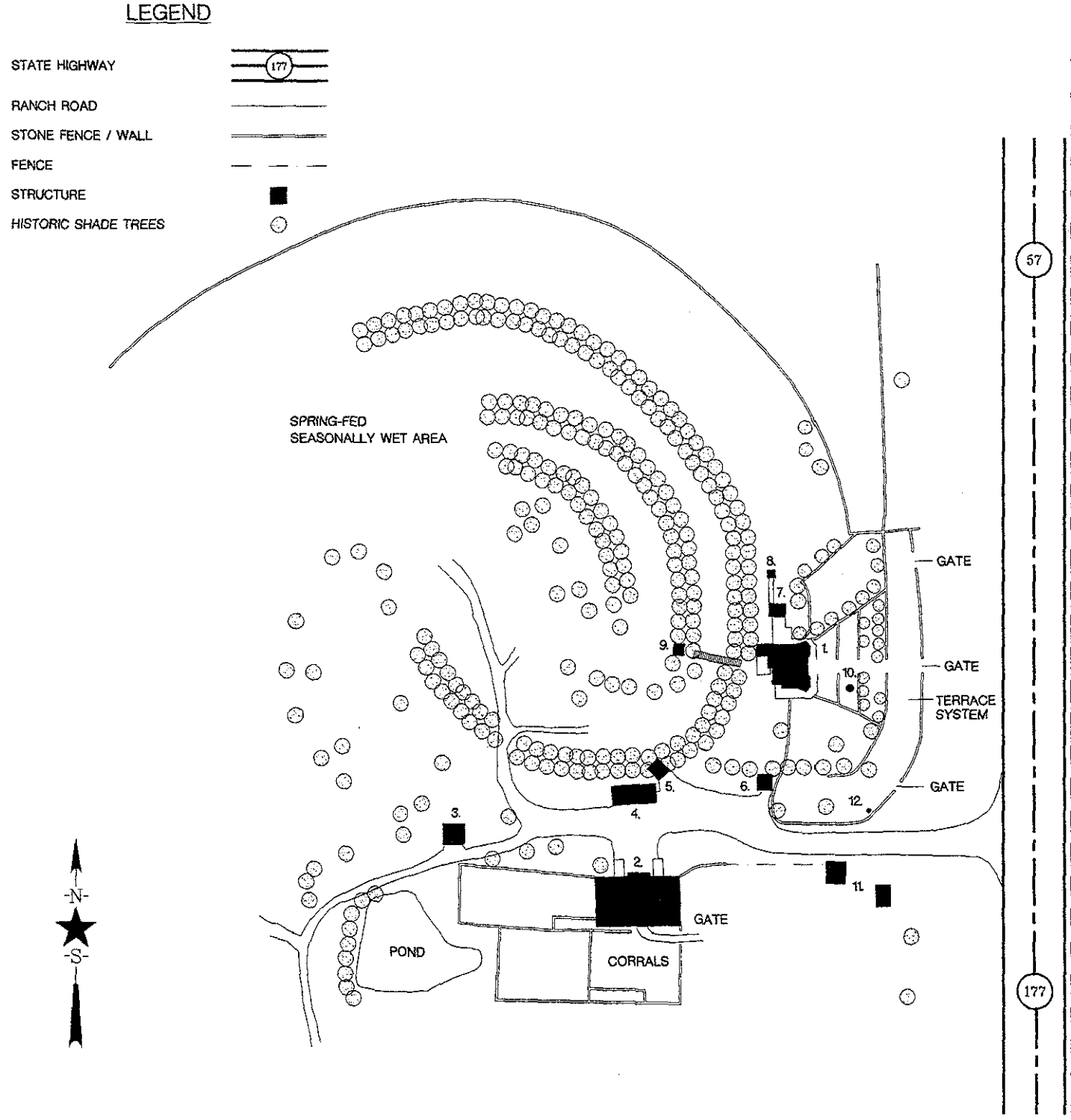
[32] Chase County *Leader*, November 18, 1880; *Strong City Independent*, November 27, 1886; Malin, "History of the Bluestem-Pasture Region of Kansas," 24-25; *Chase County Leader*, November 18, 1880.

[33] Joseph V. Hickey, *Ghost Settlement on the Prairie: A Biography of Thurman, Kansas* (Lawrence: University Press of Kansas, 1995), 122-125; Gene M. Gressley, *Bankers and Cattlemen* (New York, Knopf, 1966): 89-114; Dale, *The Range Cattle Industry*, 128-9.

MAIN RANCH BUILDINGS
-- 1878-1906 --



Sources: Wolfenberger and Ninz
"Spring Hill Ranch National Historic Landmark Nomination"
(National Park Service, 1996)

Quinn Evans / Architects
Tallgrass Prairie National Preserve Cultural Landscape Report
(Omaha, NE: National Park Service, Midwest Regional Office, 1999 Draft)

Tallgrass Prairie National Preserve GIS Digital Files
(National Park Service)

1. RANCH HOUSE
2. BARN
3. UNIDENTIFIED STRUCTURE
4. CHICKEN HOUSE
5. CARRIAGE HOUSE
6. UNIDENTIFIED STRUCTURE
7. SMOKE / SPRING HOUSE
8. OUTHOUSE
9. ICE HOUSE / CISTERN
10. FOUNTAIN SITE
11. UNIDENTIFIED STRUCTURES
12. TELEGRAPH POST

registered. He switched to the 101 Ranch name, but the ranch was often referred to by the original choice. The ranch's owners began constructing fences in 1884, and by the following year ninety-four miles of pasture had been enclosed. About 7,000 head of cattle were shipped in annually from Texas ranches, fattened and shipped to market. A large herd was also maintained in Chase County, and between 1,000 and 2,000 of these were sent to market every year.[34]

With these large influxes of outside capital from syndicates, the regional cattle industry became far more competitive and far more difficult for smaller operators. The large syndicates directly affected the viability of their smaller competitors. Unable to profit in the shadow of such large, well-financed operations, many neighboring small farmers and ranchers either sold out to outfits such as the 101 Ranch and left the county or became workers for the huge cattle operations. This transition from ownership to labor for small operators characterized agriculture in the South and sheep-ranching elsewhere in the West. Wealth, power, and land were consolidated in fewer hands, and many of those were outsiders. Eventually, a significant portion of the cattle lands in Chase County belonged to owners outside the county, a practice that continued into the twentieth century. In this the region was increasingly typical; absentee owners became characteristic of ranching on the plains.[35]

The expansion of cattle ranching in the Midwest played an integral role in the American frontier's rapid westward push. Much of the demand that underpinned this growth stemmed from the increased demand for meat in the nation's cities. As a consequence, ranchers needed much larger holdings, accelerating the already speedy process of divesting Indians of their land. Ranching quickly grew to meet the needs of the market, and soon the size and scope of the industry and the huge demand for herds left mixed ranching, which combined small numbers of cattle with grain production, restricted to regions with more limited potential. Small ranchers on the margins in the nineteenth century continued the mixed ranching tradition as the larger syndicates increasingly dominated railheads and the national market.

At the Spring Hill Ranch, Stephen Jones and other ranchers responded to the changes in his industry by inverting the agricultural-animal husbandry mix favored by early Chase County agriculturalists. Jones switched from a focus on grain production and small herds on the hills. He placed large herds on the uplands and used grain production in the lower elevation lands to augment the winter feed. One of the earliest and most consistent expenses came in fencing all newly acquired lands. By 1883 Jones had spent about $20,000 to build stone fencing five feet high and two and a-half feet thick around his property to protect his investment in blooded animals. His pattern of land use remained consistent with his predecessors: he grazed his herds on the uplands and cultivated the bottom lands, but the increase in herding's significance at the expense of farming, and his ownership of considerable acreage made his operation different from his neighbors.[36]

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[34] Peggy Stephenson, "Cattle Grazing in the Flint Hills," *Chase County Historical Sketches*, V. 3 (Cottonwood Falls: Chase County Historical Society, 1966): 242.

[35] Jordan, *North American Cattle Ranching Frontiers*, 236; Dale, *The Range Cattle Industry*, 93-114.

[36] Tewksbury, "The Jones Ranch," 41-45.

The cattle industry faced a number of issues that threatened its relationship with surrounding agriculturalists. Before research helped control the risks, diseases brought into Kansas from cattle raised to the south posed a primary threat. Imported bovine maladies, especially Texas fever, presented serious problems for Chase County's nascent cattle industry. Known as the "fever," Prioplasmosis was a circulatory infection caused by a microbe for which the cattle tick served as an intermediate host. Casualty percentages ran high; eighty percent of infected animals died. An early Abilene resident noted that Kansas farmers had very few cattle, little money to replace lost animals, and "to see their small stock of cattle die off was to them almost unbearable. It was almost open gun wars." The United States Department of Agriculture estimated that between 1865 and 1900, when Prioplasmosis was eradicated in the country, about 2.5 million cattle died from the disease. Texas cattle acquired immunity from generations of exposure and ceased to be carriers once they wintered in colder climates and the infected ticks died. Animals born and raised in Kansas never developed this immunity. As a result of the disease and the attendant negative economic consequences, northern states including Kansas drafted tough quarantine laws prohibiting or severely limiting the entry of Texas cattle to their states.[37]

Kansas's battle with Texas fever was legendary. In 1858, the disease first hit Kansas, and the territorial legislature promptly banned entry of diseased cattle. In 1859 and 1860, few ranchers obeyed the new law, new animals came, and thousands of Kansas cattle died. Out-of-state cattle drivers developed the practice of quickly paying farmers for losses, mollifying some of the complaints. Sensing the threat and seeing little action by state legislators, farmers organized into companies to enforce county regulations. Concerted action soon brought wider results. In 1861 Kansas legislators banned all cattle drives from Texas, Arkansas, and Indian Territory between April 1 and November 1, roughly the time between the last tick-killing freeze of spring and the first of the coming winter. In 1865, the ban was extended to the entire year, but the hardship the new measure imposed on merchants led to its repeal the following year. The ban was again enacted in 1867. Entry of herds restricted to December, January, and February. In 1876, certain restrictions modified the act by setting aside a quarantine herding ground in western Kansas. In 1881 after another outbreak, the older prohibitions were revived, and in 1884 the state Live Stock Sanitary Commission received the power to quarantine animals. The commission required health certificates for cattle entering Kansas between March 1 and December 1 starting the following year. This program proved no more successful than earlier attempts to regulate the disease. In 1891 entry was again limited, this time to December and January. Aside from protecting local stock from tick infection, laws served to prevent Texas cattle from breeding with native-bred cattle and to reserve the state's grazing lands for Kansas cattle.[38]

Kansas physiology became a contributing factor to the spread of cattle diseases. Segregating infected herds in the state was more difficult than in many places. Natural fencing materials such as wood were scarce in Kansas, incoming herds often mingled freely on common

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[37] Hickey, *Ghost Settlement*, 69; C.F. Gross to J.B. Edwards, April 13, 1922, J.B. Edwards Collection, Manuscript Department, Kansas State Historical Society Microfilm MS-1256, 1990.

[38] Shannon, *The Farmer's Last Frontier*, 240-42; Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 16-17.

grazing pastures with animals belonging to area ranchers and farmers. Pioneers used familiar fencing modes to help establish effective settlement in Kansas and control animal access to their crop fields. Ordinarily settlers on the state's timbered eastern boundary started with zigzag rail fences, but as settlers moved out of the humid zone and onto the grassy prairies the lack of large supplies of wood forced them to resort to substitutes. Rows of hedges, especially grown from Osage Orange, a dense plant colloquially called the "hedge apple," became popular throughout Kansas as a substitute for wood fences. But a new growth of Osage Orange took five years to become an effective barrier, forcing farmers to seek temporary legal protection until their newly planted hedges fully matured. The Hedge Law of 1867 allowed one-year-old hedge trees planted not more than one foot apart to serve as a lawful fence, and it held the owner of stock trespassing on land enclosed with such a boundary responsible for damages. Difficult for cattle growers, the law illustrated the power of agriculture in the Sunflower State.[39]

After the 1867 legislation, farmers and the politicians they influenced controlled the state's regulation of grazing. As a result, the state's initial fencing laws favored farmers, typically making the owners of animals responsible for penning them or keeping them off crop lands. Kansas favored its settled inhabitants over the very lucrative transient stock raisers until cattlemen bought enough land to create sizable revenue for the state treasury and secured their own significant influence among politicians. By the 1870s, with the coming of an open-range economy and the emergence of a Kansas-based cattle industry, the liability shifted to farmers. Caught between the farmers and ranchers, state politicians avoided any statewide regulation, leaving the counties to determine whether or not a district would be fenced.[40]

Most herd laws were temporary in nature, usually allowing a five-year suspension of the locality's fence laws while hedge fences grew to maturity. Chase County residents considered approving a herd law after an enormous 1871 trail drive overstocked the Abilene market. The flood of animals forced drovers to winter their cattle as far away as the Flint Hills while they waited for market prices to recover. The huge herds overtaxed the water supply and nearly grazed out the hay, but the county rejected herd law agitation. Farmers continued to press hard for herd laws, seeking protection from the larger herds driven into Chase County "by men who do not settle and help to improve the country," the Chase County *Leader* averred in 1872, "but merely turn nonresidents and railroad lands into stockyards, and allow their cattle to run at large, destroying all crops that are not strongly fortified." To alleviate local problems, the Kansas state legislature passed a general herd law on February 24, 1872. Afterwards, animals were forbidden to trespass on other people's property and stockmen were required to build fences of some type or to herd their animals.[41]

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[39] *General Statutes of Kansas*, 1868, Ch. 40, 486-498; Leslie Hewes, "Early Fencing on the Western Margin of the Prairie," *Annals of the Association of American Geographers* 71, no. 4 (December 1981): 499-526.

[40] Shannon, *The Farmer's Last Frontier*, 240.

[41] For a history of the fencing controversy in Butler County, see Jan Orgon Farrar, "Herd Laws and Hedge Posts: Fencing in a Kansas County," *Heritage of the Great Plains* 21, no. 3 (Summer 1988): 3-10; Rodney O. Davis, "Before Barbed Wire" Herd Law Agitations in Early Kansas and Nebraska," *Journal of the West* 6, n. 1 (January 1967): 47; Chase County *Leader*, March 1, 1872; *Session Laws of Kansas*, 1872, Ch. 190, 208-211.

Herd laws and enclosure laws reflected the balance of power between farmers and ranchers. Where livestock were fenced away from crops, the farmers were in control; where the farmer was made responsible for crop protection, ranchers prevailed. Initial settlers in North America reversed the English common law obligation of the livestock's owner to confine animals. In America, where land was cheap and small subsistence crop areas were fenced more economically than large grazing areas, the onus fell upon the farmer to take protective measures. Before widespread use of barbed wire in the early 1880s, the only fencing materials were thick shrubs, wood or stone. Hedges took several growing seasons before they were strong enough to contain the cattle. The high cost of stone walls and the lack of timber for fences throughout the Great Plains forced settlers to pressure legislators for a legal solution to the problems of cattle and crops. In 1885, Kansas passed a new, more restrictive herd law, making it illegal to allow cattle, horses or sheep to run loose and effectively ending open range grazing. Enforcement of the new regulation became easier with the availability of barbed wire after Joseph Glidden, the "father of barbed wire," and Isaac L. Ellwood formed a successful barbed wire company known as The Barb Fence Company in 1874 and use of the product spread widely.[42]

Open range grazing in the Flint Hills followed the Texas model and showed some of the traits of Spanish and Mexican communal land grants, the *ejidos*. Early ranching depended upon upland areas that farmers used as common areas for livestock grazing. Farmers on the bottom lands controlled access to water. Although many Chase County pastures contained springs, the reason why Jones named his ranch "Spring Hill," ranchers could not develop the cattle industry unless they both owned both upland pastures and acquired consistent access to year-round sources of water. Early settlers realized the importance of water and staked their claims primarily to the water-rich bottom lands. The lack of water allowed them to treat the uplands as community property. Farmers diversified in response to the landscape. They raised corn on the bottom lands, hay on the slopes, and placed small herds of shorthorns and hogs and loose stock to graze on the grassy upland slopes.

Seeing land that looked rich, farmers were not prepared for the vagaries of Great Plains weather. A series of droughts in the late 1870s contributed to the farmers' financial demise. Many left the area as the crops they brought with them from the humid Midwest withered; in contrast the Flint Hill grasses that evolved under these conditions continued to thrive. As farmers sought a more reliable climate, Texas cattle drovers grasped the intrinsic value of Chase County's prairie grasses. Quickly, ranching became the dominant industry. The lands that drovers found in the Flint Hills were far better for grazing than much of Texas, especially as cattle-raising spread to marginal lands in west Texas after the Civil War. Cattlemen considered the Flint Hills grasses essential for their herds moving north to railheads and the rainy 1880s did little to quell the

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[42] Davis, "Before Barbed Wire," 41-44; Clarence Danhof, "The Fencing Problem in the Eighteen Fifties," *Agricultural History* 18 (1944), 168-186; Earl W. Hayter, "Barbed Wire Fencing, A Prairie Invention: Its Rise and Influence in the Western States," *Agricultural History* 13 (1934), 189-207; Henry D. McCallum and Frances T McCallum, *The Wire That Fenced the West* (Norman: University of Oklahoma Press, 1965): 12, 29-43, 205; Robert O. Campbell and Vernon L. Allison, *Barriers: An Encyclopedia of United States Barbed Fence Patents* (Denver: Western Profiless Publishing Co., 1986).

perception that the Flint Hills stood out as pasture land. With ample rain, the grasses grew thick and tall, and those who saw them could be forgiven the conceit that they stumbled into an overlooked gem. This last chance to add weight before the cattle boarded the rails for eastern slaughterhouses was added value even at the cost of leases to the men who brought their animals north.[43]

Public domain grazing was never a serious option in Chase County. Railroad land grants and Indian reservations absorbed most public lands in east-central Kansas before serious American settlement commenced. The lack of public land created a situation far more reminiscent of Midwestern ranching than its Texas counterpart. In the Flint Hills, Texas cattlemen were forced to learn Midwestern cattle management techniques to thrive in the confined spaces and the region's legal and environmental conditions. Once a reliable ranching system became established and expanding operations occupied the available free range, the cattle industry turned to the development of thoroughbred cattle as a means to increase profits. In the process, Midwestern cattle-raising eventually displaced Texas techniques. The developing railroad system, aided by the owners' ability to interrupt the animals' trip to slaughter for pasturing without incurring significant cost, brought about increased business in wintering Texas and Colorado herds. In order to provide land for these expanding enterprises, syndicates purchased smaller farms and railroad lands, which they sold in bulk to cattle operations such as Jones' Spring Hill Ranch. Absentee landlords, including Texas ranchers and syndicates, soon purchased more land in Chase County. The operation was straightforward: cattle arrived from Texas in March and April, fattened on Flint Hills grasses, and were shipped East via rail in late July. The town of Bazaar, in southern Chase County, eventually became the largest shipping point for cattle in the entire AT&SF rail system. As a consequence of increased cattle operations, combined with the introduction of barbed wire into the Flint Hills, the area's open range vanished by the end of the 1870s.[44]

Despite the dominance of cattle interests in the upland pastures, a number of Chase County farmers saw crop opportunities in the higher elevation acreage. Throughout the 1880s, some experimented with upland farming, usually on portions of higher elevation acreage that adjoined their terraced fields along watercourses. Several political factors blocked and eventually ended these early experiments. The two most significant factors were the inability of Chase County farmers to compete with well-funded ranchers to purchase land and the decision by Chase County voters not to adapt a herd law to restrict cattle grazing in the uplands. The region had fencing materials such as timber in limited amounts and vast amounts of hard-to-work stone and many local farmers used the uplands as a common grazing pasture for their herds, typically ten to twenty head of cattle per operation. The small number of farmers who expanded onto the uplands could not afford to fence off their cultivated land. In this instance, the farmers' attitudes and ballot choices coincided with the needs of large-scale ranching operators. By protecting their prerogative, farmers hurt their long-term chances of survival. The beef industry took advantage of both the farmers' division and their increased profits as improved cuts of meat from carefully bred

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[43] Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 9-11.

[44] Jordan, *North American Cattle Ranching Frontiers*, 208-40; Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 17.

cattle proved popular with American consumers. The amount of open land rapidly disappeared. Ranchers hurried to secure the huge acres their expanding herds needed. The introduction of reasonably priced barbed wire accelerated the dominance of cattle interests. The end of the free range was the final financial blow to many small farmers who could no longer graze their small herds on common grounds. Unable to buy hill pasture for themselves, they were compelled to sell. Large cattle growers took even greater control of resources in Chase County.[45]

Chase County also became more popular with range owners from Texas and Colorado, and a livestock boom dominated the county's economic scene during the first half of the 1880s. Those ranchers with surplus capital could afford to pay to improve their cattle, horses, sheep, and hogs, and the financial ability to raise thoroughbred animals became another symbol of status. In search of new markets and responding to competitors, railroad lines continued to expand their services in the region. Cattle and hogs were driven to markets via railroad corrals to new rail connections in Burlington and Emporia. Some of the larger operations even had their own rail spurs. At the Spring Hill Ranch, a spur line likely laid during 1871 construction of the main line to service Lantry's quarry operation also may have been used for transporting cattle. By 1883, many stockmen who sought improved bloodlines in their range cattle shipped thoroughbred bulls to Texas and the Southwest. The Shorthorn breed was an early favorite of breeders, and later ranchers saw increased numbers of Galloway and Angus bulls. Soon, the Hereford dominated the breeding industry as the Flint Hills became a prime location to winter and mature cattle.[46]

By 1887, the Jones ranch was an outstanding example of commercial ranching, stocked with the era's best breeds. Stephen Jones raised Hereford, Shorthorn, and Galloway cattle breeds, and Hambletonian thoroughbred and graded studs as well as English Berkshire hogs. At the most, the Jones operation could maintain about two thousand head during the grazing season. Jones himself probably maintained a breeding herd of about 450 bovines year-round. In 1884, the breeding-cattle boom reached its apex nationally and came to an end by 1886. That year a decade of drought began, accompanied by a global economic depression. Jones persisted. Between 1885 and 1887, Jones imported and exported cattle from his operation. On October 30, 1885, he and D. B. Berry returned from Colorado with 497 steers; on September 2, 1886 the two stockmen shipped sixteen car loads to Chicago; on October 9, Jones shipped ten car loads of cattle and one of sheep to Kansas City; he shipped two cars of cattle to Kansas City on July 22, 1887. Despite larger economic uncertainty, Jones continued doing what he knew best.[47]

In 1888, Jones abruptly departed the region. On February 13, 1888, he sold his holdings for $95,000 to his neighbor Bernard "Barney" Lantry, who already owned considerable Chase County acreage that included Deer Park Place, a six-thousand-acre ranch directly south of the Spring Hill Ranch. Family concerns were Jones' announced reason for leaving. He wanted to raise

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[45] Chase County *Leader*, May 22, 1879.

[46] Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 12.

[47] This represents the typical Flint Hills pasture loading of about three acres per animal, considering Jones had about 7,000 acres of land with about 1,000 acres devoted to cropland, house, and roads. It is substantiated by research on Jones' cattle shipments undertaken by Julia Hobbs; Chase County *Leader*.

his daughter Lutie and two grandchildren who were her age in an urban environment with a better opportunity for a quality education. A local newspaper reported that "S.F. Jones, Esq., was in Kansas city [sic] last week getting the house in order for the removal of his family to that city. They go for the purpose of giving their daughter, Miss Lutie, and the Misses Adare, an opportunity of attending school in that city." Jones' wife Louisa never cared for ranch life, sealing their departure.[48] Jones' personal situation plated a catalytic role in his departure.

Questions of succession seemed to have played a role in the abrupt departure. Stephen Jones had no male heirs to run his cattle-ranching empire. Dreams of expansion had fueled the brothers' earlier plans, but the death of Stephen Jones' twenty-two-year-old son, Samuel, on November 4, 1878 seemed to quell any desire to keep the ranch in the family. Noting that Bud Jones worked on his uncle James Jones' property in southeastern Colorado, a local paper eulogized him as a future player in the Great Plains cattle industry. "Mr. Jones was a young and prosperous cattle rancher of Colorado," the paper mourned, "and bid fair to become one of the cattle kings of that state, in a few years."[49] His father surely mourned the loss and likely seconded the paper's sentiment.

Stephen Jones' departure from Spring Hill Ranch also reflected the new realities of the cattle trade across the West. After two decades of dominance that largely came to an end in the "Great Die-Off," of 1885-1886, the cattle business changed in dramatic ways. The freedom that the industry offered as a great American myth, the right to run cattle over vast expanses of land, came to an end. Called the range cattle industry, and typified by grazing on public or otherwise unclaimed and unfenced land where herds belonging to different owners had been raised and fattened, this set of practices came to seem vulnerable and even naive to those who lost thousands of head. The ranch cattle business, which used enclosures to segregate each owners' animals and ensure only their animals grazed upon their grasses, replaced range cattle industry practices. Safer if more demanding of stockmen, the ranch cattle industry offered operators greater control of their investment. It was also easier for absentee operators to stomach.[50]

The Stephen Jones family left Strong City for Kansas City on February 28, 1888. As he had on the Spring Hill Ranch, Jones retained the Rettiger brothers to do the stone work on his new house in Kansas City. The Joneses settled in Kansas City, returning to live in Strong City in 1889. Apparently they never again visited the Spring Hill Ranch, but Jones retained his business and banking interests in Strong City. In 1903, after Peyton Jones sold the bank, the Stephen Joneses returned to Kansas City. Louisa Jones died June 27, 1908, at the home of her daughter, Christiana Adare, then living in Strong City. She was seventy-five. Stephen Jones apparently returned one last time to Strong City. He died early in April 1914 at the Wichita home of his daughter, Christiana Adare. The funeral was held in Strong City, with burial in Prairie Grove

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[48] Strong City *Independent*, August 12, 1886; interview with Julia Hobbs, August 12, 1998.

[49] Weatherford *Exponent*, Weatherford, Texas, November 9, 1878.

[50] Joseph Nimmo, Jr. "The Range and Ranch Cattle Business of the United States," *Report on the Internal Commerce of the United States*, Ex. Doc 7, Part 3, House of Representatives, 48th Congress, 2d sess. (May 6, 1885): 98.

Cemetery west of Strong City.[51]

The economic and social forces that shaped the creation of Stephen Jones' Spring Hill Ranch were national in scope, drawing on the growing demand for beef among an urban nation's consumers, a more sophisticated business community that could see the benefits of large, integrated agricultural operations that matched growing industrial enterprises, and the resonating dream of the South's Civil War veterans to recreate the lost homeland of their youth. These forces were reinforced at the time by the economic limitations of the Flint Hills that favored cattle over crops, and by the natural forces that produced miles of nutritious grazing grasses. Jones had the strength, drive, and intelligence to see the prize of his own cattle empire and surmount the obstacles confronting him. What he could not overcome was the loss of an heir or dramatic changes in the shape and scope of the national beef market.

[51] *Chase County News*, April 9, 1914.

Chapter 6:

American Institutions Conquer the Flint Hills, 1888-1904

Even wealthier than Stephen Jones, Bernard "Barney" Lantry became the pivotal player in Chase County when he bought the Jones property on February 13, 1888. The incorporation of Chase County's cattle operations into a national market attained full maturity when Lantry acquired the Spring Hill Ranch. The acreage, which cost Lantry $95,000, an enormous sum in late nineteenth-century Chase County, became a cornerstone of his already impressive empire. Lantry's extensive quarrying and construction businesses were the core of his businesses and he approached ranching with the same zealousness he brought to other economic endeavors. Lantry's purchase cemented his prominence and suggested the changing nature of the cattle industry.[1]

Jones and Lantry, the two owners of the Spring Hill Ranch, represented entirely different dimensions of American economic endeavor. Jones was a cattleman. He made his fortune in cattle and then left the beef business, branching into other commercial enterprises, including a municipal electrical system and rebuilt hotel for Strong City. Cattle remained his first love and the core of his operation. Lantry built his wealth in construction and then entered the stock business as a secondary endeavor while retaining his other interests. He came to cattle, a mythic activity in late nineteenth-century America, with sizable wealth and many successes in other areas. It was as if Lantry became a cattleman to add a gentility to his hard-won accomplishments.

Lantry offered an entirely different picture of a cattle owner, the self-made man who through his own hard work and thrift climbed to wealth in an outside industry and then began buying land and cattle. He valued the cattle operation in a different manner than did Jones, coming to stock-raising later in life and after considerable achievement in other kinds of businesses. His different needs changed the uses of the ranch, and as a result, its meaning in local culture. Lantry loved his ranch, the Deer Park Place to the south of the Spring Hill Ranch, and after his purchase, the Spring Hill ranch house that had once been a county showcase became simply one more piece of managed property. Jones' expensive three-story stone structure, the pride of its time, became the manager's house.

The change in local practice reflected the new realities of the cattle trade across the West. After two decades of dominance that largely came to an end in the "Great Die-Off," of 1885-1886, the cattle business changed in dramatic ways. The freedom that the industry offered as a great American myth, the right to run cattle over vast expanses of land, came to an end. Called the range cattle industry, and typified by grazing on public or otherwise unclaimed and unfenced land where herds belonging to different owners had been raised and fattened, this set of practices

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[1] The total sale price for the Spring Hill Ranch was $110,000, which apparently included $15,000 for Jones' cattle herd. Julia Hobbs interview, August 12, 1999; *Strong City Republican,* November 7, 1889 and December 2, 1889.

came to seem vulnerable and even naive to those who lost thousands of head. The ranch cattle business, which used enclosures to segregate each owners' animals and ensure only their animals grazed upon their grasses, replaced range cattle industry practices. Safer if more demanding of stockmen, the ranch cattle industry offered operators greater control of their investment. It was also easier for absentee operators to stomach. The change in Spring Hill's ownership also reflected a new ordering of the region's elite.[2]

Lantry typified a pattern of westward movement and success that Americans have come to regard as a central theme in their history. Born in Brasher, New York, on August 10, 1833, he was forced to make his way early in life. Lantry's father died while he was in his teens and facing economic privation, the young man moved to Rutland, Vermont, and became a stonecutter. With a trade, the young Lantry could always find work. He turned out to be an enterprising individual who made the most of every opportunity that came his way. When he moved to Wisconsin in 1853, he became a steamboat captain and began railroad contracting. He cut stone and built railroad grades and bridges in Kentucky, Tennessee, and Texas, amassing a considerable stake. Lantry rose to the superintendency of the Wisconsin Valley Railroad, providing him another position of power. By all accounts, Lantry had become a wealthy and powerful man by the time he turned forty.[3]

Not yet satiated, Lantry sought new and better opportunities. Chase County offered a fresh challenge. In September 1877, three months after he purchased property from the Missouri, Kansas and Texas Railroad for a limestone quarry and a construction business, Lantry moved to Chase County. In May 1878, he purchased a plot of eighty acres for a residence and built a house for his family, who remained in Wisconsin until completion of the new structure. Two months later, Lantry bought another 110 acres on Crusher Hill, just to the west of Strong City, to add to his quarry. Lantry brought the kind of entrpreneurial energy and experience that was crucial in the settlement of the American West. His early activities showed his new neighbors that a man of substance had chosen to settle among them in the Flint Hills. The county soon agreed that its new citizen was an important and influential addition.

Despite being two of the most significant residents of the Cottonwood Falls-Strong City area, Stephen Jones and Barney Lantry had little in common. Jones was a southerner, Lantry the consummate Yankee. Jones was a cattleman through and through, a man of the agrarian tradition who used that cattle money to develop an important stake in other businesses. Lantry made his fortune with the tools and techniques of the industrial age, and then entered the cattle industry. Jones came from a tightknit family that worked together throughout his life. Lantry forged his way alone, later bringing his brother Charles into his business. Even in cattle operations, the two differed. Jones followed the older model of cattle raising, actively directing the property on which he lived. Lantry lived close to the Spring Hill property but operated the ranch through a manager, one of several that ran his Chase County operations. Both men owned businesses other than the

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[2] Joseph Nimmo, Jr. "The Range and Ranch Cattle Business of the United States," *Report on the Internal Commerce of the United States*, Ex. Doc 7, Part 3, House of Representatives, 48th Congress, 2d sess., May 6, 1885, 98.

