Flint Hills History and Folklife by Dr. Jim Hoy Emporia State University

The Flint Hills of Kansas have a distinctive folk culture, which derives from the distinctive ecological environment of what little is left of America's tallgrass prairie. No grass anywhere can put weight on cattle more quickly or more economically. Head west across Kansas and you'll hit the Flint Hills about a third of the way from the Missouri border. In the north they begin in Marshall County and run south through a dozen counties before entering Oklahoma, where they merge with the Osage Hills. Geologically, the Osage Hills are the southern extension of the Flint Hills, but with a different name and a different history, largely because Osage County, as an Indian reservation, was settled later. Together these two ranges of hills, along with more the level areas adjoining them on the east and west, form an area known as the Bluestem Grazing Region, prized by cattlemen from Texas and the Southwest since the 1850s. These six million acres of native grass (about five million in Kansas) represent the remaining three percent of a tallgrass prairie ecosystem that once stretched from Texas north to Canada, from Indiana west to the short grass of the Great Plains.

A Brief Natural History

Geologically, the Flint Hills date back nearly 300 million years, culturally about a century and a half. The Flint Hills had their origin to the Permian period, when all of Kansas and the Central Plains were covered by a succession of huge inland seas, which left behind large deposits of limestone. The drying up of those seas, combined with the upheaval of the Rocky Mountains during the Mesozoic Era, created the Great Plains, which, along with the Asian Steppes and the South American Pampas, is one of the world's largest expanses of grass, extending north from Texas through nine other states and into three Canadian provinces. The slope of the Great Plains, from the Rockies to the Mississippi, is gradual and occasionally interrupted, but insistent. Thus, you could theoretically run out of gas on top of Mount Sunflower in Wallace County (altitude just over 4,000 feet) and coast southeast all the way to Coffeyville, some 3,200 feet lower. All the vales and swales that intersperse would add a few speeding-ups and slowing-downs to the trip, but the real roller coaster ride would come when you hit the Flint Hills somewhere between Burden and Grenola.

Over the aeons the strata of limestone and flint on the eastern edge of the Great Plains held their own against the forces of gradual erosion, their less resistant shale slopes giving way to create a series of steep-sided terraced tablelands that give the Flint Hills their distinctive shape. Because the Flint Hills were formed by erosion, not upheaval, there are no spectacular peaks to behold rising in the distant skyline, no rugged silhouettes etched across the skyline. Approached from the east, there is a detectable rise, a slight escarpment to be encountered, but from the level plains of the west the entry into the Hills comes almost as a surprise. Early-day travelers often crossed the Flint Hills with scant notice, understandable in the mid-nineteenth century when plowed fields were sparse. But today, with the Flint Hills an island of emerald grass in the midst of cropland, the failure to appreciate this distinctive stretch of native prairie is more difficult to comprehend.

Without doubt the cliche is right; beauty is indeed in the eye of the beholder. The beauty of the Flint Hills is not spectacular and breathtaking, like that of the Grand Canyon or Yellowstone. Rather it is a quiet beauty, one that, as William Least Heat-Moon in PrairyErth observes, allows you to catch your breath, to gather your thoughts, to feel the calmness of, the oneness with Nature. Mike Hayden, former governor of Kansas and currently the state's Director of Wildlife and Parks has stated that in his travels to six continents as an Undersecretary of the Interior of the United States he has never seen any other place on earth quite like the Flint Hills. Unlike towering mountains, the Flint Hills do not startle the senses with Nature's grandeur. Rather, they inspire a contemplative awe of Nature's quiet goodness, not its harsh spectacle. Their tabled tops and terraced slopes impart to the viewer a restful calm, a serenity that not everyone can appreciate. But those who have eyes to see, experience an almost visceral joy in the quiet majesty of the Flint Hills. The outcroppings of rock that loom large in this landscape are minuscule in comparison to the huge boulders and crags of the Cascades or the Andes. The massive slabs of granite in those ranges are unquestionably majestic, but their stark beauty hides an ultimate sterility when compared to the lush and nutritious verdancy that emanates from the limestone of the Flint Hills.

The general appearance of the Flint Hills today came about after the last Ice Age, some 12,000 years ago. As the frigid weather and glaciers retreated (one of the earlier ones reaching into the northeastern Flint Hills of present-day Wabaunsee and Pottawatomie counties), the initial vegetation to become re-established was grass, the climate not yet warm enough to encourage the growth of trees. Then, when sufficient warmth and rainfall did arrive, the already established warm season tallgrasses maintained their dominance over the potential woody invaders through the agency of fire, the enemy of trees and the friend of grass. The original fires were natural, the result of the fierce thunder storms that every year for millennia have filled the spring and summer skies of the Plains with lightning. Human-instigated fires also helped to maintain the grasslands, particularly in the tallgrass prairie that bordered the Great Plains on the east.

The many wallows that dot the pastures of the Flint Hills give clear evidence that they were at one time extensively grazed by bison, a fact attested to by the first official American explorer to cross the Flint Hills. On 12 September 1806 Zebulon Pike stood on a hill near what is now Bazaar in Chase County and, while commenting on the wildlife grazing before him, unintentionally gave the Flint Hills their name as he recorded this scene in his journal: "Passed very ruff flint hills. My feet blistered and very sore. I stood on a hill and in one view below me saw buffalo, elk, deer, cabrie [pronghorn antelope], and panthers."

Original Inhabitants

Clovis points have been found in the Flint Hills, which means that Paleo-Indians were living along the streams that flow through the Hills some 13,000 years ago. Following the Paleolithic age, the Archaic era lasted until about the time of the birth of Christ, when it was succeeded by the Woodland. The last of the Woodland peoples would have been living in the Flint Hills in the mid-sixteenth century at the time of Coronado's exploration. Archaeological digs, particularly those at the sites of the Council Grove and El Dorado federal reservoirs, have revealed thriving pre-European cultures here. Based on the evidence of flint quarries and stone artifacts, these aboriginal inhabitants of the Hills valued both the game and the materials for hunting it they found here. Over the years many arrowheads and spear points have been found in the Flint Hills, both in the upland pastures and more commonly in the bottomlands of streams, especially near springs, which provided good campsites.

In the early nineteenth century the southern Flint Hills were part of the hunting grounds of the Osage tribe and the northern Hills were part of the territory controlled by the Kaw (or Kansa, for whom the state was named). Two of the three Kaw reservations in Kansas were near Council Grove, in the middle of the Flint Hills, while the Osage had been granted a large reservation in the Osage Hills of Indian Territory with headquarters at Pawhuska. In 1873 the Osage sold the northwestern portion of their land to the Kaw, and the tribe moved into its final reservation. In the early summer of 2000 the last full-blood Kaw died.

The Three Eras of Flint Hills History

Because of the central importance of the cattle industry here, the cultural history of the Flint Hills can be divided into three eras: *The Trail Drive* Era, the *Railroad* Era, and the *Trucking* Era, each era associated with the way cattle are transported into the Hills.

The earliest of these historical segments, the Trail Drive Era, began in 1854 when Kansas Territory was opened for settlement. Oxen had been traversing the Hills since the Santa Fe Trail opened in 1821, but 1854 marks the first major influx of domestic cattle, beef and milch, into the state and into the region. Seth Hays, the Council Grove entrepreneur, had established a hay ranch near the confluence of Diamond Creek and the Cottonwood River in that year, and within two more years Cottonwood Falls and a number of other communities in the central Flint Hills had become well established. As early as 1856