[3] Thomas E. Cushing, "Bernard Lantry," *Chase County Historical Sketches*, Vol. 2 (Cottonwood Falls: Chase County Historical Society, 1948): 152-155.

ranch, but the property was the early core of Jones' economic interests. For Lantry, purchasing Spring Hill Ranch was no more than a business consideration. The two men did have a host of business associations, including service on the board of directors of the Strong City National Bank, but shared little more than inordinate drive and wealth in comparison to others in the county. They do not appear to have shared a close social relationship. The Jones home was only rarely open for the social gatherings so common on the frontier, and no record of visits by the Lantrys exists. The 1887 State Atlas of Kansas clearly displays the difference between the two men. Where the ink drawing of Jones' Spring Hill Farm and Stock Ranch shows every building and fence solidly constructed of stone, the main buildings on Lantry's Deer Park Place appear to be mainly built of wood. His rambling frame house, an amalgamation of several building styles, was surrounded by other frame buildings including three large barns, another smaller residence to the north, and wooden fences. Only the base supporting the water tower shows a stone construction.[4]

Lantry succeeded beyond his expectations with Flint Hills limestone. Soon after his arrival in Chase County, he secured a profitable contract with the Atchison, Topeka and Santa Fe Railroad to cut stone for bridge abutments and ballast. In 1880, where his stated occupation of "RR Contractor" in that year's federal census stands out among the pages of farmers and laborers, Lantry purchased more land for the quarry business and several commercial properties in Strong City. This consolidation began a meteoric rise that eventually turned his Strong City contracting firm, Barney Lantry & Sons, into one of the largest in the nation. At one time, the company delivered more crushed rock and building stone to railroads throughout North America than any of its competitors. At the peak of the firm's production, its monthly payroll reached $40,000. Lantry & Sons supplied huge quantities of stone for the harbor in San Francisco, as well as railroad work on the AT&SF and two railroad bridges near Kansas City. Lantry and his sons also constructed the now-famous cog railroad line to the summit of Pike's Peak in Colorado.[5]

Lantry's business was the talk of the county. It reached beyond America's expanding railroad system to Mexico, where Lantry was involved in the construction of the Mexican Central Railroad. Local newspapers proudly reported on the extent of the Lantry stone-cutting empire and trumpeted the possible local economic benefits of its growth. On January 11, 1884, the Strong City *Independent* reported that "Barney Lantry leaves to-day for Mexico City, to look after his interests as contractor on the Mexican Central. " A few months later, on August 29, 1884, the paper noted that Lantry "has just closed a $500,000 stone contract for parties in Mexico. This will liven up work in Strong City and give employment to many new men." Lantry's role as a regional economic catalyst and as a result community leader was increasingly secure.[6]

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[4] James C. Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," *Kansas Historical Quarterly* 11 (1942): 12-13; Chase County Register of Deeds, 1878-1893, Chase County Courthouse; William G. Cutler, *History of the State of Kansas* (A. T. Andreas, Chicago, IL, 1883): 1357; Julia Hobbs interview, August 12, 1999; *The Official State Atlas of Kansas, Compiled from Government Surveys, County Records and Personal Investigations* (Philadelphia: L.H. Everts & Co., 1887): 43-46.

[5] Chase County Historical Society, *Chase County Historical Sketches*, Vol. 1 (1940), 33-34.

[6] Strong City *Independent*, January 11, 1884; August 29, 1884.

Expanding his interests outside of the quarry and construction business, Lantry moved into the land business. He seems to have seen an economic opportunity rather than embraced a change in social or class status. Lantry was practical, and to his eye, cattle could be profitable. The quarry and the construction business took most of Lantry's time and he hired subordinates to run his beef operations. In 1881, he bought 880 acres of Chase County grazing lands and hired managers to run his herd. The following year he added another 160 acres, setting some of the property aside for his new house, which became known as Deer Park Place. His property acquisitions interrupted several longtime Chase County commercial and agricultural operations. Lantry bought property belonging to Nelson J. Swayze in 1885. The Canadian native moved to Cottonwood Falls in 1871 and entered the lumber business. After a year Swayze entered banking, opening the Chase County Bank of N.J. Swayze in 1873. In addition to his business interests, Swayze owned considerable amounts of farm land scattered across the county which he rented out, and he left Chase County five years after selling his property. Lantry also purchased farm land belonging to John W. Harris, a farmer originally from New Jersey.[7] Nineteen miles of stone fence surrounded 500 acres of crops at the ranch. Although not an agriculturalist by inclination, Lantry paid special attention to livestock breeding, including cattle, sheep, and hogs. By 1885 he owned 3,400 acres of grazing land in addition to his 600-acre quarry and businesses in Strong City associated with the quarry. In 1886, his acquisition of 1,280 acres stretched his property to the southern border of Jones' Spring Hill ranch. The two men traded some land to straighten out the boundaries.[8]

Even before he purchased the Spring Hill Ranch in 1888, Lantry was a leading citizen of the county and his economic decisions affected nearly everyone nearby. The Strong City *Independent* shadowed his every move, especially when it concerned Chase County's economy. In April 1886, the newspaper hailed Lantry's return home "from Topeka on Tuesday evening bringing with him two car loads of mules to work on the new railroad. His scrapers and tools have already arrived from New Mexico, and in less than ten days dirt will be flying on the 'El Dorado Short Line.' He also has the contract for grading down the hill on Cottonwood Ave., this city, and has a large force of men at work now." Three weeks later, the paper observed that "Lantry & Sons have twenty teams and thirty men at work in the vicinity of Matfield Green, on their Emporia & El Dorado Short Line contract, and ten men excavating for bridge abutments at the crossing of the Cottonwood river." The writer lauded Lantry's quarrying firm for providing regional employment and its praise had merit. On January 25, 1887, Lantry's firm employed more than two hundred men working the railroad grades and quarries, easily the largest employer in Chase County, and an important contributor of materials essential to the rapid growth of 1880s Kansas.[9]

Lantry's agricultural operations also expanded. By 1887, he owned 5,800 acres, with ten

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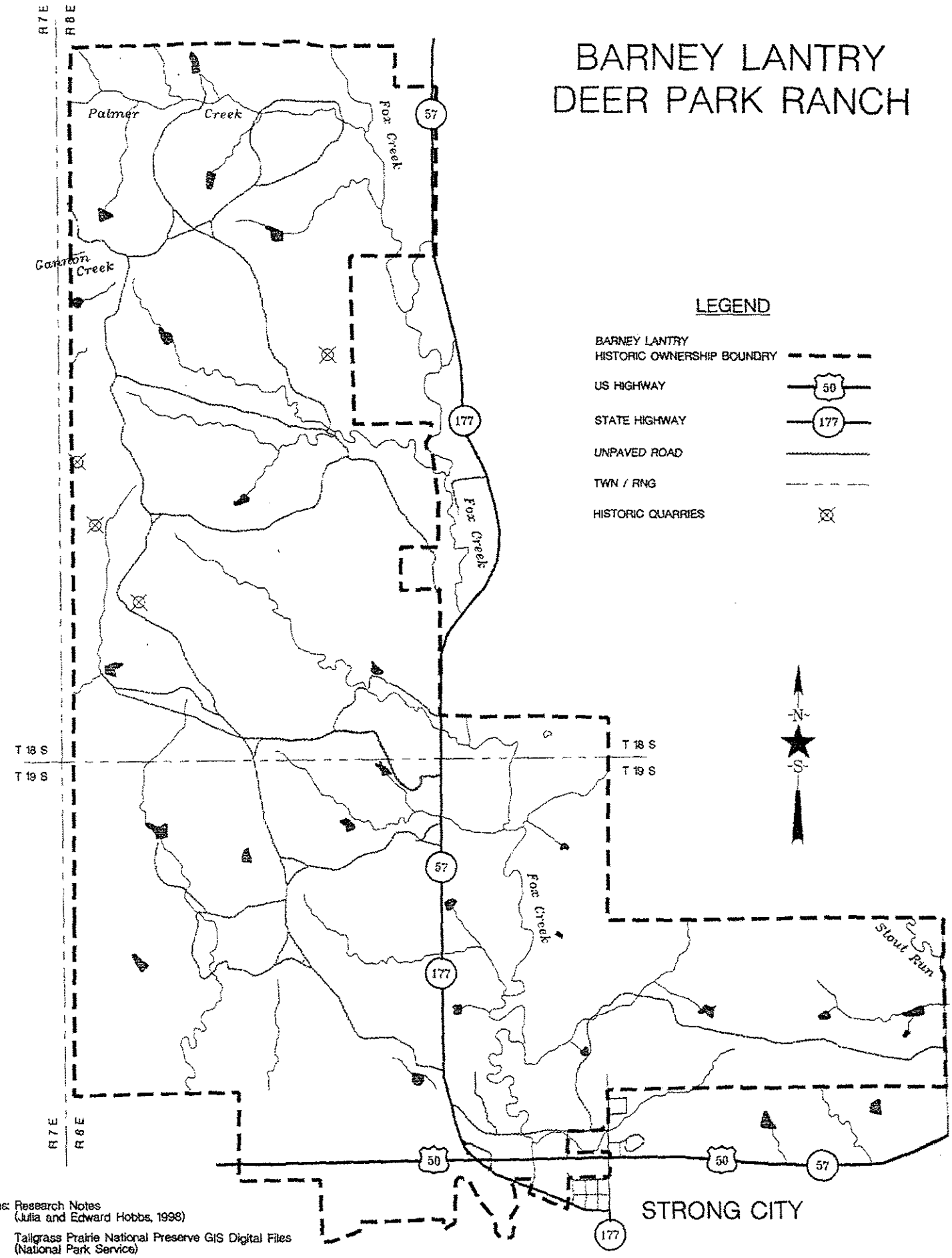
[7] *Chase County Historical Sketches*, Vol. 1, 439; 1880 Census Population Schedules, Kansas: Butler (Part) – Cherokee (part) counties, Roll 375.

[8] Andreas, *History of Kansas* (1883): 1,361; On December 15, 1886, Jones bought 120 acres from Lantry for $1,200. The following month, Lantry paid the same amount for a different 120 acres. Register of Deeds, Chase County Courthouse.

[9] Strong City *Independent*, April 6, 1886; April 29, 1886; January 25, 1887.



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(Omaha, NE: National Park Service, Midwest Regional Office, 1999 Draft)

acres of orchards, 150 acres in timber, twenty-five acres in tame grass, and Herefords, Shorthorns, Polled Angus, both thoroughbred and graded, with an estimated value of $175,000. Regarding his cattle operations as a business, Lantry had little compunction about selling his prize cattle. One advertisement in the Strong City *Independent* on January 25, 1887 read: "For Sale: Forty head of Hereford and Short horn yearling bulls from half to thoroughbred. Dams and Sires can be seen on these premises. All in fine condition, and worth money to stock-men. Apply to B. Lantry, Strong City." Another followed the same outline: "For Sale: Three thoroughbred Short horn bulls three years old this spring, and in fine condition. Apply to B. Lantry, Strong City." Lantry appreciated the land, but he appears to have lacked the attachment to owning and improving prime stock that other ranchers, many in the business for most of their life, possessed. Even as his cattle holdings grew, the community continued to think of him as a construction magnate. In a November 27, 1886 list of the some of the largest stock holdings in the county, Lantry was omitted. At the time, he was one of the largest stock-raisers in Chase County. Even his single largest purchase, all of Jones' Chase County ranch holdings except for a two-acre block of property set aside for the school on February 13, 1888, did not appear to sway public perceptions.[10]

Lantry followed the newly dominant regional trend. He used the land he bought as part of a regional network of cattle finishing, pasturing cattle in the Flint Hills before shipping them to market. Stephen Jones began the practice on the Spring Hill Ranch as early as May 1882, when he rented a pasture to a stock agent for the AT&SF for $1,000. Later that month 800 head of cattle were driven to the pasture, and they were soon followed by another 400. The practice was institutionalized and continued after Lantry's purchase of the Jones property. H.C. Miller rented 5,000 acres of the former Spring Hill Ranch in the spring of 1888 to feed nearly 700 head of cattle before they were shipped east. Lantry also accepted cattle from southeastern Colorado for pasturing before market. The shipments from Colorado continued for an extended period; in August 1888, he received eighteen cars of Colorado cattle, and on September 13, 1888, the *Republican* noted that Lantry and his sons received three cars of steers from Colorado this week, giving them about 1,200 head on their ranch. Cattle also traveled in the opposite direction, largely because Flint Hills grasses lost most of their nutritional value in the winter. In October 1888, Lantry shipped fifteen railcars of pastured cattle to the Texas Panhandle for winter feeding.[11]

Lantry's cattle were prime stock that fetched top prices. In August 1889, he shipped six cars of mostly western cattle to Kansas City. The cattle averaged 1,315 pounds and commanded the highest price paid that day, $3.65 per hundred weight. In late September of the same year, Lantry shipped ten cars of cattle to Chicago. These cows averaged 1,236 pounds each, and brought a hefty $3.35 per pound. The numbers attracted attention and area residents proudly celebrated the growth of the dominant local industry. "More cattle have been shipped through

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[10] *Official Atlas of Kansas* (1887); Strong City *Independent*, January 25, 1887; The transaction also excluded a small strip of land eight feet wide and three and three-quarters long along the west side of two sections, a small fraction of an acre. Register of Deeds, Chase County Courthouse.

[11] Julia and Edward Hobbs, "General History, Jones Family: Their Associated Neighbors, Land & Cattle, 1635-1889," private printing, 1999; *Strong City Republican*, April 21, 1888, August 4, 1888, September 13, 1888, October 18, 1888.

Kansas City to Chicago from this county in the past month than ever before in a year's time," the newspaper crowed.[12]

The purchase of the Spring Hill Ranch in 1888 filled out Lantry's holdings and effectively ended any relationship between he and Jones. The two men shared a property boundary after 1884 and Lantry and Jones served together on the Strong City National Bank board of directors; Lantry's son Charles was the bank's vice president. There is no evidence to suggest close personal ties, although Jones later served as an honorary pallbearer at Lantry's funeral. But the two men were among a few local people of means and both took pride in their accomplishments. The ranch transaction was a natural evolution of a neighborly relationship; Jones was ready to leave the area and he needed someone responsible and well off to whom to sell. Lantry fit the bill: he had the cash on hand for the purchase, and the Spring Hill Ranch easily merged into his operation. After its purchase, Lantry owned 11,670 acres of Chase County grazing land, as well as his quarry site of 600 acres and several Strong City properties. Throughout 1891 and 1892 his acquisition of land continued, as he added inholdings surrounded by his property.[13]

Lantry reordered the significance of county residences. He favored the ranch he built, called the Deer Park Place because he kept a small herd of deer, elk, and antelope there for his pleasure. He did not consider moving into the beautiful stone house Jones built, and after the purchase, the relationship between the two properties changed. Once the consolidation of Spring Hill Ranch and Deer Park Place was complete, the combined operation was called "Spring Hill and Deer Park Farms." The elegant former Jones residence became quarters for ranch hands during the Lantry years, a significant diminution after being the residence of one of the leading citizens of the county.[14]

The agricultural empire was extensive. Lantry's operations included ten separate ranches, each with its own manager, houses and equipment, and his holdings encompassed considerable acreage in farming. His crops flourished; he grew grasses for hay, specialty crops for market and other commodities. Corn and peaches were his best known farm products. Lantry, the *Republican* noted, "has the biggest peach crop in the county and the quality is not surpassed by any other fruit raiser." Lantry became one of the most important agriculturalists and stock growers in the county, and he was also apparently a hands-on manager with the fierce determination of someone who made his way in life. In one instance that revealed his grit, early in 1889 Lantry tumbled into twelve feet of icy water while supervising ice cutting for his ice house. He calmly swam to shore and ordered his men back to work.[15]

Lantry's purchase of the Spring Hill Ranch and its integration into a larger commercial operation paralleled the county's evolution into a subsidiary of mainstream America. With Lantry's rise, a new class of people led the county. They rose on their merits as had Jones and

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[12] *Strong City Republican*, August 1, 1889, September 26, 1889; September 13, 1888.

[13] *Strong City Independent*, July 11, 1893.

[14] Cushing, "Bernard Lantry," 153-54.

[15] *Strong City Republican*, February 7, 1889, September 5, 1889.

Lantry, often starting with little capital and becoming well off. Many were not native to the Flint Hills but instead found a home there. They were loyal to their region, almost fierce in their love of the Flint Hills and their communities, and they built institutions that served the public instead of ones that catered to traveling drovers and their cattle. The shift in ownership to Lantry illustrated the strengthening of local ties in Chase County at precisely the moment that control of the cattle industry passed to outside hands.

By 1888, when Lantry bought the Spring Hill Ranch, many Chase County institutions had been in existence for thirty years. Schools had been crucial to the formation of the county and its self-definition. After organizing a rudimentary school in the county's first courthouse in 1859, the community established its first formal schools during the Civil War. In Falls Township, which encompassed the Spring Hill Ranch, School District No. 6 was organized in 1862. Chase County supported the national emphasis on public education, and by 1876, thirty-six district school houses and one Catholic school, at Cottonwood Falls, offered as full a complement of rural education as any similar county in the state. In 1878, 1,647 students attended county schools. The expansion of education continued. In 1881, the county contained forty-four organized school districts and a student population of 2,140; by 1890, sixty-one organized school districts and 2,882 students revealed both growth and the response of local government.[16]

Most of these school districts were partitioned from the original, larger Bazaar Township school district that formed in 1860. As the region's population increased, the school district broke into smaller ones. In April 1862, Bazaar yielded six square miles of land from its northeastern corner to form the Vernon District. Six years later, on August 10, 1868, Bazaar gave up another two square miles to form the Miller District. The partitioning continued. Sharps Creek, Rock Creek, Prairie Hill, Patton, and Baker school districts were all formed with original Bazaar School district land. The school buildings were well constructed and fairly well-stocked. One in particular, Bazaar's second public school house, completed in 1874, was a large stone structure with a stove, chandeliers, two slate blackboards, and many desks of differing sizes to cater to the wide range of classes held there. Education was not the school's only function. It also served as a community center for church meetings, assorted cultural activities including music and literary societies, Grange sessions, and political meetings.[17]

The spread of schools served the needs of the people near the Spring Hill Ranch. Two schools were near the ranch. The first Lower Fox Creek School No. 14, sometimes called the Daugherty School, presumably after the W. J. Daugherty family who owned a farm nearby, was constructed in 1877 on Jones' original land purchase to the east of the main house. Five years later work began on the Lower Fox Creek schoolhouse, about one-half mile north of ranch headquarters complex. Jones donated the land for this school for personal reasons. He served as superintendent of the first school and had already express concerned about the quality of his daughter's education. He was equally interested in the education of other members of the family. Eventually Jones explained his departure from Chase County by articulating his reservations about local education. This commitment influenced the final sale of his property; when Jones sold the

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[16] Cutler, *History of the State of Kansas*, 266, 1357.

[17] Chase County Historical Sketches, Vol. I, 292-3.

Spring Hill Ranch, a small portion was withheld from sale and donated to the school district. Nor was Jones alone in his desire to help local schools. Lantry's quarrying business contributed to the school as well. Stone for construction came from his quarry, north of Strong City. David Rettiger, the entrepreneur who built the county courthouse, the Jones house, barn, and much of the fence work, performed the masonry work. After the new stone school was built, the original school was called Mount Pleasant. Sabbath school was formed there. The original school No. 14 on Daugherty's land was torn down by the owner in the summer of 1883.[18]

The Lower Fox Creek School was typical of rural American schools. When its first term began on September 1, 1884, teacher Dora Peer taught children of a broad spectrum of age and educational experience. Peer's situation was typical. Teachers often spent only a short time in the profession. Teaching offered little promise of a future. The pay was typically poor. Female teachers expected to marry and men usually moved on to other occupations. Gender also influenced pay scales. In Chase County in 1884, the average salary of teachers per month was $35.33 for males and $31.12 for females. Many people started in teaching and moved on to other occupations. Those who stayed did so by choice, often at their own economic peril; those who returned to teaching after a sojourn in other occupations usually had few other options left.

Despite the problems of securing and retaining teachers, schools remained symbols of a community's commitment to the future. School and other public buildings sought to project an image of stability and permanence, and communities tried to muster the resources to make a statement. In rural areas a small tax base often limited the practical impact, but with the coming of the cattle trade and as a result of Lantry's quarrying and construction business, Chase County had resources for public buildings. Out of a total of thirty-five school buildings in the county, twelve, including the Lower Fox Creek School, were constructed with stone. The other twenty-three were built from wood. The choice of wood connoted a more transitory situation than did the permanence of stone; fully one-third of Chase County's schools took on the trappings of permanence.[19]

Religion was an equally important sign of a community's cultural aspirations. Chase County's residents built their churches as soon after they settled as they could. The county's population hailed from a range of places and practiced their faith in different ways and a host of religious institutions reflected that diversity. Their memberships rose and fell in response to the ebb and flow of population. Economic fortunes were catalytic in church membership. Many settlers came to the Flint Hills to farm, but one or two years of bad weather could force them from their properties and on to the next opportunity. In 1875, an influx of German immigrants boosted the Catholic Church membership to 400, the largest in the county. Six years later 840 Catholics were reported, but by 1885, as ranching replaced farming, the number of Catholics fell to only 255. Other churches reflected national religious trends and amalgamations and divisions of congregations. In 1875 the Methodists numbered sixty in Chase County, growing to 350 the

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[18] Cutler, *History of the State of Kansas*, 1357-60; interview with Julia Hobbs, August 12, 1998.

[19] Chase County Historical Society, *Chase County Historical Sketches*, Vol. 1 (1940), 30-32; Cutler, *History of the State of Kansas*, 1357; Julia Hobbs interview, August 12, 1999; Chase County Courthouse, Register of Deeds, February 13, 1888.

following year. There were 27 Methodists in 1877, but 510 Methodist/ Episcopalians. In 1881 the Methodist Episcopal congregation shrank to 250, but that number grew by more than 100 in two years. Other churches, such as the Friends, remained relatively constant in the size of their congregations. The Spring Hill property reflected this diversity, with Stephen Jones a member of the Methodist Church and Barney Lantry belonging to the Catholic Church. Lantry donated land to his church for a cemetery at the south end of the preserve which is still in use.[20]

As improved transportation and communications accelerated interaction between the region and the rest of the country throughout the 1880s, other trappings of American social life developed in Chase County. Public libraries, newspapers, and banks all began in parallel fashion. In 1875, Chase County counted nine libraries that contained 1,252 volumes. Newspapers, the voice of local news events, entertainment, and opinion, were also numerous. In 1875 in Cottonwood Falls, the *Chase County Leader* and *Chase County Courant* published; in 1877, Strong City added in the *Chase County Republican.* Six years later, the *Chase County Independent* debuted. The county's economic health seemed assured and local financial institutions kept pace with other kinds of growth. In 1875, one bank, the Chase County National Bank in Cottonwood Falls, existed. In 1877, the State Exchange Bank received its charter in Cottonwood Falls, and Strong City added the Strong City Bank, where Stephen Jones served as president. In 1885, the Elmdale Bank in Elmdale, five miles west of Strong City, was formed. The growing number of financial institutions indicated that the county had begun to mature.[21]

The sale of the Spring Hill Ranch took place as free-range ranching ended throughout the nation. By the end of the nineteenth century, herd owners across the Southwest found a dearth of inexpensive public lands on which to run their animals. By this time, cattle owners could rarely use public land as common grazing ground; the land they could easily reach was overgrazed. More desirable land had been claimed by ranchers or sometimes farmers, who used barbed wire to stake their claim to what had previously been common property. The introduction of inexpensive barbed wire by 1880 allowed ranchers to enclose huge stretches of private land for their own herds, while letting them easily segregate animals for breeding. Cattlemen sometimes illegally fenced enormous areas of public land, until someone, federal officials, farmers or other ranchers, forced them to take down the fences.

Cattlemen faced another conundrum. Expanding consumer desire for beef stretched the resources of the industry. The number of cattle that could be grazed on marginal lands was finite, and by 1880, much of that land was in dire condition. Even the Texas legislature, as opposed to regulation as any in the country, noticed. In 1884, it limited grazing on the *llano* of west Texas. Demand persisted, and the only solution for cattlemen was to improve the bloodline of their animals. Better stock meant cattle that could put on weight more quickly and efficiently. In the Flint Hills, the abundance of ranchers soon aimed for improved animals, furthering the nature of

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[20] Ferenc Szasz, "Religion in the American West: An Introduction," in *Religion in the West*, ed. Ferenc Szasz (Manhattan, KS: Sunflower Press, 1984), 4; Report of the Productions of Agriculture as Returned at the Tenth Census (June 1, 1880) (Washington: Government Printing Office, 1883); Report on the Statistics of Agriculture in the United States at the Eleventh Census: 1890 (Washington, D.C.: Government Printing Office, 1895); Hobbs, "General History, Jones Family."

[21] Chase County Historical Society, *Chase County Historical Sketches*, Vol. III (1948): 443-46.

the regional industry.

Expansion of the nation's transportation system by 1880, especially the completion of the AT&SF line to Santa Fe and Albuquerque, directly connected the cattle range of the Southwest to Eastern markets. This made it possible to breed animals primarily for weight, increasingly the popularity of the Hereford and Angus. The traits of the longhorn, endurance in walking to market, became less desirable. Breeders could also became experienced in finishing the animals, raising them in feedlots, as the costs of transporting the large amounts of grain that fed pastured animals fell. The new rail connection to Santa Fe and beyond broadened the reach of the Flint Hills grazing operation as it enriched Kansas in general. From its beginnings in cattle from Texas and Colorado, Flint Hills lands now catered to range cattle from further west, traveling by train and less able to spread Texas fever. The broader market raised the value of Chase County lands, as speculators interested solely in profits recognized potential in these lands. Cattle owners seeking pastureland for their animals just before they were sent to market competed with speculators for ownership and land prices rose. By 1889, the Strong City stockyards underwent expansion to meet the increased rail demands for importing and exporting cattle. A battle for control of the Flint Hills took shape; increasingly it became too expensive for locals and the colonial process of divesting the region of control of its destiny began in earnest.

There were exceptions to the pattern, and the former Spring Hill Ranch stood prominently among them. Stephen Jones and Barney Lantry lived in the Flint Hills, as time passed this became more unusual among large landholders. The Lantry operation seemed out of step as the cattle industry changed. Between 1888 and 1904, when Lantry and his family operated the Spring Hill Ranch, Flint Hills land continued to drift away from local ownership, a accelerating trend that began in the 1870s. Throughout Kansas, absentee owners using on-site managers replaced residential owners and operators. In the Flint Hills, the transformation was especially pronounced. The search for economic efficiency in the beef industry demanded larger volumes of animals than many smaller Flint Hills operators could provide. They lacked the resources to compete, and as land prices rose, their property had value on the market they could not wring from it by any other means. Ranchers from Texas, the Southwest, and even Europe owned more of Chase County's pasture lands with each passing year, and those distant owners were unlikely to move to Kansas or even to regard as more than a piece in the larger puzzle of their holdings.

Throughout the region, the evidence of outside ownership grew. The 101 Ranch, in the northwest corner of Chase County, was owned by European speculators who controlled operations through an on-site manager. H.R. Hilton, a Dublin native, bought 20,000 acres of railroad land grants in late 1882 on behalf of a Scottish syndicate headed by the Duke of Sutherland. The investment group, known as the Western Land and Cattle Company, was composed of English and Scottish investors, and when it bought its Chase County property it already owned 160,000 acres in Hartley County in the Texas Panhandle. Its Chase County ranch eventually covered 35,000 acres, considerably more than Stephen Jones owned. The 101 usually shipped in about seven thousand head of cattle from the Texas ranch, fattened them on the bluestem grasses, and shipped them out to Eastern markets. Hilton operated the reach until he left the firm in 1893, and the syndicate finally sold it in 1900.[22]

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[22] "The 101 Ranch," *Cottonwood Falls Leader*, September 20, 1949.

The change in ownership patterns reflected the shift in the cattle industry. The older style, the range cattle system, succumbed to cattle ranching that involved grazing on private holdings or leased public lands. Cattle became too valuable and too expensive to be left unattended on the range. The growing number of fenced areas across the West, especially those with barbed wire, deeply cut into open range. Herd laws that made cattle owners responsible for their animals' crop damage contributed as well. In Chase County, this series of transitions made county pasture more desirable. It signaled the end of common use of upland pasture areas, and the continuation of the private ownership of uplands begun by Jones. Chase County grazing operations shifted away from local needs and increasingly reflected the needs of ranchers in far-off Texas and the Southwest.[23]

The emergence of Chase County ranchers represented a break with the norms of the country's historical development. American culture, with its premium on yeoman individualism and idealized visions of the nation's past, tended to favored agriculture over ranching. Across the West technological innovations such as barbed wire permitted farmers to keep competing cattlemen out of clearly defined and usually valuable terrain, giving farmers the advantage of seeming permanence. In the Flint Hills, a host of economic, climatic, and social vectors combined to deny the farmers the dominance they sought and captured elsewhere. The ranching industry underwent significant expansion during the 1880s; a series of dry years later in the decade curtailed grain production in Chase County and made even more room for ranching. The county's products revealed the transition. Chase County sold $288,720 worth of livestock in 1885 and $577,045.80 in farm and crop products; five years later the farm and crop production total fell to $317,895 while the sale of livestock jumped to $549,376. As farmers went bankrupt, ranchers looking for more pasture land bought them out. Larger numbers of cattle in the Southwest increased demand for Kansas grazing lands, aided by the development of ranching in the southwest corner of the state.[24]

Increasing consumer demand for beef also contributed to the cattle industry's supremacy. Some of the meat went to feed the tens of thousands who moved to cities from the nation's rural areas and increasing numbers of immigrants from overseas. Outside ownership and weak local power in Chase County also made grazing more significant at the expense of farming. Exporting beef and importing goods and foodstuffs drew the Flint Hills more tightly into the market economy, as did expansion of the nation's railroad system, and made the shift to specialized raising of cattle possible. By the time that Lantry took possession of the Spring Hill ranch, the early Chase County land conflicts between small farmers and ranchers had been resolved in favor of the cattle industry. The small number of farmers still in the area typically controlled access to the rivers and streams, so ranchers who owned the county's higher lands either purchased the waterside properties from farmers who no longer could compete economically or developed their

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[23] Charles L. Wood, *The Kansas Beef Industry* (Lawrence: The Regents Press of Kansas, 1980): 3-10; Davis, "Before Barbed Wire," 45-7.

[24] Wood, *Kansas Beef Industry*, 4-6; William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton, 1991), 218-224; *Biennial Reports of the Kansas State Board of Agriculture to the Legislature of the State* (Topeka: Kansas Publishing House): 1880 through 1890.

own system of watering ponds across the pastures.[25]

A crucial component of the developing ranching industry was the consolidation of smaller farms into larger grazing operations. In 1880 there were 775 holdings in Chase County, more than half of which contained between 100 and 500 acres. Only four were larger than 1,000 acres. A decade later, more than half of the 1,007 properties reported in the county still contained between 100 and 500 acres, but forty-eight operations controlled more than 1,000 acres. Chase County holdings remained large compared to others in Kansas. By 1890, farms and ranches in the county averaged 329 acres, the highest average size in Kansas and well above the statewide average of 181 acres.[26]

Despite the significance of farming, Chase County statistically resembled ranching counties rather than other Kansas agricultural counties. In 1885, Chase County's population of cattle considerably exceeded the state average, but it ranked low in numbers of people and quantity of agricultural production. Chase County stood sixty-sixth in population out of the 108 Kansas counties that year, sixty-eighth in acres planted in wheat; sixty-fourth in acres in corn; and twenty-fourth in the number of cattle. The transient steer population accounted for Chase County's inordinate ranking. The increase in cattle between 1880 and the early 1890s was marked. The federal census recorded 11,099 cattle in the county in 1880. By 1885, the number increased to 26,749 and peaked in 1890 at 34,336. By the mid-1890s, the number of cattle diminished. By 1895, a 33 percent decrease left only 22,050, still a very large number by Kansas standards. In 1900, the downward trend reversed as 29,196 cattle were recorded. In comparison, the number of milch cows, a mainstay of farmers holding small mixed agricultural operations, remained relatively constant during the same time: in 1880: 1,867; in 1885: 1,928; in 1890: 2,291; in 1895: 2,587; in 1900: 2,942. As Chase County became disproportionately cattle-laden, it primarily became a location to finish cattle from elsewhere.[27]

Greater production of agricultural crops that supported cattle ranching paralleled the increase in cattle. From 1871 to 1878, the amount of Chase County land in prairie pasture jumped from 1,609 acres to 11,841; land planted to feed crops such as millet soared from 201 acres to 1,283 acres. Fencing also became a common practice, more typical after cheaper barbed wire became widespread in 1883. County residents built 165,790 rods of fence (911,845 yards) by 1878. In 1885, 93,324 acres of county prairie lands were fenced; in 1890, 105,139 acres of prairie were fenced; five years later only 55,184 acres of prairie were recorded as enclosed, a decline that resulted from smaller demand and bad weather. In 1896 the figure returned to a more typical

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[25] Cronon, *Nature's Metropolis*, 218-224.

[26] *Report of the Productions of Agriculture as Returned at the Tenth Census* (June 1, 1880) (Washington: Government Printing Office, 1883); *Report on the Statistics of Agriculture in the United States at the Eleventh Census: 1890* {Washington, D.C.: Government Printing Office, 1895); *Biennial Reports of the Kansas State Board of Agriculture*.

[27] *Biennial Reports of the Kansas State Board of Agriculture*, 1880 through 1890.

109,222 acres and increased to 122,198 acres in 1900.[28]

As Chase County and Kansas became more entwined in the national cattle industry, an institutional structure to govern the cattle trade became a necessity. Since the 1860s, disease had been the great fear of the industry and all who raised domestic stock near ranching operations. The sums at stake were far too great to ignore the threat. After suffering through a hoof and mouth disease panic in 1884, Kansas established the Livestock Sanitary Commission, responsible for combating all cattle diseases, including Texas fever, and enforcing quarantines. During the same year, the federal government established an agency, the Bureau of Animal Industry, designed to combat interstate transmission of any kind of animal disease. The efforts soon paid off. The Santa Fe railroad, supported by southwestern cattlemen and Kansas City market operators, completed its lines from Arkansas City, Kansas, to Galveston, Texas, and across Panhandle Texas to eastern New Mexico by 1887-88. The Southwest and the Kansas City markets were finally directly connected. Because of Texas fever, only beef cattle could be shipped to northern markets for slaughter. Stock and feeder cattle faced quarantine restrictions. By 1890, the parasitic nature of the transmission of Texas fever through small ticks had finally been discerned, and cattle ranchers responded with new eradication measures. By 1892 cattle were dipped in a chemical agent that killed the ticks, and eastern Kansas again welcomed incoming cattle for pasturing. As a result, the Flint Hills regained its advantage as prime pre-market grazing, as railroads allowed cattle owners to ship animals to market without charging for an extra stop.[29]

The cattle that grazed Chase County pastures had already affected the environmental and economic makeup of the region when Barney Lantry assumed ownership of the Spring Hill Ranch in 1888. County resident Henry Rolger, whose family owned a ranch near Matfield Green and who was born in the late 1870s, remembered that there were fewer shrubs and bushes on the hillsides during his youth. The frequency of lighting-sparked prairie fires kept such vegetation in check as it did in many similar environments throughout the American West. Bluestem and other native grasses grew larger and more vigorously and were more dense in volume. The frequency of fire promoted rapidly rejuvenating grasses at the expense of bushes and shrubs. Animals such as squirrels, raccoons, and rabbits dominated the landscape. Rolger remembered that local cattle herds were small, comprised mostly of shorthorn breeding stock. Between 1885 and 1887, the first fences, mostly black barbed wire, were installed to help control herds and keep them away from agricultural lands. Corn was the primary upland crop. Rolger also observed the most significant change in regional demography of the era. A growing percentage of prairie lands belonged to nonresident owners, a shift from the resident owner working the land to the nonresidential ownership of prairie lands.[30]

Barney Lantry's acquisition of Jones' Spring Hill Ranch was part of that trend, but only in a peripheral way. Lantry was a longtime Chase County resident, but he was not primarily a

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[28] Charles L. Wood, "The Development of an Enclosure System for Five Kansas Counties, 1875-1895," *The Trail Guide* 14, n. 1 (March 1969): 2-20.

[29] Malin, "An Introduction to the Bluestem-Pasture Region of Kansas," 178.

[30] Interview with Roy Rolger, "Kansas Reminisces Packets," 5.

cattleman. The Spring Hill Ranch's new owner differed from his predecessor. Ranching was a sideline, albeit a profitable one, from the work in which he made his fortune. It remained a secondary concern in Lantry's operation. The diversity of his holdings let Lantry function as an absentee owner; he looked in periodically, when he was not traveling for his quarrying or construction business, and on a daily basis, a manager operated the ranch. In this sense, he was a hybrid, both local and absentee, typical of both ways of regarding the cattle industry in discrete categories of decision-making.[31]

Two larger issues, one economic and the other environmental, affected the Great Plains cattle industry during the transition to cattle raising. A general economic depression across America that began in the mid-1880s and continued until the early 1890s cut into both demand for beef and its price. Inclement weather also played a powerful role. The most celebrated were the successive blizzards of 1885-1886 and 1886-1887, a region-wide problem west of the Flint Hills that decimated cattle herds. After a series of relatively mild winters, the successive winters were long, cold, and snowy across most of the west. Tens of thousands of cattle died of exposure, persuading many in the cattle industry that the only way to survive was to avoid reliance upon free open-range grazing and instead produce hay to carry their herds through bad winters. Allowing the animals to graze on public land had always resulted in a certain mortality percentage, a loss rate considered acceptable by early ranchers. Its cost had become prohibitive by the late 1880s, and the "Great Die-Off," as this tragedy was called, compelled many to rethink their premises. In many cases, ranchers established privately owned ranches that were sufficiently large to allow for both grazing and hay production. To keep their valuable herds, cattle ranchers diversified into hay and alfalfa farming.[32]

Lantry and other ranchers in the Flint Hills grappled with these changes. The Great Plains were never consistently hospitable to humans. Forces beyond the ranchers' control continually threatened the cattle industry. Chase County suffered through its own cattle-killing blizzard in 1880. The extreme conditions drove many cattlemen from the business. Cycles of drought years also claimed thousands of animals across the West. In the Flint Hills, the lessons of 1880 were quickly forgotten. With the return of relatively mild winters and usually adequate amounts of rainfall, ranchers and farmers became accustomed to a greater measure of control over the environment than they really possessed, a belief they shared with counterparts in many other places in the West. This false sense of security encouraged short-term environmental decisions that could not be sustained over the long run.

Overstocking of grazing lands made possible by wet years was a critical reflection of the lack of understanding of the limits of the local environment. Thicker, heavier, and more plentiful grasses in rainy years promised feed for more cows, but the environmental circumstances that produced such conditions did not often recur or persist. The first half of the 1880s had been wet, and cattle flooded the region. At the same time, ranchers had long used Indian lands in what is now Oklahoma for grazing their northbound cattle, eventually reaching leasing agreements with some of the Indian owners. Other tribal members failed to secure compensation and Anglo-

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[31] Cushing, "Bernard Lantry," 153.

[32] The horrific winter of 1886-87 did not affect Chase County; Wood, *Kansas Beef Industry*, 4.

American grazing in Indian Territory became a scorching political issue. Confronting the possibility of conflict, President Grover Cleveland ordered the removal of 200,000 cattle from the Cheyenne-Arapaho reservation on August 23, 1885. Ranges across Kansas became crowded with expelled cattle, a decision that escaped attention because the previous years had been so wet. The grasses seemed easily able to sustain additional animals.

A few months later, to the west of Chase County, the jetstream dropped in latitude, cold air raced down from the Arctic, temperatures plummeted as low as 60 degrees below zero, and howling wind-fueled blizzards froze cattle crowded on the range and people in their tracks and cabins. The newly arrived animals on the range decreased the likelihood of survival off all stock. More cattle than ever before chased the few sources of nourishment available; many ranchers lost nearly half their stock. To make matters worse, drought immediately followed the spring melt. As a result of the lack of rain, the vegetation could not grow, and prairie grass fires, anathema to nineteenth-century Americans, consumed most of the vegetation that did poke its way above the ground. The animals that survived did not fatten. The calamitous year drove many from the cattle business.[33]

Then it happened to western ranchers again. The winter of 1886-1887 was even more severe, mostly because the snow came earlier and with greater and more lethal force. An 1886 spring and summer drought drastically reduced the vegetation that blizzard-stranded cattle could find for feed. Already depleted herds were further reduced; some cattlemen lost nearly 90 percent of their stock, with estimates ranging from ten million to twelve million head dead across the West. Many cattle enterprises that were hit hard by the previous winter, especially those financed by eastern and foreign investors or that were in the midst of expansion financed by borrowed capital, collapsed as a result of the fierce winter. Valuable and costly lessons emerged from the disaster. If nothing else, the successive years of blizzard forcibly reminded cattle producers that the grass crop of the open ranges could not be relied upon alone to supply the herds. Hay cultivation, as well as providing adequate shelter, became essential for cattle owners who anticipated surviving a future winter onslaught.[34]

By the time Lantry added the Spring Hill Ranch to his possessions, the summer fattening of cattle from Texas and other southwestern locales had become a major industry in Chase County. Ranchers shifted their production calendars to take advantage of the region's vegetation. Bluestem grass, the dominant vegetation across the Flint Hills, reached its peak nutritional value in the late spring and early-mid summer, typically from May to July. In contrast most range grasses retained significant levels of protein throughout the winter months. Texas and Southwestern cattlemen learned that their steers, emaciated by the Southwest's poor grazing conditions, typically gained 300 to 400 pounds over a Flint Hills summer, substantially increasing their market value. As a result, many out-of-state ranchers established business connections with

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[33] Ernest Staples Osgood, *The Day of the Cattlemen* (Chicago: University of Chicago Press, 1929): 217; Walter Eberling, *The Fruited Plains: The Story of American Agriculture* (Berkeley: University of California Press, 1979): 227.

[34] Ibid.; Osgood, *Day of the Cattlemen*, 226; Wood, *Kansas Beef Industry*

Flint Hills land owners or arranged grazing leases with pasture managers.[35]

Absentee owners of Flint Hills pastures depended upon area residents to manage their properties, with professional pasturemen in charge of the cattle from the time they were offloaded at the local station until they reboarded the train in the fall. In a longstanding regional tradition, the pasturemen typically held a contract with the cattle owners, specifying the amount of grazing land per animal and guaranteeing adequate amounts of feed, water, salt, and protection. They usually worked for a percentage of the leasing fees. Other Chase County property owners, especially those who still lived in the Flint Hills, avoided middlemen and acted as their own grazing agents. Barney Lantry's experience was his guide when he opened his grazing lands to outside cattle. Soon after purchasing the Spring Hill Ranch, he and a Texas cattleman, Joe Maulding, struck a lease-pasturing deal that placed five carloads of cattle on the Chase County ranch.[36]

The development of purebred cattle industry in Chase County flourished in the new circumstances. Texas longhorn cattle were originally the largest component of Chase County's cattle population, but by the early 1890s, they were replaced by Herefords, Angus, Brahmans, and other breeds. Numerous small-scale stock raisers, historically the dominant suppliers of America's red-meat animals, arrived in the Flint Hills. They brought capital to establish and maintain their stock business, and were able to afford the enormous risks associated with the cattle industry. They sported strong work ethics and unwavering belief in the inevitability of progress. Reports of significant opportunities to profit spread, and other investors brought capital to Chase County. These mainly absentee owners had enough money to fence their properties and stock them with large numbers of cattle. By the early 1890s, much of Chase County was enclosed, completing the transition to the Midwestern system and the closed range.[37]

The Lantry era at Spring Hill Ranch ended during the 1890s. At about this time, Lantry separated himself from agriculture operations to concentrate on his quarry and stone-cutting business. By 1894 newspaper estimates put his Chase County land investment at $260,000, with the property surrounded by 100 miles of stone fence. Although the article on the ranch prominently mentioned the three thousand cattle pastured there, Lantry's quarry business and his continued involvement in railroad construction drew equal attention. No matter what he accomplished, Lantry never became a cattleman in the eyes of his neighbors.

After a lifetime of success, illness struck, and Lantry's health failed. On December 7, 1895, Lantry died of diabetes at his Strong City home. Once a fatherless youth, he left almost one million dollars to his heirs. His obituary paid tribute to his generous character, remembering him as a "charitable" man who opened his doors "to the poor and rich alike." After his death, the firm of Lantry and Sons changed its name to B. Lantry Sons, and Charles and Henry, the two brothers,

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[35] Joseph V. Hickey, *Ghost Settlement on the Prairie: A Biography of Thurman, Kansas* (Lawrence: University Press of Kansas, 1995): 136-58; Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 4.

[36] Hickey, *Ghost Settlement on the Prairie*, 136-58; Malin, "An Introduction to the History of the Bluestem-Pasture Region of Kansas," 17-19; Wood, *Kansas Beef Industry*,7-9; *Strong City Republican*, September 28, 1888.

[37] Malin, "An Introduction to the Bluestem-Pasture Region," 12; Wood, *Kansas Beef Industry*, 30-41.

continued in the construction business. After 1895, the Spring Hill and Deer Park Farms was registered in the name of Lantry's son, Charles. In 1904, following the death of his brother Henry, Charles Lantry began to sell his father's holdings. On March 1, 1907, he sold 9,682.55 acres that included Jones' Spring Hill Ranch to C.C. Patten of Reading, Kansas, for $180,636.92. In 1908, the remaining land was sold to F. W. Freeman of Topeka.[38] An age had come to an end.

At the time of Lantry's death, Chase County shared many traits with other similar counties. Since the 1860s, American institutions in the Flint Hills had coalesced. Much of this development resulted from expanded transportation and education systems and better communications. No longer isolated from mainstream America, Chase County found itself linked to the rest of the country by telegraph and railroad, and later by improved roads and the automobiles that traveled them, telephone, and radio. The expansion of Chase County's communication and transportation infrastructure created pronounced changes in the ways of life, the expectations, and the industries of rural society. As the new century approached, American institutions jelled in the Flint Hills. The region passed from the hands of a pioneer entrepreneur generation to the leaders of a modern industrial society.

By 1900, the Flint Hills region had become ready for the new century, with a well-established cattle industry supported by an extensive infrastructure. The establishment of cultural institutions like schools, churches, and newspapers played an important role in helping define the region's cultural atmosphere. Advances in communications, such as the telegraph, and in railroad and other overland transportation systems helped connect Chase County with the outside world. The recently deceased Barney Lantry also illustrated the changes in ranch operations. Although he lived in Chase County, Lantry was intellectually an absentee landlord; he was just the first of many absentee owners in the twentieth century. The pasturing of Southwestern cattle continued as the dominant business interest, but cattlemen had to make adjustments in feeding, breeding, business arrangements and contracts, and had to learn to restore depleted grasslands after inevitable drought cycles and to cope with the economics of agricultural markets. Stockmen's meetings and livestock commissions took on new, more important roles, as they became the source of crucial business connections. The experience in Chase County in the late nineteenth century served as prologue to the development of institutions of the twentieth century.

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[38] *Strong City Derrick*, December 14, 1895; Joseph W. Snell, "A Brief History of the Z-Bar Ranch," 11; Cushing, "Bernard Lantry," 153-54; *Strong City Derrick*, September 8, 1894.

Chapter 7:

The Flint Hills in the Twentieth Century

As the era of the cattle barons closed and the twentieth century began, the enormous public land ranches of Texas and the American Southwest and their tens of thousands of longhorn steers run by cowboys passed into memory and mythology. After 1900, American consumers expected more from their butchers and red meat suppliers. They demanded quality cuts of well-fattened beef, raised and cared for in a manner that exceeded both capability and the desire of traditional cattle drovers. The gangly longhorns, brought up on the scrub grasses of the southern plains and driven long, dusty miles to railway lines for transport to the slaughterhouses, produced only lean carcasses and tough, stringy meat. These cattle fed on grass for two or three years and few received supplemental grain as part of their diet. To meet the consumers' demands after 1900, animals routinely went to feed lots for finishing soon after reaching one year of age. The lots, where an animal's diet was thoroughly controlled, became an essential component of the modern cattle industry. By 1900, only 5 percent of cattle on the plains were kept exclusively on the open range; the vast majority of the nation's beef cattle received supplemental feed or were grazed on owned or leased land. Those who owned the pastures of Chase County, including Barney Lantry's successors at the Spring Hill Ranch and Deer Park Farm, saw their role in the ranching industry threatened by these new developments.[1]

With the new century, the Spring Hill Ranch/Deer Park Farm came under new ownership. After Barney Lantry died in his Strong City home in 1895, the land, commercial operations, and buildings passed to his sons, Henry E. and Charles J. Lantry. For the eleven years that he owned the property, either with his brother or alone, Charles Lantry ran a typical mixed operation, combining acres of feed for the animals as well as food for the owner. He also continued to use the quarries located on the properties. On the average, the farm raised 1,000 acres of corn, 50 acres of sorghum for forage, 60 acres of millet, 450 acres of kafir corn, and 200 acres of alfalfa, while 1,000 acres remained uncultivated but fenced for meadow or pasture. To provide winter feed for grazing animals, the operation yielded 400 tons of tame hay and 1,000 tons of prairie-hay cut in 1904 alone. The farm also produced Irish potatoes from one acre of land, 150 pounds of butter, as well as almost $38,000 in animals fattened and slaughtered or sold for slaughter during the year ending March 1, 1905. Aside from the beef cattle, Charles Lantry's livestock included seventy-seven horses, thirty-eight mules, fourteen milch cows, 905 other cattle, and sixty swine. In 1907, the year that he sold the ranching operation, C. J. Lantry owned 13,540 acres in Strong Township, and almost 10,000 of those acres had never been plowed. The entire property was fenced, enclosed by 12,800 rods of stone fence and 6,400 rods of wire. Lantry's farm was valued

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[1] Jimmy M. Skaggs, *Prime Cut: Livestock Raising and Meatpacking in the United States, 1607-1983* (College Station: Texas A&M University Press, 1986): 50-89; Waverly Root and Richard de Rochemont, *Eating in America: A History* (New York: William Morrow and Company, 1976): 198-199, 206-212; Charles E. Bussing and Huber Self, "Changing Structure of the Beef Industry in Kansas," *Transactions of the Kansas Academy of Science* 84, no. 4 (1981): 173-86.

at $200,000, with $15,000 invested in buildings and $1,500 in machinery and implements. During his ownership of the ranch, Lantry built several small outbuildings, including a pair of stone sheds north of the main house. He was Falls Township's largest owner of property. James Coe ran a distant second, with a comparatively paltry 5,120 acres.[2]

C.J. Lantry was no more dependent on his pasture for his livelihood than his father had been. Lantry and Sharp Contracting Company continued to thrive. The quarry and railroad construction business – one of the most important in Chase County – employed 125 men, paid $50,000 in wages annually, and produced 700 tons of stone each day. With a commercial enterprise of this magnitude to manage, Lantry soon decided to leave the agriculture and ranching business, and put the ranch on the market. In March 1907, C.C. Patten of Reading in Lyon County, Kansas, purchased 9,682 acres, including the house and farm built by Stephen Jones in the 1880s, for $180,692. Lantry sold his remaining land to F. W. Freeman of Topeka on January 13, 1908. An era had come to an end; the Spring Hill Ranch and Deer Park Farm had been divided. During the next seventy years the ranch was pulled out of its position as a component of a larger operation and again became under the control of owners who lived and worked the land, only to once again become a piece of a much larger venture.[3]

The former Spring Hill ranch that Charles C. Patten purchased prospered under its new owner. A native of Indiana, he was an experienced farmer who thrived in the Flint Hills. Born in 1851, Patten moved to Kansas after the Civil War, farming in Lyon County until purchasing the Lantry operation. The Chase County ranch continued its impressive production record. By March 1, 1915, 1,000 bushels of wheat were on hand at the Patten place. He also grew 150 acres of alfalfa, and operated 9,700 fenced acres of uncultivated land for meadow or pasture. The meadow contained 150 tons of tame hay cut the previous year and 10 tons of prairie hay. Livestock made up an important component of his livelihood. In 1915, the value of his animals fattened and slaughtered or sold for slaughter reached $100,000. Patten's livestock consisted of twelve horses, twenty-four mules, six milk cows, 322 other cattle, and eight swine. In an agricultural census, he described himself as a farmer, with most of his 10,000 acres in productive crops.[4]

Patten's predominantly agricultural operation served as an interlude between different ranching regimes. The nineteenth-century history of the Spring Hill/Deer Park ranch exemplified the struggle between Flint Hills farmers and their small-scale subsistence agricultural operations and ranchers and their animal-centered activities, and how the victorious cattlemen adjusted to meet shifting consumer demands and market forces. One part of that trend was a gradual shift from grazing of transient cattle in Chase County to development of an intense breeding industry; a parallel transition was the regional move from growing food stuffs to producing feed grains for the herds. In the new century, development of improved breeds of cattle and the competition from

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[2] State of Kansas, Decennial Census, 1905, Vol. 53, Chase County, Strong Township; Chase County Tax Appraisers records.

[3] Patten's purchase included Lots 1 and 2 of Section 19, the acreage containing Jones' Spring Hill Ranch headquarters complex. Charles J. Lantry to Charles Patten Warranty Deed, March 1, 1907, Register of Deeds, Chase County Courthouse.

[4] State of Kansas, Decennial Census, 1915, Vol. 29, Chase County, Strong Township.

feed lots – specialized operations whose sole function was to methodically put more weight on cattle – became major problems for Chase County ranch operators. By the late 1880s, ranching had become the dominant agricultural industry in the county. Most Chase County farms became small operations with little pastureland; a very small minority of ranchers possessed large areas of good pasture for their high-quality herds and a small amount of crop land mainly to produce feed for their herds. Absentee owners controlled most of the larger ranches, and they established the system of transient grazing for which bluestem pastures are still renowned. Southwestern cattle owners frequently leased Flint Hills pastures, then delivered the animals to local pasture operators who assumed responsibility for them while they fattened. In a variation of this procedure, some pasturemen acted as middlemen between the land and cattle owners and secured leasing agreements for pastures and then sought out animals for grazing.[5]

A marked interest among ranchers in improved cattle breeds typified the early twentieth century, and Kansas followed the trend. By 1900, the Sunflower State became a significant location for upbreeding, superseding Great Britain, which previously led the world in producing thoroughbred animals, and states east of Mississippi River. In an environment marked by barbed wire, where ranchers routinely controlled and supervised their herds in ways that the open-range system made impossible, upbreeding became an economically advantageous strategy. As expansion of the cattle industry ended the availability of new lands for grazing, cattlemen seeking profits were compelled to produce higher-quality beef on the same or fewer acres. Great Plains ranchers favored the Hereford as their primary purebred animal. The new breed offered better meat, and more of it per animal, and with careful management gained weight more efficiently. In Kansas, a small number of ranchers recognized the potential of the new breeds and sought to create a more hospitable environment by using new range management techniques, including reduced overstocking and overgrazing, in an effort to create a sustainable situation. Most ranchers continued to maximize herd size regardless of environmental damage, exacerbating the economic problems they faced.[6]

Ranching in the state grew even more specialized, and breed animals, technology, and access to market became the best predictors of success. The Flint Hills counties, already a primary ranching region, were among the beneficiaries. Some of the first purebred Herefords in Kansas were products of these grasslands. Kansas State Agricultural College, now Kansas State University, in Manhattan worked with ranchers on improved cattle feeding since the land grant college was established in 1863. In addition to growing strains of wheat that fattened both feeder and purebred cattle more quickly, the agricultural college developed several new combinations of feed with corn as the base substance and cottonseed and various sorghums as ingredients. New harvesting machinery also increased farm efficiency, and improvements in irrigation science increased crop production. To supplement technological advances, agricultural researchers

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[5] Walter M. Kollmorgen and David S. Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures of Chase County, Kansas," *Annals of the Association of American Geographers* 55, no. 2 (June 1965): 260-90.

[6] John Schlebecker, *Cattle Raising on the Plains, 1900-1961* (Lincoln: University of Nebraska Press, 1963), 1-17, 25; E. Heath-Agnew, *A History of Hereford Cattle: And Their Breeders* (London: Duckworth, 1983); Melvin D. Skold and Roy N. Van Arsdall, *Cattle Raising in the United States* (Washington, D.C.: Farm Production Economics Division, Economic Research Service, U.S. Department of Agriculture, 1972).

introduced new hays and other crops. Alfalfa became increasingly common on ranch farms, as did bromegrass and assorted grain sorghums.[7]

Fire has long played a key role in establishment and maintenance of the prairie. Burning of prairie grasses, a tradition passed down from the earliest human inhabitants, continued after white settlement, although it was no longer seen as desirable, as farmers rapidly replaced wild grasses with domestic cereals. As the cattle industry became dominant in Chase County, the use of fires on a controlled basis continued. While wildfires remained one of the prairie's top dangers, planned burning of pastures remained a solid part of Flint Hills range management practices, with ranch crews setting fires in the spring and fall during the 1870s and 1880s. According to area folklore, burning pastures early in the spring season helped stimulate the growth of grasses that attracted cattle, eliminated noxious weeds and controlled the spread of inedible brushes and trees. Fall fires apparently helped property owners establish fire breaks around structures and haystacks. Plows would turn over two separated strips of ground, and the connecting vegetation would be burned to set up the fire breaks. When contracting for seasonal grazing, many Texas and Southwest cattle owners required early season burning of pastures.[8]

The twice-annual burning regime began to fall out of practice in the 1890s, when ranchers began questioning the usefulness of fires and Chase County became more settled. In 1910, Kansas State University researchers began a more formalized examination of the consequences of fire. Research efforts intensified in 1928, as university researchers started what became twenty-six years of study of the effect of burning prairie grasses. Early analysis by researchers indicated that fires decreased forage yields. County extension agents pushed for an end to the practice, but ranchers continued the practice. Later researchers softened their opposition, and by the 1970s, most published studies treated pasture burning as one aspect of range management directly contributing to animal weight gain, seeing it as an effective method of controlling weeds and trees and fostering large areas of new grass growth attractive to cattle. Z Bar Ranch managers from 1983 to 1987 reportedly tried to burn grass on the property every year, but weather played a crucial role in how much was actually burned, with wind and moisture conditions key limiting factors. When it was possible, the whole ranch was usually burned over period of two to three weeks, usually around first of April, since native grasses needed approximately 1-2 inches of new growth before being burned to get the best response. Ranch crews usually set backfires around the cedars near the main ranch complex to limit burning.[9]

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[7] Charles L. Wood, *The Kansas Beef Industry*, (Lawrence: The Regents Press of Kansas, 1980), 26-7; Schlebecker, *Cattle Raising on the Plains*, 24.

[8] Stephen J. Pyne, *Fire in America: A Cultural History of Wildland and Rural Fire* (Princeton: Princeton University Press, 1982), 99-100; W.E. McMurphy and K.L. Anderson, "Burning Bluestem Range – Forage Yields," *Transactions of the Kansas Academy of Science* 66, no. 1 (1963): 49-51; interview with Julia Hobbs, February 25, 2000.

[9] Interview with Henry H. Rogler, *Chase County Leader-News*, May 31, 1967; James F. Hoy and Thomas D. Isern, "Bluestem and Tussock: Fire and Pastoralism in the Flint Hills of Kansas and the Tussock Grasslands of New Zealand," *Great Plains Quarterly* 15 (Summer 1995): 169-84; Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998.

Improvements in cattle transportation and technology also affected the meat industry. The increased use of rail freezer cars, first developed by George Hammond and Gustavus Swift in the 1870s and improved over the next generation, allowed for butchering at greater distances from meat-packing facilities. Over time, the expensive transport of live cattle to distant slaughterhouses became obsolete on the main truck lines, replaced by the butchering of animals closer to the feed lots or range and the shipping of the easily handled frozen carcasses. During the early decades of the twentieth century, feeder lines to the national and regional railroad systems spread even more, putting larger numbers of feed lots within reach of train transportation. During the 1920s, J.F. Crofoot combined a feed lot with his pasturing operation along the Cottonwood River west of Strong City, taking advantage of the area's feed crop production, rail transportation system, and large amounts of fresh water. The rail system's growth helped ease the shift from open range to ranch farming as land became less available. One possible alternative to railroad shipping, trucks, became the salvation of cattle raisers dismayed by exorbitant rail transportation costs. Moving cattle by truck did not become a viable option until a comprehensive, improved highway system became a reality in the 1920s.[10]

An extended era of average and above-average rainfall, the first two decades of the twentieth century became a golden age in Kansas agriculture. By 1890, Herefords and other improved breeds largely replaced Texas longhorns. As the open range era ended across the West, prime Flint Hills acreage increased dramatically in price. In 1900, upland pasture cost $3.50 an acre; by 1911 the same land brought between $18 to $30 per acre. The era of available government land in Chase County lasted until October 1914, when Etta A. Wilson, daughter of Strong City stockman Everett Wilson, filed a land patent for forty of the last available eighty acres. But claiming public land was an anachronism after 1900, and as the nation's economy continued to grow, consumer demand for quality meats followed. The cattle industry again increased its output. Larger cattle operations became the norm, and pasture rentals in the Flint Hills also soared in number. Despite the periods of good rainfall, memories of earlier drought periods influenced ranching practices. Operators used surplus lands to produce hay and feed, with some of the feed set aside for drought years. They also sought more acreage for their cattle, allowing more land per animal for feeding in drier years. Ranching remained a business for those with excess income. Turnover of capital was sluggish, for cattle took up to three years to grow to market size, and hay and feed required between six to twelve months to produce. Many operations depended upon the owner's outside income to survive lean years.[11]

During the struggle over land use in the 1870s and 1880s, Chase County ranchers argued that topography, climate, and soil conditions made their control of the land inevitable. In the new century, the myth that the Flint Hills lands were unsuitable for farming remained powerful and

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[10] William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton, 1992), 233-34; James C. Malin, *History and Ecology: Studies of the Grassland*, edited by Robert P. Swierenga (Lincoln: University of Nebraska Press, 1984), 181-82; Wood, *Kansas Beef Industry*, 289-91; Schlebecker, *Cattle Raising on the Plains*, 23.

[11] Joseph V. Hickey, *Ghost Settlement on the Prairie: A Biography of Thurman, Kansas* (Lawrence: University Press of Kansas, 1995): 184-85; Kansas City *Times*, Oct. 30, 1914.

poignant, and cattle operations continued to expand at the expense of county farmers. Most of the land was "too rough for cultivation," one Department of Agriculture circular noted as late as 1926, "and is in permanent pasture." Free of any possible encroachment or expansion by farmers, a number of pasture owners bought cattle and grazed them. Many of these people owned both cattle and land outside Kansas, simultaneously operating a southwestern ranch for cattle production and Flint Hills grasslands for finishing under individual management. These operators were fortunate. They had the best of the world of ranching, with one major exception: they rarely possessed the capital necessary to compete as the stakes rose.[12]

These simultaneous but very different operations highlighted the twentieth century economic and social patterns that transformed national and regional ranching. Agricultural science and cattle raising techniques changed greatly during the twentieth century, as did the American beef industry. As the cost of operations increased, cattle operators combined stock and feed operations to protect their profit margin. Changes in grocery and market expectations led to a marked decrease in open-range grazing operations. Consumers no longer simply accepted the lean beef of range-raised animals; they preferred the fatter cattle raised on high-quality grass and feed. The national meatpacking industry consolidated as two major global wars and the changing international trade situation destabilized the beef industry's overall price structure. At the same time, consumer demands for higher-grade products increased. The high cost of production and the demands of the market required ever greater sums of capital, putting tremendous pressure on small and independent operators. Especially after World War II, ranching became big business, pressuring independent operators and forcing the consolidation not only of acreage but of herds and operations.[13]

Before 1900, the consolidation of the American meatpacking industry led to the establishment of a number of principal livestock markets. In the West, Chicago came first, opening on Christmas day, 1865; Kansas City followed six years later, St. Louis in 1872, Omaha in 1884, St. Joseph, Missouri, in 1893, and Wichita in 1893. The locations created a decidedly Midwestern feel to the market. The proximity of the markets offered the Flint Hills, located between markets and the ranges and feed lots further west, an important position in the orbit of a consolidating industry. As the animals, grasses, and feedlots grew linked in a geography of economics rather than ecology, the Flint Hills offered an important storehouse of grass to mitigate the cost of movement. The small number of market cities allowed a relatively small number of buyers to dominate. Sellers, farmers, and ranchers with cattle became price takers, receiving sums dictated by a handful of buyers. In a post-World War I investigation, the Federal Trade Commission charged that a "Beef Trust" had systematically conspired since the mid-1880s to manipulate livestock markets for its own advantage, costing both consumers and producers tens

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[12] R.H. Wilcox, W.E. Grimes, Morris Evans, and H.J. Henney, "Factors in the Cost of Producing Beef in the Flint Hills Section of Kansas," United States Department of Agriculture, Kansas Agricultural Experiment Station Cooperating, Department Bulletin No. 1454 (November 1926); Malin, *History and Ecology*, 178-79.

[13] The change in the cattle industry has become the backdrop to great American fiction in recent years. The works of Cormac McCarthy illustrate this dilemma, and recently Max Exans, *The Hi-Lo Country*, has been made into a film.

of thousands of dollars.[14]

The trust's cornering of the beef market during the late nineteenth century's Gilded Age reflected the same larger tensions that spurred a parallel agrarian revolt. Farmers also believed that they were victims of a conspiracy by larger powers, principally the packers and railroads. The discontent grew into the farmers' organizations that transformed themselves into Populism, the agrarian revolt that affected American social, political, and economic life as it dramatically revealed the difficulty of producing raw materials in an industrial society. Kansas became a hotbed of the agrarian movement. The creation of greater surplus, spawned by growing markets and technological innovation, trapped farmers in a cycle of diminishing return. More crops meant smaller returns, and each year compounded the negative situation. The political response of Populism, which almost won the presidency when combined with the Democrats in 1896 and left a legacy of the graduated income tax, direct election of U.S. senators, and the eventual monetarization of silver, revealed the deep distrust agricultural producers held for middlemen and the institutions of industrial society.[15]

In a manner similar to the farmers who were often their neighbors, cattlemen consolidated into organizations in response to the forces that threatened their livelihood. Between 1880 and 1920, livestock associations formed and expanded, fighting what cattle raisers regarded as an imbalance between themselves, railroads, and meat packers. Early associations included the Shorthorn Breeders' Association, which began in Topeka in February 1883. Producers of sheep, trotting horses, and dairy cows also organized. In 1890, the Kansas Improved Stock Breeder's Association formed to meet the needs of livestock owners interested in improving their herds. These smaller specialized organizations mirrored the Grange, the farmers' support organization founded in 1867. They too could teach techniques to their members, but they also lacked the size and influence to apply real political power. Only in 1897, when Kansas farmers and stockmen organized the Kansas Livestock Association (KLA), did stock growers develop genuine lobbying power. The size of the organization and its statewide scope and membership gave it clout. The KLA protested exorbitant railroad rates and charges, complained against excessive charges and services at market points, and promoted disease control. Stephen Jones helped form a county stock association in 1884, formed to combat an outbreak of hoof and mouth disease, and before relinquishing control of the Spring Hill Ranch, he was an official in the State Stock Association.[16]

The KLA traced its roots to the Central Kansas Cattlemen's Association (CKCA), organized in February 1894 by Flint Hills cattle growers. Founded to push for stricter quarantine regulations, the CKCA found its efforts broadened. Railroad shipping rates and overall service constrained cattle growers, and their organizations sought remedies. As did farmers in similar

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[14] Skaggs, *Prime Cut*, 87-89; Cronon, *Nature's Metropolis*, 211-32.

[15] Jeffrey Ostler, *Prairie Populism: The Fate of Agrarian Radicalism in Kansas, Nebraska, and Iowa, 1880-1892* (Lawrence: University Press of Kansas, 1993): 91-133; O. Gene Clanton, *Kansas Populism; Ideas and Men* (Lawrence, University Press of Kansas, 1969): 1-62.

[16] Wood, *The Kansas Beef Industry*, 61-64; Thomas A. Woods, *Knights of the Plow: Oliver H. Kelley and the Origins of the Grange in Republican Ideology* (Ames: Iowa State University Press, 1991); *Strong City Independent*, November 27, 1886.

situations, railroads charged whatever the traffic would bear when competition did not force prices down. Kansas shippers were most concerned with short-haul rates to markets, precisely the situation that gave railroads the freest hand. The CKCA became the cattle growers' advocacy group. It sought a stronger position for stock raisers, lobbying for railroad regulation and other advantages, but its achievements were limited by the national depression of the 1890s, the political and economic power of consolidated railways, and the general complexity of an industrial society.[17]

Following the ideals of Progressive America and in line with the goals of organizations such as the KLA, the federal government provided informational services to the cattle industry at the same time that it initiated serious regulation. In 1901, the U.S. Department of Agriculture Division of Animal Husbandry was formed to provide expert advice in the breeding and management of livestock. The Department of Agriculture established enforcement agencies to assure that stock raisers complied with federal policies. Such programs aimed to help ranchers increase profits by supervising costs through technological management. Disease control, yield of feed per acre, and other similar goals assisted farmers but did little to change the disadvantage at which they operated. Ranchers' gains did not come from rising prices. Instead, lower costs to stock growers assured a greater supply, keeping prices at best constant. The cost of doing business for ranchers did not diminish, and high railroad freight fees and new groups of concentrated, large-scale, assembly-line mechanized meat packers enjoyed most of the economic benefits.[18]

Fluctuating markets and prices increased owners' exposure during the long period between production costs and the actual sale of animals, but unpredictable weather posed an even greater threat to ranchers' economic health. As World War I approached, Kansas experienced a double dose of calamities: low cattle prices and drought conditions. Intemperate weather was region-wide; the years before World War I were particularly harsh across the Great Plains. In a replay of the 1885-1887 cycle of rough winters and droughts, the winter of 1909-1910 was extremely long, dry, and cold, and a drought followed that lasted until 1911. The 1910 grazing season was one of the driest on record. Kansas, Colorado, and Oklahoma all recorded desert-like conditions. The drought abated in 1912 and more regular precipitation and heavy snowfall followed during the winter. In 1913, slightly less rainfall fell than in 1912, but it was still more than during the preceding years. In 1914, drought conditions returned, affecting most of the Plains, especially Oklahoma, Kansas, and Nebraska.[19]

Poor weather conditions and unfortunate circumstances squeezed many Flint Hills ranchers. It raised costs and dropped animal weights, forcing ranchers to sell large numbers of their herds at low prices. Reduced cattle populations helped restore grazing conditions, made

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[17] Charles L. Wood, "Cattlemen, Railroads, and the Origin of the Kansas Livestock Association — the 1890s," *Kansas Historical Quarterly* 43, no. 2 (Summer 1977): 121-139.

[18] Gladys L. Baker, et al. *Century of Service: The First 100 Years of the United States Department of Agriculture* (Washington, D.C.: Centennial Committee, U. S. Dept. of Agriculture, 1963).

[19] Schlebecker, *Cattle Raising on the Plains*, 40-45; Wood, *The Kansas Beef Industry*, 67-96.

more fodder available, and saved the remainder of the herd from starvation in the poor seasons that followed. In 1914, a huge epidemic of hoof-and-mouth disease erupted, threatening the very survival of many ranches. Infected cattle – and all cattle on infected ranching premises – were immediately ordered destroyed and their carcasses burned. By the end of 1914, twenty-two states reported incidents of the disease and large parts of the nation faced extended quarantines. At the same time, poor economic conditions forced many older ranchers, especially those who resisted change, out of business. Most newcomers to the industry had more interest in new ideas, and were more willing to accept scientific advances in range management.[20]

Conditions within the cattle industry improved in the early years of World War I. Even though the summer of 1916 was hot and dry throughout Kansas, feed was readily available and high wartime demand assured good prices. At times, cattlemen struggled to find enough feed for cattle to consume. The tide of prosperity crested around 1916. The demand for meat and rising beef prices continued for a few years, but high production costs, a shortage of labor, mostly as a result of conscription and higher industrial wages, and occasional periods of severe weather severely cut profits. The perpetually escalating cost of living, highlighted by a 90 percent increase in the cost of food between July 1916 and the war's end in November 1918, also made life harder for many ranchers. Drought conditions in other parts of the county during 1916 contributed to changes in the Flint Hills economy, as stock from harder-hit regions such as Texas, Oklahoma, and western Kansas were shipped to the hills when enough feed was available. Stockmen found themselves hauling water to feed their thirsty herds, and the lack of water prompted a campaign to use state tax funds to build ponds. Kansas Governor George H. Hodges favored the plan, but local critics stressed the possibility that ponds would either disappear or become poisoned during extended droughts. In the end, drought and other obstacles these new stockmen faced on the plains did not drive them away from the land. With the help of older residents, many expanded their crop selection, returning to an older mixed agriculture and ranching model. By 1920, more Flint Hills acreage grew crops than at any time since the 1870s.[21]

World War I spurred an economic bonanza in American agriculture. European demand for agricultural products increased and American workers with wartime pay from busy factories could afford more and better food. When the United States entered the war in 1917, the agricultural boom accelerated. President Woodrow Wilson's Food Administration programs purchased tons of meat for overseas troops, driving prices upward. Well-paid urban factory workers also continued to eat well. Even though drought conditions still existed in 1918, ranchers received historically high prices for any animal that reached the slaughterhouse.

The Flint Hills experienced the upswing. During Spring 1918, more than 7,000 carloads of cattle detrained in the Flint Hills. Most arrived from Texas, Kansas, and Oklahoma, but some came as far away as Arizona and New Mexico. Outside herds became a catalyst of increased stocking. The Flint Hills accommodated approximately 250,000 head throughout the war.[22]

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[20] Schlebecker, *Cattle Raising on the Plains*, 54.

[21] Wood, *The Kansas Beef Industry*, 84-88.

[22] Ibid., 80.

Between 1900 and 1920, cattle growers experienced wide swings of national economic and social changes that affected their fortunes. Although the new century was generally prosperous for American cattle raisers, periodic upswings and downturns that reflected the national mood and market economics made it difficult for individual growers to count on consistent profits. Success in the cattle and beef business came and went; the pessimism and optimism of cattle raisers mirrored pronounced fluctuations in cattle numbers, purchasing power, and dissatisfaction with big business. Only after ranchers experienced the major economic downturns of the 1920s and 1930s did hindsight look so appealing.[23]

Other factors affected the industry. The introduction of large-scale meat packing conglomerates, especially in Kansas City and Chicago, and improvements in meat-packing production techniques satiated the rising demand for beef. The ongoing urbanization of the nation during this period sparked this increased demand. By the 1920s, America's cities began to mature in the aftermath of the steel- and industry-fueled era that defined the latter half of the nineteenth century. A larger middle class, often office-based, afforded many a higher standard of living. Beef was associated with prosperity in the minds of many a generation or two from more dire straits, and an increase in per-capita consumption of beef resulted. Modern cattle associations that gave stock raisers the organizational structure to counter the railroads and other industrial concerns made beef production more efficient. Locally, the Kansas Livestock Association reflected stock raisers' anxieties over the economic, production, and transportation problems inherent in the changing industry.[24]

Speculators who brought recently purchased cattle to leased pastures made up an important 1920s Flint Hills constituency. They were the opposite of native pasturers, possessing capital, but little connection to the place. They sought the grasses of the hills for finishing cattle for market and often regarded local residents as mere laborers. During the 1920s, four-fifths of the steers in Chase County came from Texas. In the typical year of 1924, the Texas Panhandle provided 13,538 head to Chase County pastures, Central Texas added 3,204 head, southern Texas, 3,295, the northeast corner 379, and the Gulf Coast 2,520. Northern Oklahoma sent 1,408 head, western Kansas 1,261, New Mexico 612, eastern Kansas 102, and Mexico 120. The movement of cattle from Texas and other areas began in March and April, and was usually completed by mid-May, while movement off of Flint Hills pastures started in July. The heaviest shipments of cattle occurred during the latter halves of August and September, filling cowpens with lowing animals awaiting transportation. Cattle on leased pastures were shipped to market before the end of October, with most steers typically sent to Kansas City for processing.[25]

Charles C. Patten probably recognized the cyclic rise and fall of the value of land. Nearing sixty by the end of the first decade of the twentieth century, he began to divest himself of property. On March 15, 1909, a different kind of land user purchased the former Spring Hill Ranch buildings and surrounding property. Unlike the other owners who had the surplus capital

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[23] Wood, *The Kansas Beef Industry*, 67.

[24] Ibid., 54.

[25] Kansas Agricultural Census, Chase County, 1920-1930, Kansas State Historical Society archives.

for an outright purchase, Otto Benninghoven secured the buildings and 1,080 acres on a time-payment basis. It was the first of two transactions involving the former Spring Hill Ranch. Lester B. Urschel of Marion County bought the rest of Patten's land, mainly upland pasture to the north and the east of the Benninghoven lands, for $400,000 on April 6, 1921. Benninghoven paid $10,000 before his death during the flu epidemic of 1918, and his widow, Flora Benninghoven, worked the ranch and farm operation for several years before paying off the remaining $37,800. The Benninghoven sons, Curt, Fritz, and Rhein, ran the property after the purchase.[26]

The Benninghovens practiced a typical turn-of-the-century mixed regime. In 1914, the family planted forty acres in corn, eighty acres in rye, one acre in Irish potatoes, twenty acres in sorghum for forage or grain, four acres of kafir for combined forage and grain, and 100 acres in alfalfa. Their livestock consisted of thirteen horses, two mules, two milk cows, eighty-two other cattle, a sheep, and 160 swine. The Benninghovens fenced 680 acres of uncultivated land for pasture and cut seventy-five tons of tame hay. Other products from the Benninghoven farm included 150 pounds of butter, $25 in poultry and eggs, and $3,000 in animals slaughtered or sold for slaughter. After Otto Benninghoven's death, the sons, Fritz and Rhein, operated the ranch with some success, combining the pasture operations with a large degree of farm products for family use and for sale off the ranch. By 1919, the two brothers reported ninety acres in winter wheat, thirty acres in corn, fifty acres in wheat, thirty-five acres in rye, one acre in Irish potatoes, ten acres in sorghum for forage, and 135 acres in alfalfa. That year, 730 acres of prairie grass were fenced for pasture. They cut 135 tons of tame hay in 1918. The family produced 100 pounds of butter, sold $50 in poultry and egg products, and made $5,500 in livestock fattened and slaughtered or sold for slaughter. The farm had twelve horses, six mules, two milk cows, one herd bull, 127 other cattle, thirty swine, and had 1,080 acres fenced.[27]

In the following decade, the Benninghoven operation shifted toward farming. In the 1924 agricultural statistical census, the family planted 140 acres in wheat, forty acres of corn, fifteen acres in rye, one-half acre in Irish potatoes, fifty acres in sorghum, 105 acres in alfalfa, and 730 acres of prairie grass fenced for pasture. In 1923, the family raised 1,700 bushels of wheat, produced 150 pounds of butter, and sold $125 in dairy products. Two hundred and forty chickens were on hand, providing $370 in poultry and egg products. The value of animals fattened and slaughtered or sold for slaughter was $8,000. The family had six horses, ten mules, five milk cows, 225 cattle, 200 sheep, one sow, and twenty-eight pigs. The farm housed a single cream separator, two silos, and two tractors, and around 1930 the Benninghovens built a small shed

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[26] State of Kansas, Decennial Census, 1915, Vol. 29, Chase County, Strong Township; Joseph W. Snell, "A Brief History of the Z-Bar Ranch," 11; interview with Dick Benninghoven, August 9, 1999; the Benninghoven purchase was a contiguous block of property around the main house, consisting of the south half of the sough half of Section 32, the south half of the southeast quarter of Section 31, both in Township 18 South and Range 8 East, the east half of the southeast quarter of the northeast quarter in Section 6 and all of Section 5, in Township 19 South and Range 8 East, Chase County Register of Deeds; the Urschel purchase is detailed in the warranty deed signed April 6, 1921 between him and C.C. and Nannie S. Patten, Chase County Register of Deeds.

[27] Statistical Rolls: Counties: Butler Co. Bruno — Cherokee Co. Ross Twp., 1919-1919, Microfilm AR11455, Kansas State Historical Society archives.

west of the main house.[28]

As conditions in the cattle industry and their own economic situation changed, the Benninghovens made a host of changes to the ranch. The ice house built by Jones' work crews was converted into a work shed, with a door cut into one of the walls, and the smoke house was used for storage. Across the pastures, horses and small metal scoops were put to use digging stock ponds. The Windmill Pasture contained the oldest stock pond on the ranch. The pond, which straddled two pastures, was built during 1930s by drag line. Unlike many of the ponds built after 1950, these stock ponds were planned and constructed without any federal agency funds or supervision. During the Benninghovens' ownership of the ranch property, a 4-H camp was built and operated adjacent to the pump houses near Lower Fox Creek. Among the amenities was a water hole.[29]

The main house built by Jones also underwent conversions at the hands of the new owners. The Benninghovens used the center room on the west side as a kitchen, and the current kitchen was used as the pantry. They converted the pantry into a kitchen in 1936, and used the former kitchen as a dining room. The family used the upstairs bedrooms, while the northeast room on the second floor was the living room. The rooms on the first floor were not used by family members. With several families living on the ranch, other residences were added. A small house south of the main house was built by the Benninghovens, and Curt Benninghoven and his wife lived there. Unlike the main house, this smaller home had a garden near it.[30]

In the years after 1930, farming became an even more important part of the family's operation. Flora Benninghoven remained head of household, living in the main house with her sons Fritz and Rhein while Curt and his wife lived nearby. The family expanded the farm to 1,720 total acres. It included 180 acres in winter wheat, forty more than the year before; 130 acres in corn, more than triple the forty acres of the previous year; fifty-three acres in sorghum, ten acres in kafir, ten acres in sudan grass, and 1,230 acres in native prairie grass pasture. In 1924, the brothers raised 4,000 bushels of corn and 4,000 bushels of wheat, and produced 200 pounds of butter and $100 worth of dairy products. The farm had 200 hens on hand, selling $400 in assorted poultry and egg products. The total value of animals fattened and slaughtered or sold for slaughter was $16,000. Seven horses, twelve mules, five milk cows, 325 cattle, nine sows and fifty-three pigs comprised the stock. Later, the family also had a flock of about 200 turkeys that were allowed to roam in the pasture south of the main house. As in the previous year, the ranch had one cream separator, and two tractors. The farm also had two silos made of concrete stave,

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[28] Statistical Roll for 1924 for Assessor of Strong Township, Chase County, Statistical Roll, Kansas, 1924, Kansas State Historical Society archives; Chase County Tax Assessors records.

[29] Tallgrass Prairie National Preserve Barn Equipment Assessment, 1/28/98; Orville Burtis interview with Dena Sanford, March 26, 1998.

[30] Tallgrass Prairie National Preserve Barn Equipment Assessment, 1/28/98; Floyd Fisher interview with John Donaldson, July 20, 1998.

built south of the main Jones barn.[31] The turn to farming seems to have pushed the Benninghoven family toward mild prosperity.

During the 1920s, a national recession made the prosperity of the previous decades a faint memory, and the agricultural free fall continued until the national economic recovery fueled by World War II. Between 1920 and 1940, the American cattle industry experienced a sharp economic downturn. A national economic recession followed World War I, as the domestic economy adjusted to decreased federal spending and postwar inflation cut into buying power. Unemployment increased, and people bought less food, especially beef. The agricultural sector, which expanded to meet wartime needs as a result of prodding from Herbert Hoover's Food Administration, was hit especially hard. Europe no longer purchased American beef in the quantities that marked wartime. By 1921, a terrible malaise struck the American cattle industry, the worst of the twentieth century to that time.[32]

As they had at the end of the nineteenth century, desperate cattlemen sought a culprit. The meat-packing industry became the focus of their animosity. In 1919, the Federal Trade Commission ruled that the "Big Five" – Armour, Swift, Morris, Wilson, and Cudahy – monopolized the industry. Monopolies had been illegal since the passage of the Sherman Anti-Trust Act in 1890. The FTC determined that the Big Five needed to divest themselves of subsidiary industries such as stockyards, refrigerator cars, and cold-storage facilities. The Department of Justice prepared an antitrust suit, and with protracted litigation imminent, Attorney General A. Mitchell Palmer received a consent decree from the meat packers on August 31, 1920. The meat packers promised to sell all ancillary food businesses within two years. Cattlemen demanded even more restrictions on the packers and Congress responded. On August 15, 1921, President Harding signed the Packer and Stockyard Act, which stipulated that packers could not show favoritism in commerce for any person or locality. Nor could they control prices or create monopolies. The Secretary of Agriculture received enforcement power. Flint Hills ranchers and the KLA supported the legislation, although many Kansas producers argued that the restrictions against the meat packers and stockyard operators did not go far enough. Cattle producers did see a short-term increase in profits as a result of the new law, but the packers and stockmen quickly found ways to restore their dominance.[33]

Seeking to control production costs, many ranchers expanded earlier efforts and began an intensive effort to grow their own feed crops. The practice, known as ranch farming, became the primary innovation of the 1920s, but the new practice could be seen as a codification of half-century-old practices in the Flint Hills. Almost all cattle growers on the southern plains became ranch farmers during the decade. Some built silos and constructed small dams for water storage. Property owners in the southern Flint Hills raised supplemental feed whenever possible, ending their longtime dependence on off-ranch fodder to complement their own produced feed. The more diversified northern ranch farming developed an expanded stock industry, supplemented by a

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[31] State of Kansas, Decennial Census, 1925, Vol. 26, Chase County, Strong Township; Interview with Dick Benninghoven, August 9, 1999.

[32] Wood, *The Kansas Beef Industry*, 187-222.

[33] Schlebecker, *Cattle Raising on the Plains*, 76-78; Wood, *The Kansas Beef Industry*, 266-67.

sophisticated feed program. By 1922, ranch farmers up and down the Great Plains adopted diversified ranch-farming techniques that went beyond growing wheat. Forage crops such as sorghums, alfalfa, timothy, and the hardy Russian immigrant wheatgrass became popular. Maintenance feeding became an economic necessity by 1922, for urban America prospered more when the Great Plains yielded full production quotas of crops and cattle. Following the national trend, the Benninghovens raised sows, sheep and cattle on their lands, while they planted silage, corn, and wheat to sell as well as to feed their stock. Without the income to develop and improve the bloodlines of their stock, the cattle were mixed breeds. Hogs were kept on bottom land across the highway, but not too close to the creek. Most of the bottom land along the creek was under cultivation. The Benninghovens maintained their sheep herd on the hills on the east side of the highway. The miles of stone fences erected by Jones still marked the pastures, but without the financial capital of the previous owner, the fences could not be maintained in their original condition and the repairs mainly consisted of posts cut into the lower levels of the fence holding up strands of barbed wire.[34]

A revolution in transportation characterized the two decades that followed World War I, with the monopoly held by the railroad companies gradually eroded away by motor transportation on improved roads. The shift away from the rails was not a smooth process. Fearing higher taxes, most farmers initially opposed road construction. They dreaded federal intervention in local affairs, and worried that roads would not serve their purposes. After 1890, farmers recognized the advantage of roads and joined the coalitions that pressed for improved roads. Kansas joined the road revolution late. Its rural decentralized nature and the aversion its citizens felt toward any kind of tax made the development of the centralized structures to support road-building a long and difficult process. Kansas was among the last states to form a highway commission and was dead last in designing a system of state aid for road building. Initially, the state lacked statutory authority to manage roads, and counties assumed the primary responsibility of road construction and maintenance. Until 1900, county residents could either pay taxes or work on the roads under the supervision of political appointees who were hardly expert in road repair and maintenance. The importance of roads soon exceeded the ability of counties to manage them. Pressure to maintain good roads intensified after the development of the rural free delivery (RFD) mail service and its insistence on improved roads for efficiency. After 1900, farmers recognized that better county road systems increased their marketing power and advocates repeatedly stressed that good roads permitted farmers to move their products to market when prices were at their best.[35]

During the twentieth century, trucks transported a growing number of cattle transportation each year, the practice increasing as concrete and other improved roads connected

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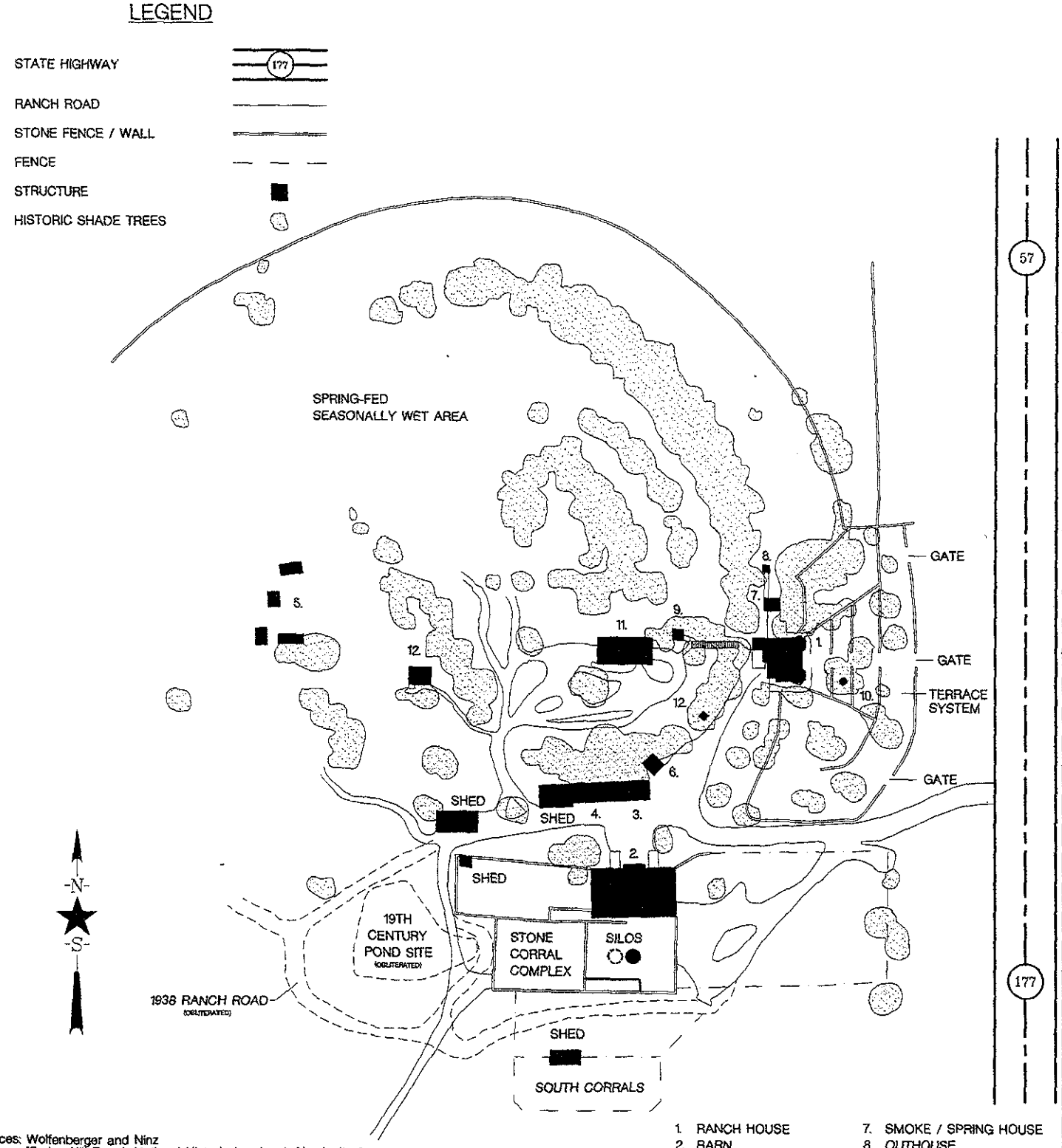
[34] Schlebecker, *Cattle Raising on the Plains,* 82-84;Tallgrass Prairie National Preserve Barn Equipment Assessment, 1/28/98; Floyd Fisher interview with John Donaldson, July 20, 1998.

[35] Paul S. Sutter, "Paved with Good Intentions: Good Roads, the Automobile, and the Rhetoric of Rural Improvement in the *Kansas Farmer*, 1890-1914," *Kansas History* 18, no. 4 (Winter 1995-96): 284-299; William R. Childs, *Trucking and the Public Interest: The Emergence of Federal Regulation, 1914-1940* (Knoxville: University of Tennessee Press, 1985); for parallel professional development, see Burton J. Bledstein, *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* (New York : Norton, 1976) and Joel Tarr, *The Search for the Ultimate Sink* (Akron: University of Akron Press, 1996).

MAIN RANCH BUILDINGS
-- 1907-1993 --



Sources: Wolfenberger and Ninz
"Spring Hill Ranch National Historic Landmark Nomination"
(National Park Service, 1996)

Quinn Evans / Architects
Tallgrass Prairie National Preserve Cultural Landscape Report
(Omaha, NE: National Park Service, Midwest Regional Office, 1999 Draft)

Tallgrass Prairie National Preserve GIS Digital Files
(National Park Service)

1. RANCH HOUSE
2. BARN
3. CHICKEN COOP
4. SCRATCH SHED
5. RANCH OUTBUILDINGS
6. CARRIAGE HOUSE
7. SMOKE / SPRING HOUSE
8. *OUTHOUSE*
9. ICE HOUSE / CISTERN
10. FOUNTAIN SITE
11. QUONSET HUT
12. CHICKEN HOUSE
(CONJECTURAL LOCATION)

isolated ranches to cities. Cattle raisers also discovered that truck transportation greatly reduced their losses, as vehicle routes were more flexible and could make timely stops for watering and feeding. Most significantly, the widespread change to truck transportation made seasonal marketing less necessary, for farmers, not as dependent upon when rail cars could be dispatched to nearby stations, could now reach markets whenever they desired. For the Davis ranching operation, moving cattle by rail was still easier through the 1950s. Within twenty years trucks took over the task of cattle transportation at the Davis ranch, with a series of corrals constructed in various pastures for loading and unloading stock. As motor transportation became more popular, the number of horses in the United States declined dramatically. Between 1923 and 1925, the horse population diminished by an average of 750,000 head each year. For cattle growers, this decrease offered some direct economic benefits, primarily by increasing the amount of feed available for cattle and lowering its cost.[36]

The introduction of the vehicles that depended upon gasoline for propulsion and oil lubrication was part and parcel of the development of the nation's petroleum industry. The geological factors that helped create the Flint Hills' grasses also played a role in creating underground oil and natural gas deposits in Chase County. Kansas has long been involved in oil and gas exploration. Newspapers noted the presence of "pure mineral oil" near Osawatomie five years before the Civil War. In 1857, two years before Edwin Drake's first commercial oil well in Pennsylvania, promoters boasted of oil in springs along Wea Creek, eight miles east of Paola. Post Civil War petroleum speculation in Kansas began in Miami County in February 1865. An oil boom hit southeast Kansas that summer, and less than six years later the Fort Scott Gas Works produced more than 10,000 cubic feet of natural gas a day. Oil production soon followed. Norman No.1, drilled at Neodesha in 1892, was considered the first true oil well in Kansas, and it soon attracted national attention. Forest Oil Company, a subsidiary of John D. Rockefellers' Standard Oil Company of Ohio, took over the field in 1895.[37]

The resource exploitation that began in eastern Kansas soon spread elsewhere in the state. Oil exploration came into the Flint Hills early in the twentieth century, when oil was found in Butler County, south of Chase County, in 1903, and an oil rig was constructed near Augusta. The Pattens opened the former Spring Hill/Deer Park property to drilling operations in January 1916, signing a oil and gas lease with J.C. Titus. In exchange for one-eighth of all oil drilled and $150 annual rent per gas well, the Pattens allowed exploratory drilling and all pipes, tanks, and structures on their property. Interest quickened in the fall of 1919, when another well in the area, Stapleton No. 1, showed evidence of large quantities of petroleum. A Flint Hills oil boom began. In the 1920s, oil and gas production soared in the area, earlier written off as unproductive for resource extraction. Greenwood and Marion counties were the special targets of exploration teams, and by 1926 Greenwood County produced more than one million barrels of oil a day, leading all Kansas counties.[38] Kansas became a significant producer of one of the key fuels of

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[36] Ibid., 93, 101; interview with Witt Laughridge, Feb. 25, 2000.

[37] Lawrence *Herald of Freedom*, March 31, 1855.

[38] H. Craig Miner, *The Fire in the Rock: A History of the Oil and Gas Industry in Kansas, 1855-1976* (North Newton, KS: Mennonite Press, 1976): 9-68; H. Craig Miner, *Discovery: Cycles of Change in the Kansas*

industrialization.

Despite the fields discovered in the region, Chase County never produced significant oil or gas strikes. A gas well north of Strong City in the Davis gas field initially produced 681,000 cubic feet of natural gas when it was drilled in 1929, and twenty-five years later it remained the largest gas producer in the county. To the east of the Davis field was the Altemus field, which in 1954 had one producing well, with the gas piped to local farms. In a 1954 report, all of Chase County's oil activity was located in the southeastern portion of the county. That year, the county produced 30,629 barrels of oil and 65,146,000 cubic feet of gas, insignificant amounts in state and national production. About thirty abandoned oil and gas wells remain scattered across what would become Z Bar Ranch lands, evidence of the gap between potential and reality of exploration. In all of the drilling on ranch property, no oil was ever found, and the natural gas discovered was too high in impurities and too low in energy content to have significant value to energy companies and landowners.[39]

Expanded sources of oil helped motorized transportation become a fixture on the American scene, but even the ability to travel in automobiles was not enough to overcome the difficulties of the late 1920s and the 1930s. By 1932, the nation's livestock producers shipped more than half their product to market in trucks, a figure that increased sharply during the following years. Cattle raisers experienced a brief boom between 1926 and 1928, when cattle prices soared and cattlemen emptied their herds to meet demand. It did not last long. As 1929 ended, the Great Depression hit America and its cattlemen hard. Prices and beef consumption plummeted; between 1929 and 1932, beef prices fell 53 percent, and consumers could not afford the product even at the lower cost. Even cattlemen who survived the postwar depression of 1919-1923 went bankrupt. To make matters even worse, in the summer of 1930, a drought hit Kansas, compounding the effects of economic depression. Light fall rains and a heavy winter eased conditions, but in March 1931 a surprise blizzard, which left as many as 15,000 cattle dead, devastated the state. In the wake of economic disaster and difficult weather, producers adjusted by simultaneously increasing the size of their holdings and decreasing the herds that grazed on these lands.[40]

The dire circumstances worsened. Scant rainfall and two winters, 1934 and 1936, with almost no snowfall, exacerbated the situation. Combined with rapid financial deflation in the cattle industry, the lethal combination was too much for most operators. On top of all this came the legendary blinding dust storms. In March 1935, a pair of dust storms hit Strong City four days

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Oil & Gas Industry, 1860-1987 (Wichita, KS: KIOGA, 1987): 159; Francis W. Schruben, *Wea Creek to El Dorado: Oil in Kansas, 1860-1920* (Columbia: University of Missouri Press, 1972): 37-69; Oil and Gas Lease, Jan. 18, 1916, Abstract of The Lantry Ranch, L.G. Beal, comp. (Topeka, KS).

[39] The Davis gas field was drilled in T 18 S, R 8 E. John Mark Jewett, *Oil and Gas in Eastern Kansas*, Bulletin 104, State Geological Society of Kansas (March 1954): 134-142; L.W. Kessler, *Oil and Gas Resources of Kansas in 1927*, Bulletin of the University of Kansas 29, no. 11, Mineral Resources Circular 1 (June 1, 1928): 30.

[40] Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York: Oxford University Press, 1980).

apart, the first ones that longtime residents could remember. They filled "homes, stores and other buildings with fine dust," mirroring an experience felt across the eastern half of the nation after the plains started to blow. Although the USDA was quick to suggest that irresponsible, rampant overgrazing by stockmen and too much plowing had created high levels of soil erosion, the combination of drought and economic collapse was rooted in a century of Euro-American practice in the semiarid climates of the southern plains. The unusually long drought, which resulted in significantly less native grass groundcover, compounded by more than one-half century of practice, created widespread soil erosion problems and the resulting dust storms. Overgrazing and too much plowing combined with drought to create ecological and economic disaster. When rainfall returned in the 1940s, bumper wheat crops and native grasses returned in abundance, supporting the notion that the dust storms did not harm general productivity.[41]

During the tumult, Kansas City grain dealer George H. Davis, the president of the Davis-Noland-Merrill Grain Company, became the most powerful force in the Flint Hills cattle industry. President of the United States Chamber of Commerce, Davis saw the economic misfortunes of others as a golden opportunity to expand his personal holdings and acquired nearly 100,000 acres in Kansas, Missouri, and Texas. Although primarily known as a wheat dealer, Davis practiced diversified farming on his ranches, was a heavy livestock feeder, and owned many herds of purebred cattle, specializing in Herefords. A friend of U.S. Secretary of Agriculture Henry Wallace, Davis became head of the Grain Exchange Code Authority, the agency responsible for enforcing National Recovery Act regulations in the grain industry, when President Franklin D. Roosevelt established the National Industrial Recovery Act on June 16, 1933.[42]

Born in Rockford, Ill., in 1876 and raised in Johnson County, Kansas, Davis followed a typical early twentieth-century pattern of success. As a teenager, he worked as an office boy in a Kansas City grain company. Eventually he was promoted to the New Orleans company office. In the early 1930s, Davis returned to Kansas City and took control of Santa Fe Elevator A, reportedly the largest grain elevator in the world. Davis formed a partnership with Harold A. Merrill, and together they owned Davis, Noland and Merrill Grain Company (DNM), with Davis as the majority partner. In 1923, the DNM Corporation organized with $600,000 in capital. Davis served as president, Nicholas Noland as vice president, and Merrill as treasurer. During the Depression, Davis regarded land as good investment for uncertain economic times and an excellent personal opportunity. He had cash and prices for ranch lands were at an all-time low. Many cattlemen were forced into bankruptcy, allowing him to buy for pennies on the dollar. During the 1930s, he bought 51,000 acres of Kansas ranch and farm land, 3,000 acres of Missouri bottomland between Waverly and Carrollton, and a north Missouri farm of 520 acres. One ranch near Manhattan, Kan., held 7,000 acres; on another forty miles west of Topeka, he owned land with seventeen oil wells. By 1940, with holdings consolidated, Davis' company had shifted its

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[41] *Chase County News*, March 20, 1935; Wood, *The Kansas Beef Industry*, 189; Worster, *Dust Bowl*.

[42] "No. 1 Kansas Landowner," *Progress in Kansas* 3, n. 6 (May 1937): 20; *Kansas City Star*, Feb. 25, 1951.

primary emphasis from grain to land.[43]

Davis reunited the lands initially purchased by Stephen Jones and split up by Patten. The Benninghoven lands were foreclosed in December 1932, part of judgement against the family for $30,167.62 as a result of a lawsuit filed by Prudential Life Insurance Company. Prudential bought the property at an auction on January 14, 1933, for $31,016.50. Davis purchased the Urschel property in January 1935, described by the county clerk and register of deeds as the largest land purchase they had ever observed. Four months later, Davis bought the former Benninghoven acreage from Prudential for $30,000. The new purchases helped Davis consolidate the 11,000 acres in Chase County that Lantry once owned. Davis also acquired 12,000 acres in Morris County, 5,500 acres in Wabaunsee County, and more than 7,000 acres of the Dewey Ranch in Riley County. Outside the Flint Hills, Davis purchased another 36,000 acres in Barber County and 4,000 acres in Comanche County. By 1936 – at the height of the Dust Bowl – Davis was the largest land owner in Kansas. Soon after losing the Spring Hill Ranch, Flora Benninghoven went west to stay with relatives in Oregon, and Fritz and Curt Benninghoven bought a farm west of Cottonwood Falls, which Fritz operated until 1960.[44]

Davis was not the only person buying huge pieces of Chase County. Less than two weeks after Davis bought the Urschel property, O. Jolliffe of Peabody purchased the Clover Cliff Ranch west of Elmdale, an operation comprising 3,009 acres of pasture, eight houses, barns, feed lots, a filling station, and other buildings. The ranch was purchased from the Prather family, who retained some holdings in the northwest and southwest sections of the property. The Prathers remained on the site as ranch managers for Jolliffe.[45]

Widespread financial desperation in the Flint Hills contributed to land acquisitions by Davis and his corporation. His success during hard times reflected his strong corporate position. In 1933, the corporation's capitalization increased to $1.5 million and its articles of incorporation were amended to authorize the corporate purchase of land, operate the ranches, and thoroughly engage in the cattle business. A year later, the corporation began to buy numerous tracts mostly from ranchers forced into bankruptcy, and integrated five ranches in Kansas into its network. In 1935, Davis sold the former Spring Hill Ranch lands to DNM.

A savvy businessman with a personal background in farming, Davis understood the importance of local people in an absentee-owned operation. He hired Fred H. Howard, E. G. Crocker's son-in-law, away from Crocker Ranch at Matfield Green in late 1934. Howard ran not just Spring Hill, but also Davis' ranches in Chase, Morris, and Wabaunsee counties. Born in 1899, Howard came from an important Flint Hills family. He was the son of Benjamin Franklin Howard, a prominent landowner and Cottonwood Falls businessman. Once hired, Howard brought in Hazel Slabaugh, a cowboy from the Crocker Ranch, as his top hand; Slabaugh lived near the Howards in Strong City. After Davis bought the property from Prudential, he allowed Howard to move into

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[43] *Kansas City Star*, Feb. 25, 1951.

[44] "No. 1 Kansas Landowner," 20; *Kansas City Star*, Feb. 25, 1951; Mary B. Canter, "Benninghoven Family," *Chase County Historical Sketches*, Vol. IV, (1972).

[45] *Chase County News*, January 16, 1935.

the Spring Hill house, where the manager and his wife lived for more than thirty years. The Davis ranch took in calves from the Barber and Comanche county properties and fed them for market. The calves, mainly Herefords, stayed on the land for about two years.

The ranch also grew feed crops and stored them in silos for winter feeding. Crop land accounted for about 10 percent of the property, while the remainder of the farming operation focused on hay production and the management of pastures. To supplement its own production of forage crops, the Davis Ranch consistently purchased additional hay from neighboring farms. This Flint Hills operation mirrored the management of the property during the Lantry era. Ten separate ranches contained their own barns, buildings, staff, and houses, and Davis maintained the former Lantry place as ranch headquarters for the entire operation. In addition to cattle, the Davis ranches used a small number of horses and mules to aid operations. The ranch hands' families raised chickens, turkeys, milk cows, and hogs for personal use.

After the tumultuous interwar era, the cattle industry stabilized as World War II began. By early 1940, the war in Europe injected new life into the New Deal American economy as a result of increased industrial and agricultural purchases. When America joined the war after Pearl Harbor in December 1941, American cattlemen entered an era of unprecedented prosperity. Domestic employment increases also helped; the number of employed rose from 85.4 percent in 1940 to 99.1 percent in 1945, and personal income paralleled the increase in employment. City residents held wartime jobs in the large factories that ringed the urban areas, and the great migration out of the nation's rural counties and the high wages of the industrial workplace produced another rapid increase in beef consumption.[46]

George Davis rode the upswing in cattle prices and retained his extensive holdings as an absentee owner throughout the war and beyond. The 1941 statistical census listed Davis as owning 6,280 acres, including the former Spring Hill Ranch. He was the only person in the Falls Township listing a residence other than Strong City, Cottonwood Falls, or Saffordville. The 1943 agricultural census reported that Davis owned 11,000 acres and again he was the only person in the township not listed as living in Strong City or Cottonwood Falls. Davis listed 165 acres in winter wheat, 40 acres in corn, 15 acres in oats, one-and-a-half acres in Irish potatoes, 24 acres in soybeans, and 225 acres in sweet sorghum. In 1942, the farm harvested 160 acres of winter wheat, 34 acres of corn, 75 acres of oats, one-and-a-half acres of Irish potatoes, and 225 acres in sweet sorghum. Ranch hands cut 130 acres of alfalfa and 30 acres of prairie and wild grasses for hay. Davis' operation produced 1,500 cattle and calves finished for market in 1942, and 14 milk cows also grazed the ranch. The operation raised 500 chickens and 125 turkeys, and listed two aboveground and two belowground silos, four tractors, and one combine.[47]

Compounding increased consumer demands, the wartime government purchased enormous amounts of beef for allied nations as well as U.S. servicemen stationed in America and overseas. In April 1943, the government established the War Food Administration, which

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[46] Kollmorgen and Simonett, "Grazing in the Bluestem Pastures," 285.

[47] In the census, Davis reported no crops nor livestock born or sold; Statistical Rolls: Counties: Chase Co., Homestead Twp. – Cloud Co., Colfax Twp., 1943, Microfilm AR00383, Kansas State Historical Society archives.

organized the purchase and rationing of foods in a manner similar to Herbert Hoover's World War I Food Administration program. As a result of rationing, the price of cattle peaked in 1944. Unlike earlier periods in the ranchers' past, bad weather did not eliminate the opportunity to profit. Weather also still played a role, but this time many farmers were prepared. Although droughts across Kansas, Texas, and Oklahoma in 1943 led to widespread declarations of state disaster areas, by 1944-1945 good rains ended the dry period. Rainwater-filled stock tanks built under long-term New Deal development projects helped ranchers cope with temporary downturns in precipitation.

Cattlemen adjusted to this welcome boom in business. Throughout the war, they expanded their herds, but soon reached the limits that rangelands could support. Since ranchers could not easily secure more land for their animals, production efforts turned to improving the meat-carrying capability of the breeds. During this time, alfalfa production became the primary source of feed. Other farmers, especially in Kansas, also turned to tame grasses to feed their cattle, while many grassland farmers switched from leasing their lands to running their own herds. Throughout the war, Kansas retained its importance as a finishing area for cattle. Its proximity to corn and soybean crops maintained its popularity. On November 23, 1945, three months after Japan's surrender, meat rationing for American citizens in the United States ended. Overall, rationing worked well in distributing meat fairly and in keeping prices down during the war. Cattlemen accepted government intervention with little complaint.[48]

Davis and his corporation continued running a diverse operation after World War II ended. The 1945 agricultural census listed DNM as owning 11,200 acres, but unlike earlier census reports, other property owners were listed as living outside the area. Davis reported 200 acres sown for winter wheat, 70 acres for spring barley, 100 acres for corn, and 200 acres for sorghum, along with 10,305 acres of tame and prairie grass pasture, and 125 acres in alfalfa. The previous year, he harvested 170 acres in winter wheat, 100 acres of corn, and 50 acres of oats. Davis cut 150 acres of alfalfa and 200 acres of tame and wild grass for hay, and did not report any livestock information. In the 1950 agricultural census, Davis owned a combined total of 10,733.5 acres in two separate properties. The farm reported 70 acres in oats, 7 acres in corn, 125 acres in sorghum, and 1 acre in Irish potatoes. The operation cut 120 acres of alfalfa, and reported 10,255.5 acres of native and tame grass pasture. In 1949, Davis cut 225 acres of sorghum and 125 acres of alfalfa for hay, and reported 20 milk cows. The ranch marketed 400 grain-fed cattle and calves in 1949. Also in 1949, Davis listed 898 acres, all in native and tame grass for pasture, while his partner Harold Merrill of Kansas City owned 2,261 acres of Chase County land.[49]

The reunification of Jones' property became complete shortly after World War II. By 1930, the Lower Fox Creek School had outlived its usefulness as the local student population dwindled away. The school district was disbanded in 1946-47, and the schoolhouse and grounds reverted to the adjoining Spring Hill Ranch. The ranch operation used the sturdy stone building

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[48] Wood, *The Kansas Beef Industry*, 281-299.

[49] Statistical Rolls: Counties: Bourbon Co., Marion Twp. – Cherokee Co., Neosho Twp., 1945, Microfilm AR00421, Kansas State Historical Society archives; Statistical Rolls: Counties: Bourbon Co., Osage Twp. – Cherokee Co., Neosho Twp., 1950, Microfilm AR00537, Kansas State Historical Society archives.

for hay storage. Soon, the building deteriorated and fell into disrepair. With its usefulness for economic purposes at an end, the school languished until 1968, when concerned citizens from fourteen Garden Clubs in the Mid-East District of Kansas restored the Lower Fox Creek Schoolhouse. After clearing out the hay, the clubs fixed the windows, installed new door locks, performed cleaning and extensive painting on the inside and the outside windows, tar-patched the tin roof, and protected the dilapidated building from further decay. The historical significance of the structure made it a candidate for historic designation and on September 6, 1974, the former schoolhouse was placed on the National Register of Historic Places.[50]

The most dramatic change in the ranch's long history of cattle operations occurred late in the 1950s. Ever since Stephen Jones established the ranch, cattle operations were mainly seasonal. Some stock was kept on the farm, mainly for breeding purposes, but most of the emphasis was on grazing steers during the spring and summer before shipping them off to market. Cows weren't brought into the area until the 1950s. The Nolan-Davis business originally kept its cow operation on a ranch in Bourbon County, while steers were shipped to Z Bar Ranch. The Z Bar Ranch ran only steers at first, only later adding yearling heifers which were kept the winter. Calves wintered over on the ranch's fields, with supplemental feed distributed in cakes supplementing the available hay. In 1957 the ranch stopped overwintering two-year-olds, switching its focus on yearlings.[51] After Davis' death in 1955, cattle were generally kept on the Z Bar Ranch year-round. When the Z Bar conducted year-round ranching activities, four to six people lived on the property. They occupied the two small houses south of the main ranch complex that are now gone, another large house, possibly the Lantry house, and the ranch hand's house, west of the complex. A host of equipment changes and additions was made across the ranch to support the new grazing schedule, with Davis' workers also building structures in the decades before the changeover.[52]

Most of the new construction was aimed at supporting the cattle and pasture operations. Two well pump houses were built east of the main house on Fox Creek, probably sometime in the 1940s. The Davis operation also built several trench silos across the property starting in the 1940s. The largest trench silo in the county used to be located to the southwest of main buildings, under where the highway now runs, and the ranch had four or five smaller trench silos dug around the ranch. They were used to hold grains and supplemental feed for yearlings. Not all the work was out in the pastures. That same decade, Fred Howard oversaw construction of a metal shed just to the west of the main house. Although it is called a Quonset Hut, the building was handmade out of 2x4s, not Army surplus materials. Measuring 36 feet by 80 feet, it has sliding doors on either end. The original purpose of the stone structure next to the garage is unknown, but many maps now identify it as the Poultry House. When they worked for George Davis, the Hazel Slabaugh family kept chickens in the structure when they lived at the ranch, although it is

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[50] "Historic Site, Lower Fox Creek School, Continuing Project," 3-4; Snell, " A Brief History of the Z-Bar Ranch," 13; Mitch Dexter, *Stone Architecture in Chase County*. Unpublished research paper filed in the Chase County Historical Society Museum and Library, Cottonwood Falls.

[51] Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998.

[52] Orville Burtis interview with Dena Sanford, March 26, 1998

unclear if that was the building's original purpose. Turkeys may have been kept in the building as well. The ranch also installed a gas pump around 1947 near the barn and added a flag pole near the main house during Fred Howard's time at the ranch, sometime in the 1950s-60s.[53]

During the following decades, cattle needs again drove the changes undertaken. The main barn underwent modifications, with grain bins installed on the third floor in 1952 or 1953. Work crews also built a pair of spring boxes for watering the cattle in 1952, with one box and trough built into a hillside to the south/southwest of the main ranch complex. The other spring box was built as part of a corral complex close to section line of Sections 7 and 6, T 19 N, R 8E. A pole barn used for equipment storage was built most likely during the 1950s. The two-story-high structure, 30 feet by 60 feet and covered with corrugated metal, was located near the southern end of the Z Bar property. A new house was built just to the west of the main ranch complex during the 1960s to house ranch workers. The T-shaped frame building had Masonite siding and a gable roof covered with asphalt shingles. The fields to the east of Highway 177, long used for growing feed for cattle, were gradually switched over to brome early in the 1960s. During the next decade, a small metal and plywood scale house was built near the barn corral, with ranch hands pouring the cement platform. The Z Bar bought the scale, used to weigh calves, from the Santa Fe Railroad after it closed stockyard operations.[54]

Consumer demand for better cuts of beef that had begun before World War I intensified after the allied victory in1945, and a prosperous America could easily afford the costs of grain-fed animals. Beef eaters now preferred younger, grain-fed animals, which by the early 1950s greatly reduced the demand for grass-finished steers. Shopping habits also changed in the affluent postwar period, as the number of supermarkets featuring precut pieces of meat increased. Full-service stores often became their own packers and distributors. The postwar era also witnessed a dramatic redistribution of products, for a greater percentage of plains cattle were shipped West to feed a burgeoning Pacific Coast population. Fearful of another depression such as the one that followed World War I, cattlemen tried to control prices after 1945. As the end of the war approached, they held herds off the market, anticipating a boom in overall prices with rationing's end. This created a meat shortage, and contributed to brief but intense postwar inflation. The boom continued for the American cattle industry. Full urban employment, the highest wage levels in U.S. history, and the suburban inclination to pick beef as the meat of choice for backyard barbeques made stock growers' lives as easy as they had ever been. A portion of this increase in consumption resulted from more efficient means of transportation to market. Beginning in the late 1940s, with the end of wartime gasoline and tire rationing, trucks assumed a more important role in transporting animals and finished products to market that they have never relinquished.

The beef industry looked forward to enjoying the period of prosperity, but the fickle plains weather remained an uncontrollable variable in the cattle market. After years of fine weather, the American cattle industry was devastated by deadly blizzards in 1948-1949, the worst on the plains since 1886-87. Although cattlemen had more and better shelters and dependable supplies of

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[53] Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998.

[54] Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998.

supplemental feed, the death toll among the herds was still high. Large amounts of feed on hand mitigated the worst effects of the blizzard, for cattle did not depend on grass as much as in previous blizzards, but throughout the industry, cattle growers faced punishing losses. By April 1949, more than 200,000 animals were dead.[55]

Regional land ownership patterns also shifted. In the postwar years, cattlemen bought more and more land from dryland farmers, many of whom began the now half-century-old pattern of leaving farms for urban life. During the late 1940s, leasing of state lands on the plains decreased dramatically and private ownership increased. By 1949, individuals owned almost all plains land and they were well positioned to keep that control. Although a serious drought in the early 1950s cut into crop production, the Korean War accelerated national demand for red meat. In the burgeoning postwar economy, more affluent Americans, with more disposable income, again consumed larger quantities of beef. In the early 1960s, rapid growth in the industry was accompanied by an explosion in the number of feed lots, especially in southwestern Kansas. From an average of 219,800 animals fed at these commercial lots in Kansas during the 1950s, the industry expanded to more than 3.4 million head on feed in 1978. By the end of the 1970s, Kansas ranked third nationally in production of fed cattle. Most of this expansion took place in western Kansas, especially after the introduction of large, improved aquifer-fed irrigation projects cut feed costs by growing crops locally.[56]

As the beef industry adjusted to the shifting forces of postwar American economy, Chase County ownership patterns reflected these national influences. When the war ended, absentee urban owners in the county made up 35 percent of all property owners, but by 1959 they held title to a little more than half of all agricultural land in county and 57 percent of grasslands. Only 15 percent of their holdings were in crops while 93 percent were in grass. These owners showed a definite inclination to continue their grasslands operations, because unlike more traditional forms of farming, continued pasturing required a minimum of improvements in necessities such as fences, watering sites, and fertilizers. They also faced considerably less risk from adverse weather. Land owners who still lived in Chase County focused their attention on the agricultural side. Local urban owners represented 15 percent of all owners and owned 13 percent of all pastures and 13 percent of croplands. Although local rural owners represented 47 percent of all owners, they only owned 32 percent of Chase County's agricultural land and barely 26 percent of the pastureland. Local residents did continue to own the majority of local cropland, and the figure of 68 percent revealed their dependence on local feed. Considered farmers rather than ranchers, these rural owners owned few cattle, leased little if any pastureland, and played almost no role in the program of grazing transient cattle. In a statistical breakdown of farmers and ranchers, 4 percent of all Chase County operators managed 54 percent of the pasture acreage and only 2 percent managed 41 percent.[57]

In 1949, after disagreements about employees' salaries and the controversial purchase of

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[55] Wood, *The Kansas Beef Industry*, 281-299.

[56] Bussing and Self, "Changing Structure of the Beef Industry in Kansas," 173.

[57] Kollmorgen and Simonett, "Grazing in the Bluestem Pastures," 276-77.

stock owned by another member of DNM's board of directors, W. W. Kilworth, Harold Merrill dissolved the DNM partnership with Davis. Following a lawsuit, Merrill received 4,000 acres in Comanche County and 12,000 acres in Morris County. In an affidavit filed in the dissolution, Davis reported that his Chase County holdings totaled 1,686 head of cattle, 20 hogs and 44 head of horses. The owner of the former Spring Hill Ranch also had troubles outside the courtroom. In order to keep Howard, his ranch manager, working for him, Davis promised him eventual control of the ranch. Davis's oral promise to leave his holdings to Howard, who out of loyalty to the ranch where he had worked most of his adult life decided to remain with the Davis ranch after the split, went unfulfilled when Davis died. Just before his 1955 death, Davis reorganized his ranch ownership, setting 92 percent of his estate for an educational trust fund and divided the remainder equally among four employees in his Kansas City office.

Between the 1960s and the mid-1980s, the Great Plains cattle trade shifted from pasture grazing to feed lots. Although small-scale feedlots existed before 1960, this practice became widespread during the decade, when improved irrigation technology increased the efficiency and scope of grains and grasses that could be grown and processed. Feedlots became an important part of local economies, increasing demands for feed crops while providing a steady income for local residents, who either managed the cattle or the paperwork necessary to complete complicated business transactions. In an economic sense, everyone benefitted; the environmental consequences were deferred. Packers received high-quality beef to meet rising demand and trucking firms received consistent shipments of cattle either on the hoof or as processed meat ready for transportation to urban areas. In the postwar era, cattle raising became big business, pumping millions of dollars annually into the Kansas economy.[58]

Feed-lot finishing became a common practice in the Flint Hills, as corn, alfalfa, and other feeds supplemented grazing on prairie grasses or even became a substitute for grass feeding. This allowed young animals to mature through a winter, sometimes with grain added to their diet. Then they were pastured through the following summer. As a result of the expansion of feeding operations and the perfection of supplemental feed, cattle operations in the Flint Hills reflected the shift to large-scale agribusiness. More local, younger cattle foraged on the bluestem grass that had once been reserved for older cattle imported from the Southwest and Texas. Part of this transformation was the shifting preference of consumers for younger beef. The new preference and the general prosperity of cattle owners in the postwar era encouraged Flint Hills residents to raise their own cattle and limit imported herds. By 1970, locally raised yearlings and breeding stock accounted for most of the cattle population in the Flint Hills.[59]

Reflecting the new emphasis on truck operations, the Z Bar Ranch built corral and holding pens in the pastures. Before the ranch relied on trucks to move cattle, the ranch typically ran the stock south along the ridge to the holding pens near the railroad spur line. Other ranchers would also use the property for transit, a normal practice in the region. Trucks had the ability to pick up and deliver animals directly from the fields, but most of the stock was shipped out of pens near

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[58] Wood, *The Kansas Beef Industry*, 293-94.

[59] Ibid., 296.

the barn, where they could be weighed before shipment. The pasture corrals, located in Section 9, T 19 S, R 8 E, almost directly north of Strong City near the main Lantry house, included an octagonal holding pen, with two units to the east and one to the west, and a loading chute. Each corral was typically constructed of five strands of barbed wire with fence posts six to eight feet apart. Another large corral/holding pen was located to the west. The remains of a stone fence located along the north fence line suggested that the original corral may have been made of stone. During the 1980s, the railroad spur on the south end of the Z Bar property was removed. The ranch also saw another round of stock pond construction, with new ponds added each decade. Most were built using bulldozers under Soil Conservation Service guidelines.[60]

Aside from the physical changes, the Z Bar Ranch continued to change. Despite his surprise and disappointment about Davis' unfulfilled promise to leave him the ranch, Fred Howard opted to continue his long association with the ranch. After Davis' death, ranching operations continued under Howard's guidance until his death in 1970. The ranch received a new title in August 25, 1975, when the company merged the Z Bar Cattle Company into Davis-Noland-Merrill Grain Company and changed the DNM name to "Z Bar Cattle Company." A decade after the property became the Z Bar Ranch, the company decided to cease cattle and ranch operations. The two surviving stockholders, Orville Burtis II and Elisabeth Merrill, voted to dissolve the corporation and accepted a cash buyout of their shares. The property was subsequently sold and on November 26, 1986, was placed into a trust managed by Boatmen's First National Bank in Kansas City. The Spring Hill Ranch was now owned by the bank's trust department, which leased the property for seasonal grazing.[61]

George Davis represented the epitome of absentee ownership, but his acquisition of the Urschell and Benninghoven property brought together the divided pieces of the Spring Hill Ranch, and in the end helped maintain the property's grazing tradition. Davis was a different rancher, one whose background was in the feeding industry, but he was smart enough to hire Fred Howard, an able local ranching expert, to run his property. The combination of money and cattle expertise helped the DNM Ranch survive the cattle industry's conversion from grazing pastures to commercial feed lots, and preserved the land for its eventual entry into the national park system.[62]

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[60]Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998; Orville Burtis interview with Dena Sanford, March 26, 1998.

[61] Rebecca Conard and Susan Hess, "Tallgrass Prairie National Preserve, Legislative History, 1920-1996,"(National Park Service, 1998).

[62] National Park Service, *Special Resource Study, Z-Bar (Spring Hill) Ranch, Chase County, Kansas* (Omaha: National Park Service, 1991).

Chapter 8:

A National Preserve

> "The blue stem region [of Kansas] is one of Nature's great manufacturing plants. The grass is the raw material, the cattle are the machines and the product is beef. The only difference is that the machines, instead of the raw material, are moved into the plant."[1]

As the American West prepares for a new century, its past and its future remain subjects of constant debate. Some historians see two regions operating simultaneously, with a "pioneer" version belonging to the cowboys, prospectors, and mountain men who form the legendary West overlain by the other, characterized by the pursuit of goals borrowed from the industrialized East, large-scale financing of projects, and absentee ownership. Unfortunately, the latter vision also results in unequal distribution of wealth, as well as class and race conflict. For the Flint Hills, nature provided the grasses for its cattle and initially the federal government provided the public lands that allowed almost unlimited grazing possibilities, but outside interests usually supplied the capital that built and sustained the industry. Those Eastern ideals which glorified the age of machines were clearly in place by 1933, when a Plains newspaper, the *Weekly Kansas City Star*, defined raising cattle, which had long been regarded as a natural process, in strictly industrial terms.[2]

The initial cultures developed by the human populations of Chase County were shaped and influenced by environmental limitations, creating societies that reflected the conditions of the meeting of transition zones which surrounded them – the climatic and topographic features that determined which crops, animals, and mineral resources were available to the limited reach of each group of inhabitants. With the establishment of American dominance, technological improvements brought into the Flint Hills by the new culture were able to overcome most of these environmental limitations, and a series of economic restrictions that stemmed from the market became the controlling force in the regional society that developed. Under these restrictions, cattle grazing, not farming, was perceived as the best-paying way to use most of Chase County's land. These economic factors have now remained valid for just a little more than a full century, but several external factors, including changes in American diets and agricultural systems,

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[1] "Optimism Pervades the Kansas Blue Stem Region as Cattle Prices Mount," *Weekly Kansas City Star*, May 24, 1933.

[2] Paul W. Rodman, *The Far West and the Great Plains in Transition, 1859-1900* (New York: Harper & Row, 1988): 183-206; Terry G. Jordan, *North American Cattle-Ranching Frontiers: Origins, Diffusion, and Differentiation* (Albuquerque: University of New Mexico Press, 1993):267-307.

environmental restrictions, and different cultural expectations have emerged to threaten the current situation's stability. In the end, the environment shaped human use of the Flint Hills and Chase County even after Americans created a society that could defy the limits of place and the boundaries of space. By the time the technology had evolved to overcome environmental limitations, the Flint Hills had been used in a certain way so long that the institutions of the place and of the larger society only possessed one lens through which to see the region. Such a limited vision constrained the uses of the Flint Hills even more than did the limits of climate, topography, soil, and rainfall.[3]

Americans' dietary preferences and habits underwent a major transformation during the twentieth century. Since time immemorial, humanity struggled to acquire enough caloric intake to sustain and perpetuate life. Humans found food and hoarded surplus quantities as long as they could; proteins such as meat were scarce and desirable. As late as the nineteenth century, preindustrial populations routinely survived by hunkering down for the winter and outlasting the cold and the increased periods of darkness by relying on a minimal amount of supplies. The remarkable innovations of industrialization, markets, and transportation freed humans from this age-old quandary of supply. The physical wealth of the New World became abundant food stores, making Americans the best-fed people on earth. Meat – principally beef – and potatoes were the basics of American cuisine and Americans ate more beef than any other people. By the mid-twentieth century, the eating patterns of the "People of Plenty," as one historian labeled Americans, were transformed. Most American no longer had to struggle to find ways to add calories to their diet. Instead they spent billions each year to avoid the consequences of the temptations of abundance without sacrificing the quality of their life.[4]

For many consumers, quality life meant fresh beef that tasted good, and that meant beef with plenty of fat. Beef from grain-fed cattle contains more fat per ounce than grass-fed ones, adding succulent taste, and consumers preferred the richly marbled beef, which called for greater use of larger feed lots to finish cattle. The cattle industry increasingly turned to commercial feed lots, sites able to methodically, economically and efficiently fill up animals with grain and other feed crops, supplemented by new chemical compounds, such as steroids, which helped the cattle put on even more of the desirable fat. In 1955, about 500,000 animals in Kansas fed on grain. By the 1970s, that number topped two million.[5]

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[3] Larry L. Naylor, *Culture and Change: An Introduction* (Westport, Conn.: Bergin & Garvey, 1996): 1-60; Marshall Sahlins, *Culture and Practical Reason* (Chicago: University of Chicago Press, 1976) 169-70, 205-210; James C. Malin, *History and Ecology: Studies of the Grassland* (Lincoln: University of Nebraska Press, 1984): 15-16; John Perlin, *A Forest Journey: The Role of Wood in the Development of Civilization* (New York: W.W. Norton, 1989).

[4] David Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor* (New York: W.W. Norton, 1998): 292-309; David M. Potter, *People of Plenty; Economic Abundance and the American Character* (Chicago: University of Chicago Press, 1954): 142-65; Harvey A. Levenstein, *Revolution at the Table: The Transformation of the American Diet* (New York: Oxford University Press, 1988).

[5] Alan I. Marcus, *Agricultural Science and the Quest for Legitimacy: Farmers, Agricultural Colleges, and Experiment Stations, 1870-1890* (Ames: Iowa State University Press, 1985); Charles S. Wood, *The Kansas Beef Industry* (Lawrence: Regents Press of Kansas, 1980): 19, 23-4, 286-94.

The shift to feedlot beef raising was revealed in the demise of small individual-owned feed operations and the dramatic increase in the number of huge commercial lots. In 1960, 73.7 percent of Kansas beef was raised on small lots as part of a combined farm operation. By 1970, the portion of Kansas cattle fed in larger commercial lots, those with a capacity of a thousand or more animals, reached 57.5 percent. Ten years later it topped 87.6 percent. Most of these lots were located in western Kansas, close to large stores of feed crops. Locating feedlots in western Kansas made economic sense; improvements in irrigation opened the region to large farms that could specialize in raising feed crops; raising feed near the lots lowered overall transportation for the bulky grains; and the region was still midway between the breeding pastures of the Southwest and Texas and markets in Eastern cities. As it had nearly a century before, Kansas was located in the right place to capitalize on changes in the beef industry.[6]

Innovation in agricultural practice was a principal contributor to the availability of grain for feed. Water had long been an issue for Kansas farmers, but the development of irrigation technology after World War II allowed a steady flow from the Ogalalla Acquifer beneath the Plains. Irrigation equipment, always essential, became more common and more sophisticated. More large fields in Kansas were irrigated; this allowed large-scale production of corn, along with new hybrids of sorghum, alfalfa, and other feed crops. By the late 1950s, the southwest corner of state contained more than 90 percent of Kansas's irrigated acreage, shifting the center of state's corn production from the northeastern corner to the arid southwestern counties. The ranchers' and feed-lot operators' need for large amounts of grain to finish the cattle for sale made them more dependent than ever upon the farmer. The transition helped to eliminate the decades of hostility between cowman and sodbuster, making them close partners in the beef industry.[7]

Feed lots took advantage of their economy of scale to increase their advantage over grazing operations. The commercial lots gradually increased in efficiency as research by land-grant universities and private grain companies refined the feeding process to minimize waste and maximize animal growth. The introduction of automated feeding stations and improved handling equipment and techniques lowered the manpower requirements to handle the herds while they were at the lots, while new pollution control devices lowered the impact of animal wastes on neighboring communities. The owners of grazing operations could not match improvements in operating efficiencies in their pastures and were also victimized by the increase in land costs that continually boosted their taxes. As a result of the advances in feed lot management, the Kansas beef population rose from four million head in 1960 to 5.7 million in 1970. The growth continued; the 6.8 million head in 1974 were nearly three times the number of cattle in the state before the introduction of large commercial feedlots. Not all were Kansas cattle, for other states sent between 1.6 and 2.8 million of their cattle to Kansas feedlots for finishing, confirming the

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[6] Wood, *The Kansas Beef Industry*, 285-94.

[7] John Opie, *Ogalalla: Water for a Dry Land* (Lincoln: University of Nebraska Press, 1996): 122-60; John Opie, *The Law of the Land* (Lincoln: University of Nebraska Press, 1988): 112-32; Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York: Pantheon Books, 1985): 313-4.

importance of Kansas feedlots in the beef industry.[8]

The meatpacking industry followed the cattle to the new feedlots, helped by the development of a more efficient national transportation infrastructure. Large truck fleets that used President Dwight D. Eisenhower's new interstate highway system, along with vastly improved federal, state, and county secondary roads, usurped the railroad's dominance in the transport of cattle to slaughterhouses. In the aftermath of a severe drought in 1953 and a drastic drop in beef prices, the Eisenhower administration urged worried cattlemen to increase the vertical integration of the industry and strengthen the links between ranches and commercial feed lots. Later beef industry developments included the establishment of regional slaughterhouses and the shipment of precut beef already packaged and ready for supermarkets and consumers. The Iowa Beef Packers (IBP) originated this new system of preparing and shipping meat to consumers in the 1960s. IBP's chief local rival in the 1970s was Excel, headquartered in Wichita, Kansas, which added a large plant in Dodge City to its processing network. Excel illustrated the beef industry's continued move toward the vertical integration recommended earlier, owning the cattle, the grain, processing plants, transportation, and marketing facilities. Mergers were possible; in the 1980s, Consolidated Agriculture (Con-Agra) joined two other conglomerates to combine diffuse cattle facilities into comprehensive combined operations.[9]

Owned by outsiders who sought to maximize their profit, Chase County's Z Bar Ranch followed the dictates of the industry while minimizing its obligations to the land. In the 1960s and 1970s, the ranch grew larger amounts of forage crops. In the lowland fields directly east of the highway across from the main house, where Stephen Jones once cultivated an orchard, 200 acres of timber, 500 acres in "tame grass," and many patches of plowed ground intermixed with pastures of smooth brome produced winter feed for livestock. Other changes introduced by the cattle industry included the fencing of pastures and the construction of more stock ponds; originally introduced more than thirty years earlier during the Great Depression; about twenty ponds were built during Davis' ownership. Ranchers also experimented with introducing nonnative grasses and plants such as brome for grazing by cattle, but the exotic vegetation did not develop the extensive root systems used by native grasses, and heavy spring rains usually caused wide-scale erosion.[10]

The main barn and its adjacent reservoir underwent renovations during the 1980s. A new roof of shingles replaced the original tin roof in the middle of the decade, about the same time the reservoir was replastered. The reservoir was not set up to capture rainwater from the barn roof, but rather used gravity for water flow down from a spring near the top of the hill behind the main house. It could also be filled by pumping from wells east of the road. A gate valve for filling was

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[8] Wood, *The Kansas Beef Industry*, 286-94.

[9] Edward L. and Frederick H. Schamsmeir, "Western Livestock Policy During the 1950s," *Journal of the West* 14, no. 3 (July 1979): 25-31; Jeremy Rifkin, *Beyond Beef: The Rise and Fall of the Cattle Culture* (New York: Penguin Books, 1992): 125-31.

[10] National Park Service, *Special Resource Study, Z-Bar (Spring Hill) Ranch, Chase County, Kansas* (Omaha: National Park Service, 1991); Wood, *Kansas Beef Industry*, 255-80.

located in a pit north of the Quonset hut, with another valve in the barn basement. Around 1989 the two small houses south of the main house were leveled. Structures on the former Lantry lands continued to be used by the Z Bar operation, including the two-story barn near the main Lantry house, the adjacent one-story barn, and the poultry house, which may have originally been used as a bunkhouse.[11]

As the cattle industry changed to reflect the growing dominance of larger and larger commercial feed lots and more integrated cattle processing operations after the Korean War, the Z Bar Ranch ceased to be of interest to cattle growers except as leased pasture, and the property simply stood, awaiting a new use. Between 1986 and 1994, Boatmen's First National Bank of Kansas City managed the ranch. With the growing interest in conserving prairies, a number of national conservation organizations lined up to seek ways to convert the 10,894 acres into a tallgrass prairie preserve of some kind. The National Audubon Society stepped to the fore; in June 1988 it secured an option contract to purchase the ranch, or assign its purchase to another appropriate agency, but the society failed to renew the option after it expired in 1990. As controversy swirled around the idea of federally protected tallgrass prairie, the Z Bar Ranch's pastures remained stocked with cattle fattening on native grasses. Boatmen's Bank leased the pasture, and about 370 acres remained cultivated in crops. When the National Park Trust purchased the ranch in 1994, the creation of a national park area at the Z Bar became a strong possibility.[12]

By the early 1990s, comprehensive changes in the American and global economy made ranching far less viable, and places such as the Flint Hills, reminders of the America of memory, acquired considerable cachet. Its hills and the ranching life it supported had become rare in the United States; finishing for most cattle production had shifted to large commercial feedlots or left the country entirely for South or Central America, and the Flint Hills, with their cowpens by the interstate highways and the horizon-to-horizon fires deliberately set each spring to rejuvenate the grasses, recalled an earlier, seemingly more individualistic America. While the value of the hills as scenery and memory had not yet surpassed its value as ranch land, many individual operations found the going very tough. In that setting, the advantages of a national park area became apparent to a wider cross-section of the public in Kansas, the Flint Hills, and Chase County. The Z Bar Ranch, owned by a trust that leased it for grazing, became a likely candidate for national park area status.

Earlier attempts to secure a prairie national park began during the 1920s. The efforts of Midwestern ecologists and other scientists led the way. Dr. Victor E. Shelford of the University of Illinois, originated the idea of preserving a sizable acreage of native prairie grassland. He, along with the National Research Council's Committee on the Ecology of North American Grasslands, investigated eleven sites in search of the best location for a prairie national park. He recommended the preservation of part of the Great Plains in 1930, just as the Great Depression began, but economic and natural disasters curtailed any action. The Depression and the Dust

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[11] Tallgrass Prairie National Preserve Barn Equipment Assessment, January 28, 1998.

[12] National Park Service, *Special Resource Study, Z-Bar (Spring Hill) Ranch*, 11.

Bowl, when much of the southern plains blew away, diverted attention from a prairie national park to more pressing concerns such as the survival of the families who made their homes in the affected area.[13]

As federal support became essential to resuscitating the plains, a series of government studies between 1937 and 1953 looked more closely at the idea of a prairie park. A 1940 proposal to establish a Great Plains National Monument west of South Dakota's Pine Ridge Indian Reservation received serious consideration. The Department of Agriculture investigated grasslands preservation in 1950, examining six ecological categories of grasslands in the Midwest. Officials recommended the preservation of at least 20,000 acres of each type of grassland. In 1956, as MISSION 66, a ten-year capital development program for the national park system, gained congressional support, the Secretary of the Interior's Advisory Board recommended more studies for possible inclusion of grasslands into the system.[14]

Grasslands faced a long-standing problem that hampered their inclusion among the national parks: they lacked the kind of spectacular scenery that Congress and the public associated with natural areas in the national park system. Although as early as the 1930s, the Park Service promoted representative-area national monuments of prevalent but unusual types of flora – such as Saguaro, Joshua Tree, and Organ Pipe Cactus national monuments – only as science increased in the importance in agency management did the concept gain widespread currency. After 1963, when the Leopold Report asserted that national park areas should present "vignettes of primitive America," and when the agency debuted its new "Parkscape U.S.A." agenda, the concept of a grasslands park area received the full sanction of the Park Service.[15]

Even with the shift toward ecological definitions, grasslands were still an anomaly for the park system. The first serious effort for a prairie national parkland, the Pottawatomie County Park proposal debuted in 1958 and illustrated the range of issues. *Reevaluation Study, True Prairie Grasslands*, a 1960 National Park Service survey, reported twenty-four different types of grasslands that could become park areas, but eighteen were eliminated because they lacked adequate scenic variety and appeal, failed to meet minimum size requirements, or harbored inholdings or other significant intrusions. The six remaining areas were all within the Flint Hills in Kansas or Oklahoma and of these, two stood out. The Park Service favored a park in Pottawatomie County near Manhattan, Kansas, because of the existing federal presence at Fort Riley. Land acquisition could be accomplished mostly by interagency transfer. Osage County, Oklahoma, contained attractive scenic and natural qualities. After further study, the Park Service

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[13] Rebecca Conard and Susan Hess, "Tallgrass Prairie National Preserve, Legislative History, 1920-1996,"(National Park Service, 1998): 1.

[14] George Cameron Coggins and Michael McCloskey, "New Directions for the National Park System: The Proposed Kansas Tallgrass Prairie National Park," *Kansas Law Review* 25, no. 4 (Summer 1977): 484-85; Conard and Hess, "Tallgrass Prairie National Preserve, Legislative History," 3-5.

[15] Hal K. Rothman, *Preserving Different Pasts: The American National Monuments* (Urbana: University of Illinois Press, 1989): 170-71; Richard West Sellars, *Preserving Nature in the National Parks* (New Haven: Yale University Press, 1997): 206, 214-19.

recommended the 57,000-acre Pottawatomie site.[16]

Local residents were less sanguine about a federal presence. In 1960, U.S. Representative William Avery and Senators Andrew Schoeppel and Frank Carlson of Kansas introduced their Pottawatomie park bill in Congress. On December 4, 1961, gun-wielding rancher Carl Bellinger confronted Secretary of the Interior Stewart Udall's entourage, which included NPS Director Conrad L. Wirth, when the secretary's helicopters landed on Bellinger's leased grazing land. Later the same day, during on-site public hearings, Bellinger voiced strong opposition to the park. A few months later in February 1962, the Kansas legislature appropriated $100,000 to purchase park land, but implementation depended on federal funds to complete the purchase. The federal bill never emerged from congressional subcommittee hearings, and the Pottawatomie park proposal floundered.[17]

As the Park Service continued to assess its options, grassroots groups formed on both sides to voice their concerns. In 1973, Kansas environmentalists started an organization called "Save the Tallgrass Prairie." STP preferred a separate national park on the Flint Hills' eastern slopes. Arguing that the Flint Hills could not successfully resist ruination by human intrusion forever, strident advocates such as University of Kansas law professor George Cameron Coggins noted, "The threats to the remaining areas of dominant tallgrass prairie come in two main forms: external forces are converting the prairie from grazing to other uses incompatible with continuation of grass dominance and are defacing the landscape with modern structures; and, some ranchers are using practices inimical to the integrity of the prairie ecosystem as it is."[18]

Two months after STP formed, the Kansas Grassroots Association was established to counter it. Environmentally aware Kansans from the state's eastern half mainly comprised STP, while the KGA was made up of Flint Hills ranchers and landowners. A battle of values and priorities, typical of the conflict over uses of the environment at the time, loomed. To rural residents, urban environmentalists wanted to squeeze them out; to environmentalists, rural areas wanted to continue age-old patterns that had already destroyed most of the prairie. Left unquestioned during the often stormy debates was the longstanding myth that local stewards were the best managers of the land. Statewide organizations lined up in predictable fashion. Fearful of arbitrary federal land takeovers for recreational purposes, the Kansas Livestock Association and Kansas Farm Bureau firmly opposed any kind of national park. Bending to pressure from powerful agricultural interests, the Kansas Legislature became an active opponent of park

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[16] Conard and Hess, "Tallgrass Prairie National Preserve, Legislative History, 1920-1996," 5; John Ise, *Our National Park Policy: A Critical History* (Baltimore: Johns Hopkins Press, 1961): 526-7; National Park Service, *Proposal for a True Prairie National Park* (Omaha: Midwest Regional Office, 1958).

[17] Edward L. and Frederick H. Schapsmeir, "Western Livestock Policy During the 1950s," *Journal of the West* 14, n. 3 (July 1975): 25-31; Glen P. Snell, "Past, Present and Future of the Cattle Business as Seen by an Old Timer," Chase County *Leader-News*, May 31, 1967.

[18] Coggins and McCloskey, "New Directions," 477-543; Conrad L. Wirth, *Parks, Politics, and the People* (Norman: University of Oklahoma Press, 1980): 237-84; "Tallgrass Prairie Group Favors Separate Park," STP press release March 9, 1973, "Prairie Park Citizens Lobby Proposes Park Location," March 13, 1973, Box 25.7, Save the Tallgrass Prairie Records, Kenneth Spencer Research Library, University of Kansas.

proposals.[19]

Any proposal for a national prairie park remained shelved during President Ronald Reagan's eight-year tenure in office. The idea of an Osage Prairie National Preserve in Oklahoma – the Park Service's top choice in 1975 – surfaced briefly in the mid-1980s and kept alive the idea of a Flint Hills park. Park proponents needed to rethink the process of planning and acquisition and consider what kind of park met their goals and served their purposes. In a reflection of this reconsideration, park proponents "do not wish to see the entire Flint Hills designated a national park, only a nationally significant portion," wrote advocate Lawrence Wagner in 1979. "It is needed so that an ecosystem can again exist as it once did, a hundred years or more ago. Pasture maintenance — pasture preservation — will not accomplish this."[20] Park advocates also faced the question of feasibility. What they wanted and what could be acquired were likely to be entirely different. By the mid-1980s, so many opportunities for securing park lands had passed. Proposals included all kinds of areas, but few tracts of land had been offered for park purposes. Most of the best Flint Hills prairie was still in active use as ranch land, and unless owners sought to sell, the opportunities for a national park area were slim.

Denied government financing, prairie preservation plans finally received a boost from private sources. Previous Park Service acquisitions had been aided by the Land and Water Conservation Fund. Created by Congress in 1964, the fund used revenues from offshore oil and gas receipts for the purchase of land and water to support the creation of national and community parks, forests, and wildlife refuges. In the two decades following the creation of the fund, professional conservation organizations played a crucial role in assisting the NPS in land acquisition. They often bought land with the assurance that LWCF dollars would be appropriated to include the land in the park system in the near future. During the Reagan administration, when Secretary of the Interior James Watt prohibited the use of the LWCF for purchasing parklands, that process was stymied and the importance of professional conservation organizations dramatically increased. The Nature Conservancy, the Audubon Society, and others often purchased land and held it until a congressional proclamation and appropriation made possible transfer to the Park Service. Such private-public cooperation allowed park advocates to circumvent local opposition; it also depended heavily on willing sellers.[21]

The Z Bar Ranch became the focus of such an effort. In November 1986, the Davis-Noland-Merrill Corporation sold the ranch and placed it into a trust managed by Boatmen's First National Bank of Kansas City. In 1988, the National Audubon Society secured an option from the

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[19] Coggins and McCloskey, "New Directions," 486; Walter M. Kollmorgen and David S. Simonett, "Grazing Operations in the Flint Hills-Bluestem Pastures of Chase County, Kansas," *Annals of the Association of American Geographers* 55, no. 2 (June 1965): 260-290.

[20] Lawrence Wagner, "The Case for a Prairie Park," *Kansas Fish and Game* 36, n. 5 (September/October 1979): 22-25.

[21] Ronald A. Foresta, *America's National Parks and Their Keepers* (Washington, D.C.: Resources for the Future; Baltimore: Distributed by Johns Hopkins University Press, 1984): 172-3; "James Watt / Interior Secretary, 1981," Box 24.4, Save the Tallgrass Prairie Records, Kenneth Spencer Research Library, University of Kansas.

bank for the purchase of the ranch. In December 1988, Kansas Representative Dan Glickman expressed his interest in a Flint Hills tallgrass preserve or monument, and he intended the Z Bar Ranch to be its cultural centerpiece. In January 1989, the Audubon Society's West Central Region Vice President, Ron Klataske, a native Kansan with roots in ranching and farming, presented options to community leaders and residents. Three were under serious consideration: Park Service purchase and management; Audubon Society purchase and management; or state purchase followed by management by a Kansas state agency. This public meeting and the increasingly difficult economic climate for ranching rekindled dormant enthusiasm for a park. Editorials in various local newspapers and the Strong City and Cottonwood Falls city councils offered approval of the concept.[22]

Some locals were not as enthusiastic. Less than one month later, resistance to the plan by area ranchers surfaced. Although local businesses and community leaders welcomed the boost in income that tourist revenue could provide, local ranchers remained extremely skeptical about federal involvement. They especially feared the use of the power of eminent domain, which permitted government to acquire private property for market value if significant public benefit resulted from the transaction. Some ranchers did not mind setting aside land for a national monument, as long as the government did not use eminent domain to take their property. Most ranchers did not object to an Audubon Society purchase, feeling that any qualified buyer was entitled to own land. They did object to the federal government doing as it pleased, as they framed the issue, only for the sake of establishing a park.[23]

A cultural argument underpinned the ranchers' uneasiness. They strongly believed in the inability of government to care for the land as well as they did. Flint Hills property, often run personally by their families for generations, they asserted, was already receiving optimal stewardship. This argument reflected local identity more than it did the history of the region. A 1965 analysis of Chase County's grazing operations first established that most of the pastures belonged to absentee owners. Supporting that study, a 1997 survey by researchers demonstrated that the most suitable properties for a national park, the largest parcels of land in the Flint Hills, were almost all owned by absentee owners. In looking at Chase County, the researchers noted that six of the ten largest parcels were owned by out-of-state residents, and of those ten pieces of property, four had been sold during the last twenty years, reflecting short land tenure throughout the Flint Hills.[24]

Many groups in the Flint Hills stood to benefit from a park and they became more vocal in their support. Bankers, motel owners, gas station owners, and even some land owners stood to gain from park proclamation. It was likely that a new park might very well improve business in

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[22] Conard and Hess ,"Tallgrass Prairie National Preserve, Legislative History, 1920-1996," 31-34.

[23] "Tallgrass Prairie: The Landscape That No One Knows," Box 19.33, Save the Tallgrass Prairie Records, Kenneth Spencer Research Library, University of Kansas.

[24] Kelly Kindscher and Nancy Scott, "Land Ownership and Tenure of the Largest Land Parcels in the Flint Hills of Kansas, USA," *Natural Areas Journal* 17, n. 2 (1997): 131-35; Hank Ernst, "Flint Hills Tug-of-War," *Kansas Farmer* (March 1989).

communities such as Strong City and Cottonwood Falls, and many were willing to try out the new option. As is typical in such situations, differing interests split the community, for ranchers and commercial business owners had very different stakes.[25] Yet a wedge of local support seemed to form.

Pro-park forces recognized the value of even a lukewarm local endorsement and they took immediate action to boost their growing support. In 1989, Chase County residents formed the Flint Hills National Monument Committee, which sought national monument status for the Z Bar Ranch. The committee included more than thirty people from Strong City, Council Grove, Emporia, and Cottonwood Falls; attorney Lee Fowler served as chairman. Among the committee's members were owners of land adjacent to the Z Bar ranch. The FHNMC sought to help draft park legislation that assured Flint Hills landowners that they would not lose their farms or ranches during the establishment of a park area. Some proposals discussed included a provision that eminent domain could not be used to acquire additional lands or scenic easements, and assurances that local residents must be involved in the management of any monument or park.

As local support coalesced, federal agencies revived their interest. Although the Audubon Society's option on the Z Bar expired in July 1990 and was not renewed, Glickman proposed $50,000 in funding for a National Park Service study of the area in a 1990 congressional appropriations bill. In August 1989, NPS Director James Ridenour accepted a proposal for a study using Park Service funds. He ordered the Midwest Regional Office in Omaha to conduct a property evaluation to determine significance, suitability, and feasibility as an addition to America's park system. Led by Homestead National Monument of America superintendent Randall Baynes, the study team began work in January 1990. The proposal further divided Chase County residents into those who desired monument status for the Z Bar and those who did not. Among those who fought against the idea was the reorganized and reinvigorated KGA, which informed Glickman that it intended to work to oppose efforts to turn the ranch into a park.[26]

In April 1991, the Park Service completed its study, and Glickman promised to introduce legislation authorizing acquisition of the Z Bar Ranch. His bill was doomed from the outset. Local opposition forced Glickman to delay introducing the bill, H.R. 2369, until mid-May. Additionally, he had support from only two members of the Kansas House delegation: Jan Myers and Jim Slattery. The NPS opposed Glickman's bill, arguing that the 11,000-acre ranch was not sufficiently large to ensure successful management and natural and cultural significance had not been evaluated to the agency's satisfaction. Even though the negative Park Service opinion hurt changes of passage, on July 16, 1991, hearings before the House Subcommittee on National Parks took place as scheduled. Despite NPS opposition, Glickman lined up considerable support for the bill. With the support of national conservation and preservation organizations, as well as a host of statewide organizations, the House Interior Committee approved the bill in September 1991, and it passed the full House of Representatives in October.

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[25] Hal K. Rothman, *Devil's Bargains: Tourism in the Twentieth Century American West* (Lawrence: University Press of Kansas, 1998): 1-27; Box 20.1, STP Position Papers and Related Data; Save the Tallgrass Prairie Records, Kenneth Spencer Research Library, University of Kansas.

[26] Conard and Hess ,"Tallgrass Prairie National Preserve, Legislative History, 1920-1996," 33-36.

The Kansas delegation remained divided on the purchase of land for the preserve. U.S. Senator Robert Dole did not support the provision for purchase in Glickman's bill, but Senator Nancy Kassebaum announced that she philosophically supported the idea of a park. In December 1991, she created a panel to study the possibility of the Z Bar purchase by a private foundation. At a January 1992 meeting held at the ranch, a group agreed to create a private foundation with a twelve-member board of trustees, eventually known as the Spring Hill Z Bar Ranch Inc., to raise the necessary private funds to purchase the ranch and develop interpretation and land management plans.

In 1992, the NPS announced its willingness to work with the foundation, and the two organizations reached a tentative agreement. The Park Service agreed to operate and manage the ranch with appropriate educational and interpretation programs, while the Foundation committed itself to raising $5 million within two years to purchase the Z Bar. With an acquisition plan firmly in place, the foundation began six months of negotiations with Boatmen's Bank. Another obstacle surfaced; the bank requested a steep $3.9 million, 15 percent above the ranch's appraised market value. Predictably, negotiations broke down.

Just because the foundation and the bank could not agree on a price did not mean the ranch was not for sale under the right circumstances. The National Park Trust, a nonprofit land trust formed in 1983 by the National Parks and Conservation Association, was invited to purchase the ranch. NPT reached an agreement with the bank, purchasing 10,894 acres of the Z Bar Ranch in June 1994 specifically to establish a national park unit. Although NPT preference was National Park Service management, it was amenable to keeping the ranch in private ownership and administering it under an "affiliate relationship" with the Park Service. This gesture was designed to quell local opposition to federal ownership. Senator Kassebaum organized an August meeting with the Kansas congressional delegation, Secretary of the Interior Bruce Babbitt, and NPCA President Paul Pritchard to discuss the Park Service's land management role at the Z Bar. Babbitt informed Kassebaum that the federal government needed to own 180 acres of the ranch to support legislation and eventual federal ownership.

With this tentative agreement, in the second session of the 103rd Congress, the Kansas congressional delegation introduced companion bills – Glickman in the House and Kassebaum in the Senate – to create the Tallgrass Prairie National Preserve. Both sides of the aisle seemed to accept the idea. Kassebaum delivered the Republicans and Glickman brought in the Democrats. The legislation allowed the Park Service to acquire by donation no more than 180 acres within the boundaries of the preserve, with the government prohibited from acquiring any land without the property owner's consent. The "preserve" designation resulted from existing land uses such as oil and gas and grazing leases. The designation granted greater flexibility for the proposed public-private partnership.[27]

As in previous legislative efforts, opposition soon appeared. The Kansas Farm Bureau opposed the 180-acre federal purchase, arguing that it left the door wide open for the possibility of future government land acquisitions, through the great bugaboo of eminent domain. Although Glickman hoped for quick passage, this inflammatory opposition was enough to stall any hearings,

[27] United States Congress, "Tallgrass Prairie National Preserve Act of 1996," Public Law 104-333.

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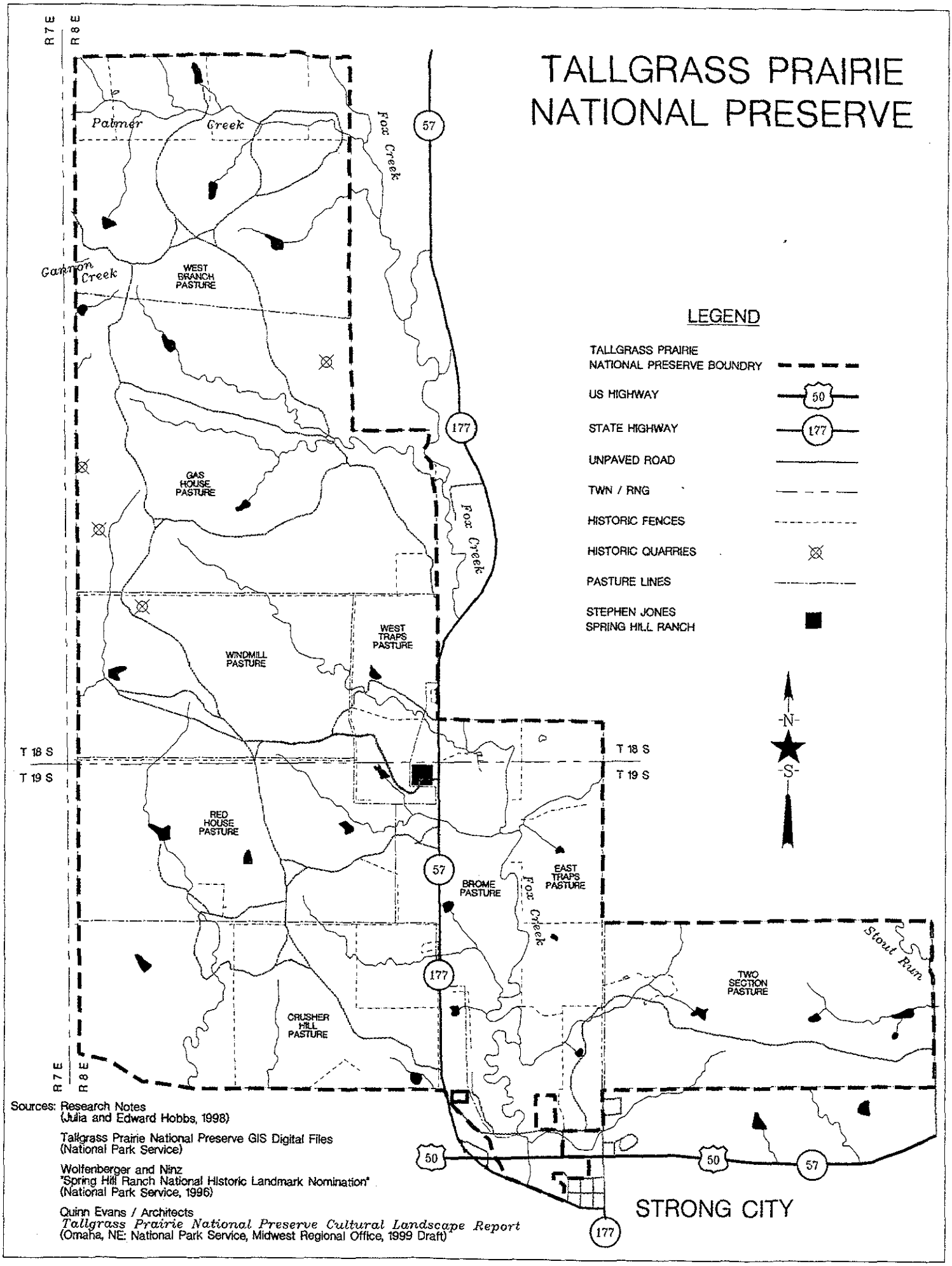
TALLGRASS PRAIRIE NATIONAL PRESERVE



Sources: Research Notes
(Julia and Edward Hobbs, 1998)

Tallgrass Prairie National Preserve GIS Digital Files
(National Park Service)

Wolfenberger and Ninz
"Spring Hill Ranch National Historic Landmark Nomination"
(National Park Service, 1996)

Quinn Evans / Architects
Tallgrass Prairie National Preserve Cultural Landscape Report
(Omaha, NE: National Park Service, Midwest Regional Office, 1999 Draft)

distinctive practice of fattening animals imported from southwest ranges on the area's bluestem pastures during the summer before shipment to markets in the fall. The historic landmark nomination included eight contributing buildings, four contributing structures, and two contributing sites. Listed with the contributing buildings are the main house, the barn, the springhouse/smokehouse, outhouse, ice house, and poultry house/equipment shed. The ranch's miles of stone fences were considered a contributing structure, as are two stone corrals and the cistern near the house, while the terraces in front of the house and the surrounding ranch lands are contributing sites. Other contributing structures include a silage pit southwest of the main house, a cement-stave silo in the corral on the south side of the barn, a metal Quonset hut, a metal shed, and a small ranch-hand house, all west of the main house. Several items on property belonging to Barney Lantry were included in the NHL nomination, including a poultry house believed constructed during Lantry's ownership. Other historic structures are a small tack building and a two-story board and batten barn, while a stone bridge and a metal barn north of the Lantry farm are listed as non-contributing.[28]

The Tallgrass Prairie National Preserve sits astride an enormous cultural fault line in American society. Most of the nation is at least two generations removed from agricultural life; in the next century, when grandparents take their grandchildren to show the youngest generation what life was like, they will head to the remnants of the industrial workplace instead of the farms and pastures of the early twentieth century. In this respect, the value of Tallgrass Prairie National Preserve, with its illustration of rural – and near-mythic – activity, is enormous. It is a memory of who Americans once were and how they lived to a society that has become more than 95 percent urban.

Tallgrass Prairie National Preserve preserves natural resources and the stories those resources tell of nature and the way humans interact with it. In a changing world, where grass lands are converted to agriculture as a result of systems of water delivery and agricultural land not only in the United States but throughout the world is rapidly being devoured for urban uses, grasslands are becoming more scarce. Their preservation is essential to the human species, but the mechanisms to protect grasslands are few. In this, Tallgrass Prairie National Preserve serves as a model of grassland preservation that can be utilized in other places in the United States and around the world.

In another way, Tallgrass Prairie National Preserve is an important reminder of the nature and significance of productivity in American life. As the nation completes its transformation to an information-based society, its ties to activities of historic substance, the making of goods and services and the growing of food and animals, have become more slim. Tallgrass Prairie National Preserve offers a storehouse of information about the past that may well have considerable significance in the future. In an urban, paved America, stored knowledge about raising native beef may hold the key to the answer to some future calamity of supply, disease, or political exigency.

As the agricultural industry reinvents and reforms itself, states that have long depended upon farming and ranching such as Kansas face an uncertain future. For the Flint Hills, its aging rural population and the accompanying decrease in the number of younger people eager to accept

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[28] National Park Service, National Historic Landmark Nomination, Spring Hill Ranch.

an agricultural life threaten any continued reliance upon its grazing pastures. Changes in the cattle industry, including a concentration on grazing in the summer months, an increase in absentee land ownership and changes in market needs and use of commercial feed lots further undercut employment opportunities in ranching. The introduction of the National Park Service into Chase County dramatically illustrates the shifting economics of the cattle industry. Like so many other locales across the country, Chase County has entered a transition to reliance upon tourism, anchored by its new national preserve.[29]

The transformation to visitor services can be a complicated one in rural places. Grasslands sometimes had as much value and more cultural and political cachet as preserved areas than as pasture. Under these circumstances rural communities, committed to the precept of producing something – crops, animals – from their land, faced a difficult circumstance. The world as farmers and ranchers understood it had become skewed, the activities they valued somehow diminished, and the available option became catering to an urban-based population that often possessed only a misty-eyed romantic view of rural life and nature. This transition created tension, but with tourism as economic sustenance, it became more than an option. Facing the changes became a necessity.

That future may be taxing, but a national park area serves as an important basis and a force that regiments and controls change. Communities in the vicinity of national park areas make the transition to tourism more smoothly and with far less dislocation than in less-controlled settings. The limits the National Park Service places on its concessioners play an enormous role in this mitigation, and the sense of reverence Americans still retain for national parks promotes a respectful attitude among visitors. While no park area can claim to prevent or forestall change, the advantage of a national park area is simply that the process undergoes more control, a wider review process, and a more comprehensive set of checks and balances than in any private setting.

As the new century dawns, the Flint Hills faces new and different challenges. Tallgrass Prairie National Preserve may not be a tonic for what ails the region, but as a transitional strategy, the shift to tourism has much to offer Chase County and its environs. In a rural place with a long tradition of producing something tangible – beef – tourism is likely to serve as a shadow economy, an important leg of the regional economic stool that people overlook. Yet the value of Tallgrass Prairie National Preserve for education, recreation, and tourism is large. Its value as memory, as history, as environment, and as catalyst for regulated change give this new park an unequaled regional significance.

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[29] Rothman, *Devil's Bargains*, 311-34.

Appendices

NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Historic name: **Spring Hill/Z Bar Ranch Historic District**
Other names/site number **Tallgrass Prairie National Preserve**

2. Location: **Strong City, Chase County, Kansas**

Street & number: **3 miles north of Strong City on K-177** not for publication ___
City or town: **Strong City** vicinity ___
State: **Kansas** code ____ county: **Chase** code ____
Zip code _____

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this ____ nomination ____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ____ meets ____ does not meet the National Register Criteria. I recommend that this property be considered significant ___ nationally ___ statewide ___ locally. (___ See continuation sheet for additional comments.)

_____ _____
Signature of certifying official Date

_____
State or Federal agency and bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.
(___ See continuation sheet for additional comments.)

_____ _____
Signature of commenting or other official Date

_____
State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

____ entered in the National Register _____ _____
___ See continuation sheet.
____ determined eligible for the _____ _____
National Register
___ See continuation sheet.
____ determined not eligible for the _____ _____
National Register
____ removed from the National Register _____ _____

____ other (explain): _____

_____ _____
Signature of Keeper Date of Action

5. Classification

Ownership of Property (Check as many boxes as apply)
_X_ private
___ public-local
___ public-State
___ public-Federal

Category of Property (Check only one box)
___ building(s)
_X_ district
___ site
___ structure

___ object

Number of Resources within Property

Contributing	Noncontributing
12	__ buildings
1	__ sites
14	__ structures
___	__ objects
27	__Total

Number of contributing resources previously listed in the National Register 2

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)
Tallgrass Prairie National Preserve

6. Function or Use

Historic Functions (Enter categories from instructions)
Cat: **AGRICULTURAL/SUBSISTENCE** Sub: _____

1. Chicken Coop	**animal facility**
2. Sheds	**agricultural outbuildings**
3. Main Barn	**animal facility/storage**
4. Vet Shed	**animal facility**
5. Lantry Barn	**animal facility/storage**
6. Lantry equipment building	**agricultural outbuilding**
7. Scale House	**agricultural outbuilding**

DOMESTIC

1. Ranch house	**single dwelling**
2. Out House	**secondary structure**
3. Smoke House	**secondary structure**
4. Cistern	**secondary structure**
5. Carriage House	**secondary structure**
6. Red House	**single dwelling**
7. Red House Spring House	**secondary structure**
8. Stone Corrals	**secondary structure**

EDUCATION

1. Lower Fox Creek School	**school**

Current Functions (Enter categories from instructions)
Cat: **WORK IN PROGRESS** Sub: _____

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

7. Description

Architectural Classification (Enter categories from instructions)
Mixed, Late Victorian, Second Empire
Other, Late Nineteenth and Twentieth-century agricultural

_____

Materials (Enter categories from instructions)
Foundation: **native course rubble limestone**
Roof: **flat-seamed metal, metal shingles, wood shakes, corrugated metal**
Walls: **native course rubble limestone, corrugated metal**

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

X	A	Property is associated with events that have made a significant contribution to the broad patterns of our history.
____	B	Property is associated with the lives of persons significant in our past.
____	C	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
____	D	Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

____ A owned by a religious institution or used for religious purposes.

____ B removed from its original location.

____ C a birthplace or a grave.

____ D a cemetery.

____ E a reconstructed building, object, or structure.

____ F a commemorative property.

____ G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

AGRICULTURE

Period of Significance **1878-1993**

Significant Dates **N/A**

Significant Person (Complete if Criterion B is marked above)

N/A

Cultural Affiliation **N/A**

Architect/Builder **N/A**

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)
___ preliminary determination of individual listing (36 CFR 67) has been requested.
_X_ previously listed in the National Register
___ previously determined eligible by the National Register
_X_ designated a National Historic Landmark
___ recorded by Historic American Buildings Survey # _____
___ recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
_X_ State Historic Preservation Office
___ Other State agency
_X_ Federal agency
___ Local government
_X_ University
___ Other
Name of repository: _____

10. Geographical Data

Acreage of Property _____

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing
A	**14**	**712250**	**4263545**
B	**14**	**714844**	**4257104**
C	**14**	**714939**	**4252314**
D	**14**	**711628**	**4253477**
E	**14**	**709777**	**4253543**
F	**14**	**709555**	**4263473**

_X_ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title _____

organization date

street & number _____ telephone

city or town_____ state____ zip code _____

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps
A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs
Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)
name _____

street & number_____ telephone_____

city or town_____ state_____ zip code _____

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).
Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.0. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

Introduction

Located in the Flint Hills area of east-central Kansas, the Tallgrass Prairie National Preserve is 2 miles north of Strong City and c.16 miles south of Council Grove. The property is bisected by Highway 177 and consists of 10,894 acres owned by the National Park Trust. Rich in luxuriant tall and short grasses that make it prime cattle grazing country, the bluestem pasture of the Flint Hills of east-central Kansas is distinctive. Simply put, it looks different from the lands around it, and as a result it possesses a history different from most of the rest of Kansas. Undulating mounds glow bright green in the summer sun, and its crevasses create a depth that seems to be at the bottom of a deep well. The bluffs that make up the Flint Hills are mostly limestone-based rock outcroppings. The geographical boundaries of the Flint Hills are clear. Observers know the moment they leave the grasslands; as they enter the low-lying, humid area near Emporia to the north or the dry plains to the south and west, the differences are unmistakable. Stretching from Pottawatomie County, Kansas, to Osage County, Oklahoma, the bluestem region appears on maps as an elongated, oval-shaped area almost 200 miles long and fifty miles wide. At the close of the twentieth century, the National Park Service received authorization to preserve, restore, and interpret a small part of this ecosystem. Created November 12, 1996 and located in Chase County, Kansas, Tallgrass Prairie National Preserve, holds almost 11,000 acres of prairie and was designed to tell the story of people and the grasslands that once dominated the center of the North American continent.

The proposed Spring Hill/Z Bar Ranch Historic District, within the Tallgrass Prairie National Preserve, is situated in the heart of the Flint Hills country and the architecture of the ranch epitomizes the accommodation of traditional building styles with local environmental conditions and regional native materials. The buildings and structures that make up the proposed Spring Hill/Z Bar Ranch Historic District were built over a period of almost one hundred years by a succession of owners. Most of the significant local stone structures date from the 1880s when the property was known as the Spring Hill Farm and Stock Ranch. The ranch contains an excellent collection of native limestone buildings, ruins and historic resources unique to this region of east-central Kansas as well as a collection of outbuildings representing changes in agricultural architecture and technology during the twentieth century. The buildings include the twenty one ranch buildings surrounding the elaborate Second Empire mansard roofed 1881 mansion c.1 mile south of the 1882 Lower Fox Creek Schoolhouse (both individually listed on the National Register). The main house and school house have been recognized as clearly historically significant on a local and national level. The rest of the ranch, currently not on the national or

state registers, also contains a large collection of native limestone agricultural outbuildings and a massive limestone barn.

The barn is one of the largest in the state with an impressive internal design that included machine storage, grain processing and storage, and animal facilities under one roof. Over time, the ranch grew to included a ranch-hand's house, a series of sheds, a Quonset hut, pole barn, scale house, and several other mid-twentieth century agricultural outbuildings and structures.

In addition to containing a wide variety of significant regional historical resources, the Spring Hill/Z Bar ranch district is notable for the overall historical integrity of the materials and design of the extant structures. Despite some modifications and the addition of newer structures to the ranch over the years the design, materials, and workmanship make a strong contribution to the feeling and historical associations of the location. The consistent use of local limestone and building techniques contribute to the sense of the ranch as a whole that is greater than the sum of its parts. Most of the newer additions to the ranch help demonstrate changes in cattle ranching without undermining the coherence of the original 1880s structures. All of these characteristics make the Spring Hill/Z Bar Ranch an outstanding example of a late nineteenth century enclosed cattle ranch and headquarters, which serves as an exemplary model of the way of life on the southern plains of the United States.

Natural and manmade elements:

Built environment:

Although the architectural styles of the ranch and surrounding structures are mixed, the most significant buildings, including the main house and barn, are Late Victorian, Second Empire. The Lantry buildings might be described as late nineteenth- and twentieth- century mid-western ranch, with the utilitarian buildings and structures of the 1950s falling into the category of modern agricultural functionalism. There were three main phases of construction on the ranch. The original limestone buildings of the Spring Hill ranch headquarters complex were built between 1880-83. The Lower Fox Creek Schoolhouse was also built during this time in 1882. The "Lantry" buildings represent the second phase of building. The Lantry poultry house resembles the workmanship, materials and construction of the early buildings at Spring Hill and probably dates from the 1890s. The Lantry barns are of unknown date, but most likely pre-WWII. The final phase of building on the property currently known as the Spring Hill/Z Bar ranch dates to the 1950s when a variety of utilitarian buildings and structures were added to the property.

The Spring Hill/Z Bar Ranch was originally several plots of land merged together by Stephen F. Jones beginning in 1878. In 1880, he hired David Rettiger to build a house and ranch outbuildings including a large three story barn. Capitalizing on his experience in the cattle industry in Texas and east Colorado, Stephen F. Jones, seeking to fulfill "a lifelong desire to establish a stock-farm for the breeding of blooded cattle," as one early account recorded, came to the Flint Hills with a businessman's eye, and left behind a memorable legacy. With a beautiful stone main

house built to rival the most elegant structures in the West, Jones' Spring Hill Ranch was the ultimate expression of how the region's treasures could be captured and utilized.

The construction of the main house at the Spring Hill ranch illustrated Jones' status and position. In May 1880, Jones purchased eighty acres north of Strong City, the land upon which he planned to build his main house and barn, from the Missouri Kansas and Texas Railroad. Construction began in 1881, and the house became one of the showpieces of an increasingly affluent county, as well as Jones' claim on a rural Arcadia. Overlooking the Fox Creek Valley, the eleven-room, three-story, mansard-roofed house constructed in the Second Empire style of the nineteenth century, suggested a cultural permanence, the self-proclaimed triumph of cattle culture in the Flint Hills. Flanking the house, built with locally-quarried white limestone, and set upon stone terraces, were several smaller outbuildings also built of limestone, including an ice house, a chicken house, and a carriage house. Water was piped from a nearby spring and gathered in a large cistern behind the house, uphill next to the ice house, big enough to supply five hundred cattle for several weeks.

When not earmarked for emergencies, the cistern fed a fountain and fish pond on the house's front lawn. Built just to the south of the house, Jones' huge, three-floor barn was equally as impressive, especially to the people of the Flint Hills. The stone barn covered 6,480 square feet and was tucked against a south sloping hill. During its construction workers hammered 5,000 pounds of tin to cover its roof. A windmill, with four thirty-foot wings to generate power to run a grist mill, a saw mill, and other farm machinery, arrived in Cottonwood Falls in January 1882. The cost of construction on the property was believed to reach $40,000, of which $20,000 to $25,000 comprise the expense of the house. The primary contractor on the project was David Rettiger, the contractor of the Chase County Courthouse and owner of a stone quarry north of Strong City. Jones utilized Rettiger's stone as much as possible, even using stone fences to surround his pastures, orchards and cultivated fields. During its main period of significance, in the1880s and 1890s when Jones and then Lantry built the ranch into one of the richest in the county, the ranch was a very impressive complex that made full use of local stone. The generous use of native building materials helped the ranch fit perfectly into its surrounding environment in the rolling Flint Hills. Extensive decorative fencing and generous yard space around the main house contributing to the feeling of wealth and progress that the ranch came to represent and qualities distinguishing the district from its surroundings.

The main ranch complex looks today remarkably similar to the ranch of Jones' heyday, with the majority of the major structures intact and much of the original fencing and the stone bridges helping to maintain the feeling of the 1880s and contributing to the historical integrity of the ranch. The most obvious difference between 1880s representations and contemporary photos is the maturity of the landscaping and the addition of modern structures surrounding the original ranch complex.

Currently the majority of the outbuildings surrounding the main ranch house maintain their historic character for the extended period of local significance and include the following structures:

1. Jones House (1882)

Late Victorian, Second Empire native limestone house. Individually listed on National Register.

2. Springhouse with Tunnel (1882)

Limestone and concrete structure connected to main house.

3. Lower Fox Creek School House (1882)

Limestone structure individually listed on National Register.

4. Smokehouse (1882)

The smokehouse is a detached one-story limestone building located north of the main house. It has a pyramidal roof with metal shingles and a cupola. The stone walls are in good condition and the structure has only minor alterations and some cracking of the stone work. At the north elevation, the circular opening has been modified and wood screen has been installed on the inner width of the lower window opening. The east wall also has an in-filled portion at the lower center which may have been a vent opening in the past. The interior is also in generally good shape with only minor cracking in the south wall. The major problem on the interior stems from deterioration of the mortar especially on the southwest and north walls.

5. Outhouse (c.1882)

The outhouse is similar in style and construction to the smokehouse. It is a limestone stone structure with a pyramidal roof with a small cupola and wood shake shingles. The exterior walls are in generally good condition, with the exception of some deterioration around the base of the structure where there is organic material discoloring the stone. The mortar joints have been repointed using various mortar. The door sill has water damage, but remains stable. Wood elements of structure, including cornice moulding and window and door frames show weathering and require reglazing. The shake roof is in good condition. The interior walls are rough ashlar stone with joints and mortar in generally good condition. Wood floor and wooden bench are worn but in fair condition.

6. Cistern (c.1882)

U-shaped structure built into the hillside connected to icehouse. About 5 feet tall (16' 10" x 13'4"), constructed out of limestone laid in courses and in good condition. Two large stone blocks (4' x 14") separate cistern from icehouse. Mortar is in good shape and has been tuck pointed.

7. Icehouse (c.1882)

Similar construction and dimensions as connected cistern. Icehouse is built of limestone with a pyramidal roof with shake shingles with missing cupola. Exterior walls have been tuck pointed. Some erosion of mortar, but generally good condition. Significant plant growth on structure is causing damage. Wood elements of structure are weathered and split at some points. Roof shakes are in poor condition with cupping and general deterioration. The window opening has been filled with plywood, but double-hung window is still intact, although in need of restoration and reglazing. Door is relatively new in an expanded opening. The interior floor was replaced with a concrete slab which is cracked and pitted, but sound.

8. Carriage House (c.1882)

Limestone construction consistent with original 1880s structures. Organic growth around base of walls similar to other ranch buildings. Walls in good shape with mortar conditions ranging from good to poor. Window and frame are in fair condition with window needing general restoration and reglazing. Peaked roof with shakes is in good condition with a few missing shingles. Interior floor is composed of precast flat silo tiles in fair condition. Interior walls are in generally good condition with exception of south wall where base stones are deteriorated. Mortar joints are in fair condition. Window and frame in north wall is missing.

9. Shed Complex

A row of connected buildings oriented east to west.

A. "Poultry House" (c.1882) (16' x 39') Limestone construction partially embedded in hillside. Sod roofed with boarded-up skylights. Walls in fair condition with mortar showing signs of wear and discoloration from organic growth. Doors and windows in poor condition with significant deterioration of woodwork and window glass replaced with screens. Interior concrete floor is in fair condition. Walls have significant deterioration with open joints, cracking and sporadic parging. Although identified as a "poultry house," this may be a misnomer, and the building may have served other purposes.

B. Scratch Shed (date?) (35'4" x 18'6") Shares end walls with poultry house and shed no.1. Conditions are similar to poultry house and shed no. 1. Scratch shed has small sections of stone wall, but is mostly constructed of wood. Stone portions are in generally good shape, wooden walls are in poor condition due to weathering and loose boards. Roof is sloped with corrugated metal in poor condition. Interior floor and walls are in good shape.

C. Shed 1—Tractor Shed (date?) (24' x 32') Shares walls with scratch shed. Stone portions are in good shape. Wood elements of shed are in poor condition with extensive

weathering. Peaked roof with corrugated metal is in fair condition and interior floors are of crushed stone.

D. Shed 2(date?) Shares one stone wall with Tractor shed, which is in good shape. Rest of structure is lean-to with wood frame and corrugated metal siding and roofing in fairly good shape.

10. Barn (1882)

Wonderful gable roofed wood shingled large three-story limestone building. South elevation of barn dominates the ranch landscape and is even more impressive than main house. The limestone and joints are in good condition overall, with small areas of deterioration similar to other limestone ranch buildings from this time period. Wood elements of structure (windows, sills, doors, cupolas and dormers) show signs of weathering and wear but are generally in good condition. Condition of interior of barn varies considerably. The barn is one of the largest in Kansas and was built with three complete floors: a lower floor for stables and animal management, a middle level for machinery storage and maintenance, and a third for grain storage. The interior structure is complex and contains a wide variety of construction types, but is generally a post and beam frame divided into interior sections. The lower level has some dirt and some concrete for flooring with upper floors constructed of wood planks, but most of the original stalls remain. The second floor interior retains its original open plan with massive support beams. The third floor interior was extensively modified in the 1950s. The Z Bar installed a granary bin in the center of the floor. Because of its massive size, generally open plan on the upper floors, and easy access, the stone barn was able to make a consistent contribution to the operations of the ranch throughout several significant periods of changing technology and practice. Condition of interior woodwork varies greatly, with serious deterioration especially on first and second levels, but overall, most bays, dividing walls and supports are in serviceable condition and the barn retains its historical integrity for both is national and local periods of significance.

Summary of conditions: First Floor — consistent problems include water on flooring causing deterioration, stone erosion, spalling, rusted hardware and wood damage from water and wear. Second Floor — wood floor material and level vary throughout, cement flooring in bays also varies from fair to very poor. All windows are four-over-two double hung. Major problems include serious deterioration and parging of floor in bays and deterioration where floor meets wall in some of the bays. Also general weathering and deterioration of wood elements, especially windows. Third Floor — wood flooring is heavily worn and weathered, but generally in fair condition, with the exception of bays 28-32 where boards are missing and remaining members are seriously deteriorated. Again, wood elements including dormers, windows and cupolas are heavily weathered but in fair condition. Despite deterioration throughout, overall structure seems sound and building retains its historic character and makes a large contribution to the historic feel of the ranch.

11. Stone Corrals and Fences Around Barn (1882?)

Stone corral west of barn is limestone laid in courses. Height varies but is generally 5 feet high and 2 feet thick. Walls are 174' x 85' x 56'. Stone corral south of barn is similar to west corral. 96' x 113' x 90'.

12. Red House Ruin & Spring House (1952?)

Red house is native stone ruin with only partial walls and foundations remaining. Spring house is limestone and concrete U-shaped structure. Stone walls are in fair-to-poor condition with cracks and fractures.

13. Lantry Coop (c.1940s)

Located north of main Lantry barn (Unusual construction for chicken coop, possibly a bunk house originally?). This building is of similar construction to the main complex of buildings at the Spring Hill Ranch. One story, rectangular structure with native stone foundation and walls laid in rough courses and gable roof with corrugated metal. The stone is in very good condition with good mortar. Small doors on north are in good condition. Window glass has been replaced with screen.

14. Lantry Barn (1887)

This is the main barn for the Lantry ranch. A large rectangular two-story structure with board-and-batten siding on a stone foundation. Corrugated metal gable roof with three ventilation cupolas. Siding is in fair condition with weathering all around and especially heavy weathering and deterioration near the stone foundation. Large sliding door is in good condition. All of the windows are in poor condition and missing glass. Roof is in good condition.

15. Pole Barn (1950s)

Pole barn (30' x 60') with vertical metal siding.

16. Quonset Hut (1945-46)

Vaulted wood frame (36' x 80') with corrugated metal siding/roof.

17. Silo (1940s?)

Concrete stave with circumference of 58 feet.

18. Ranch House (date?)

(28' x 29') Painted gypsum walls with vertical wood trim on concrete foundation, asphalt shingle roof. Possibly moved to its current location during the 1950s from another property, presumably from a part of the Davis holdings.

19. Vet Shed (?)

Pole structure (32'6" x 18') with concrete pad. Vertical corrugated metal sheet siding with sliding doors.

20. Stone Bridge (date pre-WW II?)

Bridge is along road leading south from the county road toward the Lantry section of the ranch. Spans creek from east to west with masonry arch and dirt road bed. Stone is in fair-to-poor condition, with erosion, cracking and organic growth, but center structural elements are stable.

21. Lantry Equipment Building (1950s?)

Pole construction (37' x 100') with corrugated metal siding and roof.

22. Concrete Troughs (1950s)

Fred Howard constructed several concrete troughs and watering structures at various locations on the ranch surrounding the headquarters.

23. Wood and Wire Corrals (1950s)

Vertical, stripped tree branches or trunks lashed together to form standing structure, supplemented with wire, or stripped wood posts with wire strung horizontally.

Integrity of District

The National Register of Historic Places identifies seven aspects of integrity that must be present in an eligible property. These include: location, design, setting, materials, workmanship, feeling and association. The Spring Hill/Z Bar Ranch complex retains much of its historic integrity for its period of local significance largely due to the quantity and quality of the 1880s native stone buildings and structures remaining on the property in conjunction with a representative collection of twentieth century utilitarian agricultural structures. Also the environmental conditions of the surrounding prairie significantly contribute to the integrity of the area

Location

The extensive collection of buildings, structures and environmental features in their original locations indicate that the ranch district meets the requirements for integrity of location.

Design

Design integrity is very strong in the 1880s Spring Hill section of ranch that contains the nicely preserved collection of native limestone outbuildings surrounding the impressive limestone main house and the massive limestone barn. The well-preserved Lower Fox Creek School and other limestone structures such as bridges, fencing and corrals all contribute to a strong sense of design integrity.

The twentieth-century additions to the main ranch complex are not as uniform as the 1880s structures but taken as a whole they do accurately reflect the twentieth-century evolution and activities of the ranch. Although there are a wide variety of design styles evidenced in the twentieth-century structures, they all are easily identifiable as products of their own time and represent critical historical changes in the ranching economy that contribute to the local significance of the site as a whole. The shift from the elaborate and massive structures of the 1880s toward a much more vernacular/utilitarian architecture on the ranch is an important design shift that reflects changes in ranching practice and the ranching economy. Beginning with the Lantry purchase of the property, the focus in design shifted from overt display of wealth toward strict utility and functional design to maximize efficiency and profit in an increasingly competitive industry. It appears that one of the significant twentieth-century occupants of the property made very few changes or additions to the built environment of the ranch. The Benninghoven period of occupancy coincided with the Great Depression when there was very little capital available for expansion or modification of the agricultural properties in the plains. Like Lantry, George Davis, who owned the ranch after the Benninghovens, was much less concerned with making a visual statement with his ranch and focused on strict utility in his constructions on the property. Like many ranchers and farmers of the post-Depression period, Davis was focused on the business of ranching and like other ranchers around the American West he adopted a utilitarian philosophy for his additions to the ranch that owed more to agricultural engineers and extension agency design concepts than to architects. The pole buildings and Quonset hut are excellent examples of the utilitarian agricultural design of the 1940s-50s, when new technologies, such as combines and large tractors, necessitated flexible balloon frame structures that were cheap yet sturdy. Based on the specific history of this property and the larger history of the transformation of the ranching economy between the years 1878-1993, the twentieth-century resources on the Spring Hill/Z Bar Ranch do make a significant contribution to the overall design integrity of the property.

Setting

The setting of the Spring Hill/Z Bar ranch district is one of its strongest claims for historical integrity. The unique surviving tract of tallgrass prairie that surrounds the complex is remarkably intact and undisturbed. The extensive use of local building materials contributes to the

overall sense that the property fits perfectly within its setting and nicely ties the built environment into the natural environment. Additionally, the quantity and quality of representative twentieth-century resources and significant twentieth-century modifications, including the highway bisecting the ranch, contribute to a sense that the Spring Hill/Z Bar Ranch district is closely related to transformations in the ranching landscape during the extended period of local significance.

Materials

The integrity of materials and workmanship for the district during its early period derives mainly from the use of local limestone in the Spring Hill ranch complex and surrounding outbuildings. There is less continuity of material in twentieth century buildings. Still, when taken as a unit the twentieth-century resources do clearly reflect the choices and combinations of material indicative of changing patterns of cattle ranching and evolving ranching and agriculture technologies. Materials such as corrugated metal siding and steel poles reflect the utilitarian design ethic of the post WWII era in plains ranching.

Workmanship

The workmanship on the 1880s resources is of very high quality including the utilitarian outbuildings and fences and corrals. The materials and workmanship of the twentieth-century buildings and structures is very different, yet still significant. Some of the buildings and structures were well constructed of sound material and built to be a lasting component of a working ranch, while others were built of lesser quality materials to meet immediate or short-term needs. The ability to construct economical and efficient utilitarian agricultural and ranching structures was crucial to the success or failure of a twentieth-century ranch. While the "evidence of the artisan's labor and skill" may be less obvious in the twentieth-century resources, there is clear evidence of a high level of sophistication in meeting the historic needs of the industry with innovative practical designs, most of which have survived in good condition for over half a century.

Feeling

The presence of the physical features of the Spring Hill/Z Bar Ranch, taken together, convey the feeling of agricultural life during the extended period of local significance.

Association

The Spring Hill/Z Bar ranch complex maintains a strong integrity of association, especially for the national period of significance c.1880-1900. The ranch complex also retains a strong historical association with the longer period of local significance. The complex is clearly associated with successful cattle ranching in both the nineteenth and twentieth centuries, but also with larger trends of evolving ranching and agricultural trends that span the longer time frame. The integrity of association for the ranch district as a whole derives from its strong association with significant long term trends in the ranching economy of the American West. The remaining buildings and structures from the nineteenth and twentieth centuries provide tangible associations

for interpreting the evolution of western ranching from owner/operator to consolidation and absentee ownership.

The natural environment:

The environment currently surrounding the structures is an important historical resource. The ecological significance of the Flint Hills transcends human history. The last remaining significant expanse of unplowed tallgrass prairie in the United States, the region is a vestige of an earlier geological landscape. Precontact vegetation predominates, as tallgrass or true prairie species, including switchgrass, big bluestem, little bluestem and Indian grass, still characterize the Flint Hills. Three major waterways cross the Flint Hills – the Republican, Blue, and Kansas rivers. Several others receive water from the area. Stands of timber crown the preserve's water drainage systems — the Cottonwood River and its South Fork, Middle Creek, Palmer Creek, and Diamond Creek – as well as smaller waterways, with lines of burr oaks, walnuts and hackberry trees, and other woody and grass species. The hills of Chase County contain more than seven hundred plant species and almost one thousand species of vascular plants. Many of the lowlands acres with deep soil have been cultivated into pastures of smooth brome, winter wheat, milo, corn, soybeans, and alfalfa. Atop many of the bluffs, thin layers of sod laced with pieces of chert make the fields difficult to cultivate. As a result, the area has won renown for its cattle grazing.

The Flint Hills are an ecological remnant of a much larger ecosystem. At one time, 1.1 million square miles of grass and savanna dominated the center of the North American continent. Created after the last Ice Age, these grasslands took their present form about 11,000 years ago. Stretching east to west from Indiana to the Rocky Mountains, grasses grew on lands too wet to become desert and too dry to support forests. A host of other environmental factors, including climate, contributed to their development. The relatively young Rocky Mountains to the west became the most defining environmental feature of the plains, blocking the moisture-laden winds that blow off the Pacific Ocean from reaching the region's western zone and refocusing wet air masses coming north from the Gulf of Mexico further to the east. As a result of this ecological combination, grasses predominated. Less than one-third of those central 1.1 million square miles were grassland-tree mixtures, with small groups of trees covering between 10 and 75 percent of the terrain. The grasses seemed to stretch forever.

The human history of the Flint Hills closely links environmental change and cultural behavior. Human beings develop the systems called culture as a complex web of strategies and techniques that enable them to cope with survival problems in specific ecological contexts. Other living things adapt physiologically to assure survival. Humans alone use culture as an instinctive response to environmental pressures and limitations, and the environmental conditions imposed by the Flint Hills have affected every human population that ever settled there. The Tallgrass Prairies had uses to each of the peoples who came to make its lands their own. Despite its initial foreignness to both native peoples and the European-American settlers who followed them, all learned to see the prairies in the terms of their culture, to adapt to its advantages and to develop strategies to limit its disadvantages. The deep grasses of the Flint Hills fed abundant wildlife, and along river courses, seeps, and small springs a wide array of plants made gathering possible. Much

of human behavior and indeed human history in the region stem from this pattern of accommodation.

Shaping that behavior was the Flint Hill's fundamental liminal condition, for the region lies in a series of transition zones. Located within what geographers describe as the Central Lowlands Province of the Interior Plains of North America, the Flint Hills contain a series of microclimates, each diverse from one another. Chase County lies in a boundary zone between the subtropical climate of the southeastern United States and the semiarid Great Plains. Located in the northern section of the Flint Hills, it exhibits many of the traits of the southern parts of its region. Periodic seasonal droughts typify the area, but expansive, grassy pastures and tree growth limited to the fertile bottom lands next to streams reveal elements of a subtropical climate. Except for the southernmost range of the Flint Hills in southern Kansas and northern Oklahoma, average annual rainfall reaches 30 to 35 inches. In that southern portion, higher average temperatures and longer frost-free periods offset lower precipitation levels. In southern Kansas, eight additional days in the average year remain free of frost, permitting a wider range of agroeconomic strategies. In the northern parts of the Flint Hills, earlier frost obviates the advantages of greater rainfall, creating a transitional bioregion of great historical interest and importance in the history of plains ranching and agriculture.

STATEMENT OF SIGNIFICANCE

Intro

The collected resources of the proposed Spring Hill/Z Bar Ranch historic district are eligible for inclusion on the National Register of Historic Places at a local level of significance, according to Criterion A, for their ability to represent the evolution in cattle ranching in the Flint Hills region. The resources embody the changes in ranching demonstrated by the careers of Jones, Lantry and their twentieth-century successors. The ranch provides an excellent model of these important changes during its extended period of local significance from 1878-1993. The ranch has obvious historical significance for Chase County and for the state of Kansas. It appears that the ranch also has national historic significance when viewed in the context of changes in cattle ranching in the American West between the years 1878-1993. This extended period of significance and the close association between the existing built environment of the extended ranch complex and the history of the transformation of western cattle ranching suggest that the property should be considered for listing on the National Register of Historic Places.

The Spring Hill/Z Bar Ranch meets the National Register criteria as a site that provides a good example of broad patterns of American history, specifically transformations in the ranching economy in the American West. At the same time it serves as a reminder that broad trends in American ranching and agriculture had significant regional variations that influenced broader evolutions. Viewed as part of the westward expansion of the United States in the nineteenth century, the cultural history of the Spring Hill/Z Bar Ranch reveals the changes in the Midwestern cattle trade. Like the industry as a whole, the ranch changed from an open range, resident-owner operation to the closed range, absentee-owner pattern that succeeded it. The original buildings of the Spring Hill Ranch capture an important moment in Kansas history as Chase county rose to prominence in the state and the West. The significant collection of outbuildings, barns and corrals that surround the 1882 ranch house and compound built by Stephen Jones, and expanded by Barney Lantry, demonstrate the ways that ranching in the region quickly evolved from owner occupant to absentee ownership and led toward consolidation of the ranching industry during a turbulent time of economic transformation in the American West. The patterns of history and development evidenced by the built and natural environment of the Spring Hill/Z Bar Ranch also provide an excellent source for understanding the convergence of environmental, economic and cultural factors that transformed the economy of Kansas and the American West in the years between 1878 and 1993. The property captures the cyclical nature of the ranching/agriculture economy of the area from small holds to consolidation and back again. By looking at the historic resources of the ranch as a whole over an extended period of time, the complexities of cattle ranching are revealed.

Historical Period

For the purposes of considering the Spring Hill/Z Bar Ranch as a historic district for listing on the National Register of Historic Places, it makes most sense to define the period of

significance broadly to encompass the historically significant transformation of the cattle ranching economy between 1878 and 1993.

The period of national significance for the collected resources dates from 1878-1904.

During this period of nineteenth-century cattle ranching, Stephen F. Jones and Barney Lantry moved into Chase County and established large-scale cattle ranches. Consolidation of the ranches occurred during this period under the ownership of Lantry. The Lower Fox Creek School was also established during this period. The Spring Hill/Z Bar Ranch represents the transition from open range to enclosed holdings in the cattle industry during the 1880s. This historically significant aspect of the story of the Cattlemen's Empire is not represented by any other property in this part of the southern plains.

The period of local significance encompasses the 1878-1904 period and extends into 1993.

During the period of twentieth-century ranching, the ranch was divided and after several shifts in ownership ended up in the hands of the National Park Trust. During the twentieth century the ranch had two periods of extended ownership, first in the hands of the Benninghoven family and later as the reconsolidated Davis/Z Bar Ranch.

Elaboration

Jones/Lantry Period

Stephen F. Jones, the founder of the Spring Hill Ranch and one of the catalytic figures in Flint Hills ranching, amalgamated the Texan and Midwestern styles. After purchasing his Chase County land purchase, Jones initiated a regional pattern that reversed the characteristic trends of western land use: he took land from agriculture to ranching instead of the other direction. The acreage Jones purchased dated back to the initial Euro-American settlement of Chase County. His first property, two plots of eighty acres each that he bought from Rocker and Langston, had been originally homesteaded by Ohio natives John H. Scribner and his family late in 1860. The family lived there in a log cabin for six years. Scribner, heavily involved in the freighting business, was absent most of the time. Scribner sold the land to William Barton on February 22, 1866, for $800, and seven years later, on November 3, 1873, Barton sold it to Rocker and Langston for $2,000. The property spanned Fox Creek and contained mostly bottom land, valuable for agriculture because of its alluvial soil and access to water. Using the same principles with which he succeeded in Colorado, Jones envisioned the farm and its water as the core of a much larger cattle operation.

At the Spring Hill Ranch, Stephen Jones and other ranchers responded to the changes in his industry by inverting the agricultural-animal husbandry mix favored by early Chase County agriculturalists. Jones switched from a focus on grain production and small herds on the hills. He placed large herds on the uplands and used grain production in the lower elevation lands to augment the winter feed. One of the earliest and most consistent expenses came in fencing all newly acquired lands. By 1883 Jones had spent about $20,000 to build a stone fence five feet high and two and a-half feet thick around his property to protect his investment in blooded animals.

His pattern of land use remained consistent with his predecessors: he grazed his herds on the uplands and cultivated the bottom lands, but the increase in herding's significance at the expense of farming, and his ownership of considerable acreage made his operation different from his neighbors.

By 1887, the Jones ranch was an outstanding example of commercial ranching, stocked with the era's best breeds. Stephen Jones raised Hereford, Shorthorn, and Galloway cattle breeds, and Hambletonian thoroughbred and graded studs, as well as English Berkshire hogs. At the most, the Jones operation could maintain about two thousand head during the grazing season. Jones himself probably maintained a breeding herd of about 450 bovines year-round. In 1884, the breeding-cattle boom reached its apex nationally and came to an end by 1886. That year a decade of drought began, accompanied by a global economic depression. Jones persisted. Between 1885 and 1887, Jones imported and exported cattle from his operation.

In 1888, Jones abruptly departed the region. On February 13, 1888, he sold his holdings for $110,000 to his neighbor Bernard "Barney" Lantry, who already owned considerable Chase County acreage that included Deer Park Place, a six-thousand-acre ranch directly south of the Spring Hill Ranch. Family concerns were Jones' announced reason for leaving.

Even wealthier than Stephen Jones, Bernard "Barney" Lantry became the pivotal player in Chase County when he bought the Jones property on February 13, 1888. The incorporation of Chase County's cattle operations into a national market attained full maturity when Lantry acquired the Spring Hill Ranch. The acreage, which cost Lantry $110,000, an enormous sum in late nineteenth-century Chase County, became a cornerstone of his already impressive empire. Lantry's extensive quarrying and construction businesses were the core of his businesses and he approached ranching with the same zeal he brought to other economic endeavors. Lantry's purchase cemented his prominence and suggested the changing nature of the cattle industry.

The shift in ownership to Lantry illustrated the strengthening of local ties in Chase County at precisely the moment that control of the cattle industry passed to outside hands. By 1889, the Strong City stockyards underwent expansion to meet the increased rail demands for importing and exporting cattle. A battle for control of the Flint Hills took shape; increasingly it became too expensive for locals and the colonial process of divesting the region of control of its destiny began in earnest.

There were exceptions to the pattern, and the former Spring Hill Ranch stood prominently among them. Stephen Jones and Barney Lantry lived in the Flint Hills, a practice more unusual among large landholders as time passed. The Lantry operation seemed out of step as the cattle industry changed. Between 1888 and 1904, when Lantry and his family operated the Deer Park/Spring Hill operation, Flint Hills land continued to drift away from local ownership, a accelerating trend that began in the 1870s. Throughout Kansas, absentee owners using on-site managers replaced residential owners and operators. In the Flint Hills, the transformation was especially pronounced. The search for economic efficiency in the beef industry demanded larger volumes of animals than many smaller Flint Hills operators could provide. They lacked the resources to compete, and as land prices rose, their property had value on the market they could

not wring from it by any other means. Ranchers from Texas, the Southwest, and even Europe owned more of Chase County's pasture lands with each passing year, and those distant owners were unlikely to move to Kansas or even to regard as more than a piece in the larger puzzle of their holdings.

The change in ownership patterns reflected the shift in the cattle industry. The older style, the range cattle system, succumbed to cattle ranching that involved grazing on private holdings or leased public lands. Cattle became too valuable and too expensive to be left unattended on the range. The growing number of fenced areas across the West, especially those with barbed wire, deeply cut into the open range. Herd laws that made cattle owners responsible for their animals' crop damage contributed as well. In Chase County, this series of transitions made county pasture more desirable. It signaled the end of common use of upland pasture areas, and the continuation of the private ownership of uplands begun by Jones. Chase County grazing operations shifted away from local needs and increasingly reflected the needs of ranchers in far-off Texas and the Southwest.

A growing percentage of prairie lands belonged to nonresident owners, a shift from the resident owner working the land to the nonresidential ownership of prairie lands. Barney Lantry's acquisition of Jones' Spring Hill Ranch was part of that trend, but only in a peripheral way. Lantry was a longtime Chase County resident, but he was not primarily a cattleman. The Spring Hill Ranch's new owner differed from his predecessor. Ranching was a sideline, albeit a profitable one, from the work in which he made his fortune. It remained a secondary concern in Lantry's operation. The diversity of his holdings let Lantry function as an absentee owner; he looked in periodically, when he was not traveling for his quarrying or construction business, and on a daily basis, a manager operated the ranch. In this sense, he was a hybrid, both local and absentee, typical of both ways of regarding the cattle industry in discrete categories of decision-making. The Lantry era at Spring Hill Ranch ended during the 1890s. At about this time, Lantry separated himself from agriculture operations to concentrate on his quarry and stone-cutting business. By 1894 newspaper estimates put his Chase County land investment at $260,000, with the property surrounded by 100 miles of fence.[1]

Twentieth Century period

By 1900, the Flint Hills region had become ready for the new century, with a well-established cattle industry supported by an extensive infrastructure. The establishment of cultural institutions such as schools, churches, and newspapers played an important role in helping define the region's cultural atmosphere. Advances in communications, such as the telegraph, and in railroad and other overland transportation systems helped connect Chase County with the outside world. The recently deceased Barney Lantry also illustrated the changes in ranch operations. Although he lived in Chase County, Lantry was intellectually an absentee landlord; he was just the first of many absentee owners in the twentieth century. The pasturing of Southwestern cattle continued as the dominant business interest, but cattlemen had to make adjustments in feeding,

[1] The Spring Hill Ranch NHL Nomination contains more specifics on cattle ranching and the period of national significance.

breeding, business arrangements and contracts, and had to learn to restore depleted grasslands after inevitable drought cycles and to cope with the economics of agricultural markets. Stockmen's meetings and livestock commissions took on new, more important roles, as they became the source of crucial business connections. The experience in Chase County in the late nineteenth century served as prologue to the development of institutions of the twentieth century.

As the era of the cattle barons closed and the twentieth century began, the enormous public land ranches of Texas and the American Southwest and their tens of thousands of longhorn steers run by cowboys passed into memory. After 1900, American consumers expected more from their butchers and red meat suppliers. They demanded quality cuts of well-fattened beef, raised and cared for in a manner that exceeded both capability and the desire of traditional cattle drovers. The gangly longhorns, brought up on the scrub grasses of the southern plains and driven long, dusty miles to railway lines for transport to the slaughterhouses, produced only lean carcasses and tough, stringy meat. These cattle fed on grass for two or three years and few received supplemental grain as part of their diet. To meet the consumers' demands after 1900, animals routinely went to feed lots for finishing soon after reaching one year of age. The lots, where an animal's diet was thoroughly controlled, became an essential component of the modern cattle industry. By 1900, only 5 percent of cattle on the plains were kept exclusively on the open range; the vast majority of the nation's beef cattle received supplemental feed or were grazed on owned or leased land. Those who owned the pastures of Chase County, including Barney Lantry's successors at the Spring Hill Ranch, saw their role in the ranching industry threatened by these new developments.

With the new century, the Spring Hill Ranch came under new ownership. After the second owner, Barney Lantry, died in his Strong City home in 1895, the land and buildings passed to his descendants. Lantry's sons, Henry E. and C. J. Lantry, initially followed their father's practices. For the years that they owned the property, the younger Lantrys ran a typical mixed operation, combining acres of feed for the animals as well as food for the owner. They also continued to use the quarries located on the properties. On the average, the farm raised 1,000 acres of corn, 50 acres of sorghum for forage, 60 acres of millet, 450 acres of kafir corn, and 200 acres of alfalfa, while 1,000 acres remained uncultivated but fenced for meadow or pasture. To provide winter feed for grazing animals, the operation yielded 400 tons of tame hay and 1,000 tons of prairie-hay cut in 1904 alone. The farm also produced Irish potatoes from one acre of land, 150 pounds of butter, as well as almost $38,000 in animals fattened and slaughtered or sold for slaughter during the year ending March 1, 1905. Aside from the beef cattle, the Lantrys' livestock included seventy-seven horses, thirty-eight mules, fourteen milch cows, 905 other cattle, and sixty swine.

Henry Lantry died in 1904 and Charles Lantry assumed full ownership. In 1907, the year that he sold the ranching operation, C. J. Lantry owned 13,540 acres in Strong Township, and almost 10,000 of those acres had never been plowed. The entire property was fenced, enclosed by 12,800 rods of stone fence and 6,400 rods of wire. Lantry's farm was valued at $200,000, with $15,000 invested in buildings and $1,500 in machinery and implements. During his ownership of the ranch, Lantry built several small outbuildings, including a pair of stone sheds north of the main house, He was Falls Township's largest owner of property. James Coe ran a distant second, with a comparatively paltry 5,120 acres.

The former Spring Hill ranch that Charles C. Patten purchased in 1907 prospered under its new owner. Patten's predominantly agricultural operation served as an interlude between different ranching regimes. The nineteenth-century history of the Spring Hill/Z Bar ranch exemplified the struggle between Flint Hills farmers and ranchers, and how the victorious cattlemen adjusted to meet shifting consumer demands and market forces.

World War I spurred an economic bonanza in American agriculture. European demand for agricultural products increased and American workers with wartime pay from busy factories could afford more and better food. When the United States entered the war in 1917, the agricultural boom accelerated. President Wilson's Food Administration programs purchased tons of meat for overseas troops, driving prices upward. Well-paid urban factory workers also continued to eat well. Even though drought conditions still existed in 1918, ranchers received historically high prices for any animal that reached the slaughterhouse. The Flint Hills experienced the upswing. During spring 1918, more than 7,000 carloads of cattle detrained in the Flint Hills. Most arrived from Texas, Kansas, and Oklahoma, but some came as far away as Arizona and New Mexico. Outside herds became a catalyst of increased stocking. The Flint Hills accommodated approximately 250,000 head throughout the war.

Between 1900 and 1920, cattle growers experienced wide swings of national economic and social changes that affected their fortunes. Although the new century was generally prosperous for American cattle raisers, periodic upswings and downturns that reflected the national mood and market economics made it difficult for individual growers to count on consistent profits. Success in the cattle and beef business came and went; the pessimism and optimism of cattle raisers mirrored pronounced fluctuations in cattle numbers, purchasing power, and dissatisfaction with big business. Only after ranchers experienced the major economic downturns of the 1920s and 1930s did hindsight look so appealing.

Speculators who brought recently purchased cattle to leased pastures made up an important 1920s Flint Hills constituency. They were the opposite of native pasturers, possessing capital, but little connection to the place. They sought the grasses of the hills for finishing cattle for market and often regarded local residents as mere laborers. During the 1920s, four-fifths of the steers in Chase County came from Texas. In the typical year of 1924, the Texas Panhandle provided 13,538 head to Chase County pastures, Central Texas added 3,204 head, southern Texas, 3,295, the northeast corner 379, and the Gulf Coast 2,520. Northern Oklahoma sent 1,408 head, western Kansas 1,261, New Mexico 612, eastern Kansas 102, and Mexico 120. The movement of cattle from Texas and other areas began in March and April, and was usually completed by mid-May, while movement off of Flint Hills pastures started in July. The heaviest shipments of cattle occurred during the latter halves of August and September, filling cowpens with lowing animals awaiting transportation. Cattle on leased pastures were shipped to market before the end of October, with most steers typically sent to Kansas City for processing.

Charles C. Patten probably recognized the cyclic rise and fall of the value of land. Nearing sixty by the end of the first decade of the twentieth century, he began to divest himself of property. On March 15, 1909, Otto Benninghoven purchased 1,080 acres, including the main house and barn built by Stephen Jones, on a time-payment basis. It was the first of two

transactions involving the former Spring Hill Ranch. Lester B. Urschel of Marion County bought the rest of Patten's land, mainly upland pasture, for $400,000 on April 6, 1921. Benninghoven paid $10,000 before his death during the flu epidemic of 1918, and his widow, Flora Benninghoven, worked the ranch and farm operation for several years before paying off the remaining $37,800. The Benninghoven sons, Curt, Fritz, and Rhein, ran the property after the purchase.

The Benninghovens practiced a typical turn-of-the-century mixed regime. In 1914, the family planted forty acres in corn, eighty acres in rye, one acre in Irish potatoes, twenty acres in sorghum for forage or grain, four acres of kafir for combined forage and grain, and 100 acres in alfalfa. Their livestock consisted of thirteen horses, two mules, two milk cows, eighty-two other cattle, a sheep, and 160 swine. The Benninghovens fenced 680 acres of uncultivated land for pasture and cut seventy-five tons of tame hay. Other products from the Benninghoven farm included 150 pounds of butter, $25 in poultry and eggs, and $3,000 in animals slaughtered or sold for slaughter. After Otto Benninghoven's death, the sons, Fritz and Rhein, operated the ranch with some success, combining the pasture operations with a large degree of farm products for family use and for sale off the ranch. By 1919, the two brothers reported ninety acres in winter wheat, thirty acres in corn, fifty acres in wheat, thirty-five acres in rye, one acre in Irish potatoes, ten acres in sorghum for forage, and 135 acres in alfalfa. That year, 730 acres of prairie grass were fenced for pasture. They cut 135 tons of tame hay in 1918. The family produced 100 pounds of butter, sold $50 in poultry and egg products, and made $5,500 in livestock fattened and slaughtered or sold for slaughter. The farm had twelve horses, six mules, two milk cows, one herd bull, 127 other cattle, thirty swine, and had 1,080 acres fenced.

In the following decade, the Benninghoven operation shifted toward farming. In the 1924 agricultural statistical census, the family planted 140 acres in wheat, forty acres of corn, fifteen acres in rye, one-half acre in Irish potatoes, fifty acres in sorghum, 105 acres in alfalfa, and 730 acres of prairie grass fenced for pasture. In 1923, the family raised 1,700 bushels of wheat, produced 150 pounds of butter, and sold $125 in dairy products. Two hundred and forty chickens were on hand, providing $370 in poultry and egg products. The value of animals fattened and slaughtered or sold for slaughter was $8,000. The family had six horses, ten mules, five milk cows, 225 cattle, 200 sheep, one sow, and twenty-eight pigs. The farm housed a single cream separator, two silos, and two tractors, and around 1930 the Benninghovens built a small shed west of the main house.

In the subsequent years, farming became an even more important part of the family's operation. Flora Benninghoven remained head of household, living in the main house with her sons Fritz and Rhein. The family expanded the farm to 1,720 total acres. It included 180 acres in winter wheat, forty more than the year before; 130 acres in corn, more than triple the forty acres of the previous year; fifty-three acres in sorghum, ten acres in kafir, ten acres in sudan grass, and 1,230 acres in native prairie grass pasture. In 1924, the brothers raised 4,000 bushels of corn and 4,000 bushels of wheat, and produced 200 pounds of butter and $100 worth of dairy products. The farm had 200 hens on hand, selling $400 in assorted poultry and egg products. The total value of animals fattened and slaughtered or sold for slaughter was $16,000. Seven horses, twelve mules, five milk cows, 325 cattle, nine sows and fifty-three pigs comprised the stock. Later, the

family also had a flock of about 200 turkeys that were allowed to roam in the pasture south of the main house. As in the previous year, the ranch had one cream separator, two silos, and two tractors. The turn to farming seems to have pushed the Benninghoven family toward mild prosperity. This prosperity was short lived however, as the approach of environmental and economic upheaval of the 1930s loomed on the horizon.

During the tumult of the Great Depression, Kansas City grain dealer George H. Davis, the president of the Davis-Noland-Merrill Grain Company, became the most powerful force in the Flint Hills cattle industry. President of the United States Chamber of Commerce, Davis saw the economic misfortunes of others as a golden opportunity to expand his personal holdings and acquired nearly 100,000 acres in Kansas, Missouri, and Texas. Although primarily known as a wheat dealer, Davis practiced diversified farming on his ranches, was a heavy livestock feeder, and owned many herds of purebred cattle, specializing in Herefords. A friend of U.S. Secretary of Agriculture Henry Wallace, Davis became head of the Grain Exchange Code Authority, the agency responsible for enforcing the National Recovery Act rules in the grain industry, when President Franklin D. Roosevelt established the National Industrial Recovery Act on June 16, 1933.

During the Depression, Davis regarded land as good investment for uncertain economic times and an excellent personal opportunity. He had cash and prices for ranch lands were at an all-time low. Many cattlemen were forced into bankruptcy, allowing him to buy for pennies on the dollar. During the 1930s, he bought 51,000 acres of Kansas ranch and farm land, 3,000 acres of Missouri bottomland between Waverly and Carrollton, and a north Missouri farm of 520 acres. One ranch near Manhattan, KS, held 7,000 acres; on another forty miles west of Topeka, he owned land with seventeen oil wells. By 1940, with his holdings consolidated, Davis' company had shifted its primary emphasis from grain to land.

Davis reunited the lands initially purchased by Stephen Jones and split up by Patten. The Benninghoven lands were foreclosed as part of judgement against the family for $30,167.62 in December 1932, as a result of a lawsuit filed by Prudential Life Insurance Company. Prudential bought the property at an auction on January 14, 1933, for $31,016.50. Davis purchased the Urschel property in January 1935, described by the county clerk and register of deeds as the largest land purchase they had ever observed. Four months later Davis bought the former Benninghoven acreage from Prudential for $30,000. After losing the Spring Hill Ranch, Flora Benninghoven soon went west to stay with relatives in Oregon, and Fritz and Curt Benninghoven bought a farm west of Cottonwood Falls, which Fritz operated until 1960. The new purchases helped Davis consolidate the 11,000 acres in Chase County that Lantry once owned. Davis also acquired 12,000 acres in Morris County, 5,500 acres in Wabaunsee County, and more than 7,000 acres of the Dewey Ranch in Riley County. Outside the Flint Hills, Davis purchased another 36,000 acres in Barber County and 4,000 acres in Comanche County. By 1936 – at the height of the Dust Bowl – Davis was the largest land owner in Kansas.

A savvy businessman with a personal background in farming, Davis understood the importance of local people in an absentee-owned operation. He hired Fred H. Howard, E. G. Crocker's son-in-law, away from Crocker Ranch at Matfield Green in late 1934. Howard ran not

just Spring Hill, but also Davis' ranches in Chase, Morris, and Wabaunsee counties. Born in 1899, Howard came from an important Flint Hills family. He was the son of Benjamin Franklin Howard, a prominent landowner and Cottonwood Falls businessman. Once hired, Howard brought in Hazel Slabaugh, a cowboy from the Crocker Ranch, as his top hand; Slabaugh lived near the Howards in Strong City. After Davis bought the property from Prudential, he allowed Howard to move into the Spring Hill house, where the manager and his wife lived for more than thirty years. The Davis ranch took in calves from the Barber and Comanche county properties and fed them for market. The calves, mainly Herefords, stayed on the land for about two years.

The ranch also grew feed crops and stored them in silos for winter feeding. Crop land accounted for about 10 percent of the property, while the remainder of the farming operation focused on hay production and the management of pastures. To supplement its own production of forage crops, the Davis Ranch consistently purchased additional hay from neighboring farms. This Flint Hills operation mirrored the management of the property during the Lantry era. Ten separate ranches contained their own barns, buildings, staff, and houses, and Davis maintained the former Lantry place as ranch headquarters for the entire operation. In addition to cattle, the Davis ranches used a small number of horses and mules to aid operations. The ranch hands' families raised chickens, turkeys, milk cows, and hogs for personal use.

After the tumultuous interwar era, the cattle industry stabilized as World War II began. By early 1940, the war in Europe injected new life into the New Deal American economy as a result of increased industrial and agricultural purchases. When America joined the war after Pearl Harbor in December 1941, American cattlemen entered an era of unprecedented prosperity. Domestic employment increases also helped; the number of employed rose from 85.4 percent in 1940 to 99.1 percent in 1945, and personal income paralleled the increase in employment. City residents held wartime jobs in the large factories that ringed the urban areas, and the great migration out of the nation's rural counties and the high wages of the industrial workplace produced another rapid increase in beef consumption.

George Davis rode the upswing in cattle prices and retained his extensive holdings as an absentee owner throughout the war and beyond. The 1941 statistical census listed Davis as owning 6,280 acres, including the former Spring Hill Ranch. He was the only person in the Falls Township listing a residence other than Strong City, Cottonwood Falls, or Saffordville. The 1943 agricultural census reported that Davis owned 11,000 acres and again he was the only person in the township not listed as living in Strong City or Cottonwood Falls. Davis listed 165 acres in winter wheat, 40 acres in corn, 15 acres in oats, one-and-a-half acres in Irish potatoes, 24 acres in soybeans, and 225 acres in sweet sorghum. In 1942, the farm harvested 160 acres of winter wheat, 34 acres of corn, 75 acres of oats, one-and-a-half acres of Irish potatoes, and 225 acres in sweet sorghum. Ranch hands cut 130 acres of alfalfa and 30 acres of prairie and wild grasses for hay. Davis' operation produced 1,500 cattle and calves finished for market in 1942, and 14 milk cows also grazed the ranch. The operation raised 500 chickens and 125 turkeys, and listed two aboveground and two belowground silos, four tractors, and one combine.

Compounding increased consumer demands, the wartime government purchased enormous amounts of beef for allied nations as well as U.S. servicemen stationed in America and

overseas. In April 1943, the government established the War Food Administration, which organized the purchase and rationing of foods in a manner similar to Herbert Hoover's World War I Food Administration program. As a result of rationing, the price of cattle peaked in 1944. Unlike earlier periods in the ranchers' past, bad weather did not eliminate the opportunity to profit. Weather also still played a role, but this time many farmers were prepared. Although droughts across Kansas, Texas, and Oklahoma in 1943 led to widespread declarations of state disaster areas, by 1944-1945 good rains ended the dry period. Rainwater-filled stock tanks built under long-term New Deal development projects helped ranchers cope with temporary downturns in precipitation.

Cattlemen adjusted to this welcome boom in business. Throughout the war, they expanded their herds, but soon reached the limits that rangelands could support. Since ranchers could not easily secure more land for their animals, production efforts turned to improving the meat-carrying capability of the breeds. During this time, alfalfa production became the primary source of feed. Other farmers, especially in Kansas, also turned to tame grasses to feed their cattle, while many grassland farmers switched from leasing their lands to running their own herds. Throughout the war, Kansas retained its importance as a finishing area for cattle. Its proximity to corn and soybean crops maintained its popularity. On November 23, 1945, three months after Japan's surrender, meat rationing for American citizens in the United States ended. Overall, rationing worked well in distributing meat fairly and in keeping prices down during the war. Cattlemen accepted government intervention with little complaint.

Davis and his corporation continued running a diverse operation after World War II ended. The 1945 agricultural census listed DNM as owning 11,200 acres, but unlike earlier census reports, other property owners were listed as living outside the area. Davis reported 200 acres sown for winter wheat, 70 acres for spring barley, 100 acres for corn, and 200 acres for sorghum, along with 10,305 acres of tame and prairie grass pasture, and 125 acres in alfalfa. The previous year, he harvested 170 acres in winter wheat, 100 acres of corn, and 50 acres of oats. Davis cut 150 acres of alfalfa and 200 acres of tame and wild grass for hay, and did not report any livestock information. In the 1950 agricultural census, Davis owned a combined total of 10,733.5 acres in two separate properties. The farm reported 70 acres in oats, 7 acres in corn, 125 acres in sorghum, and 1 acre in Irish potatoes. The operation cut 120 acres of alfalfa, and reported 10,255.5 acres of native and tame grass pasture. In 1949, Davis cut 225 acres of sorghum and 125 acres of alfalfa for hay, and reported 20 milk cows. The ranch marketed 400 grain-fed cattle and calves in 1949. Also in 1949, Davis listed 898 acres, all in native and tame grass for pasture, while his partner Harold Merrill of Kansas City owned 2,261 acres of Chase County land.

The reunification of Jones' property became complete shortly after World War II. By 1930, the Lower Fox Creek School had outlived its usefulness as the local student population dwindled away. The school district was disbanded in 1946-47, and the schoolhouse and grounds reverted to the adjoining Spring Hill Ranch. The ranch operation used the sturdy stone building for hay storage. Soon, the building deteriorated and fell into disrepair. With its usefulness for economic purposes at an end, the school languished until 1968, when concerned citizens from fourteen Garden Clubs in the Mid-East District of Kansas restored the Lower Fox Creek Schoolhouse. After clearing out the hay, the clubs fixed the windows, installed new door locks,

performed cleaning and extensive painting on the inside and the outside windows, tar-patched the tin roof, and protected the dilapidated building from further decay. The historical significance of the structure made it a candidate for historic designation and on September 6, 1974, the old schoolhouse was placed on the National Register of Historic Places.

Between the 1960s and the mid-1980s, the Z Bar Ranch continued to change. Despite his surprise and disappointment about Davis' unfulfilled promise to leave him the ranch, Fred Howard opted to continue his long association with the ranch. After Davis' death, ranching operations continued under Howard's guidance until his death in 1970. The ranch received a new title in August 25, 1975, when the company merged the Z Bar Cattle Company into Davis-Noland-Merrill Grain Company and changed the DNM name to "Z Bar Cattle Company." A decade after the property became the Z Bar Ranch, the company decided to cease cattle and ranch operations. The two surviving stockholders, Orville Burtis II and Elisabeth Merrill, voted to dissolve the corporation and accepted a cash buyout of their shares. The property was subsequently sold and on November 26, 1986, was placed into a trust managed by Boatmen's First National Bank in Kansas City. The Spring Hill Ranch was now owned by the bank's trust department, which leased the property for seasonal grazing.

George Davis represented the epitome of absentee ownership, but his acquisition of the Urschell and Benninghoven property brought together the divided pieces of the Spring Hill Ranch, and in the end helped maintain the property's grazing tradition. Davis was a different rancher, one whose background was in the feeding industry, but he was smart enough to hire Fred Howard, an able local ranching expert, to run his property. The combination of money and cattle expertise helped the DNM Ranch survive the cattle industry's conversion from grazing pastures to commercial feed lots, and preserved the land for its eventual entry into the national park system.

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Verbal Boundary Description

The boundary of the Spring Hill/Z Bar Ranch is shown on the USGS map of the "Strong Hill Quadrangle."

Boundary Justification

The boundary includes all acreage/ranch lands presently associated with the Spring Hill/Z Bar Ranch, the Spring Hill Ranch headquarters, and several buildings of the Lantry Ranch. The boundary closely approximates the ranch during its primary period of national significance under the ownership of Jones and then Lantry.

Recommendations for Future Studies

Tallgrass Prairie National Preserve is a new park. Completing the park and achieving the goals of the General Management Plan will require additional research in a number of areas. During the Historic Resource Study, Rothman & Associates observed a number of needs, and in the context of the Historic Resource Study, offers suggestions for additional studies to support NPS objectives at Tallgrass Prairie National Preserve. These all reflect agency goals and standards and would help further the mission of the NPS at Tallgrass Prairie National Preserve.

Special History Study: Jones Family

- Support to complete the history of the Jones family, the group directly responsible for introduction of the Great Plains cattle industry at the ranch. The study is currently being done by Julia and Edwin Hobbs, volunteer historians living in Wichita.

Special History Study: Lantry Family

- Support for research into the history of the Lantry family. This work and the Jones study would allow for definitive interpretation of the property's conversion from the early grazing on unfenced land that typified the early ranching industry to the enclosure system that later came to dominate.

Historic Structure Report: Main House and Barn

- A Historic Structure Report for the main house and barn, built by Stephen Jones in the early 1880s. The two buildings are the centerpiece for the main ranch complex and future interpretation efforts will begin with them. As cultural attributes, the offer much; further study will provide greater depth of information to support interpretation.

Historic Preservation Guide

- A Historic Structure Preservation Guide for long-term maintenance on the main ranch structures, to help guide present and future inspections and maintenance of the historic buildings.

Social Impact Study

- Initiate a Social Impact Study for further support of NPS goals of developing Tallgrass as an example of ranching industry by using cultural anthropology to document the effect of park development on the Flint Hills population.

Traditional Use Study

- Initiate a Traditional Use Study to help NPS monitor the prairie's long-term health as it continues its cattle operation. Such a study would allow park managers to set long-range goals and objectives in accordance with traditional ranching practices of the Flint Hills.

Cultural Resource Survey

- Initiate a broader archeological survey of the ranch's prehistoric and historic cultural resources, augmenting current studies that have examined only a small percentage of the park's land base.

Special History Study: The Cattle Industry

- Support for a study to assess relevant records of the cattle industry available to park staff and begin a library and archive housed at the park to support interpretation, resource management, and other park activities.

Administrative History

- Initiate an administrative history to support the existing legislative history, to guide park managers as they complete the General Management Plan and begin its implementation.

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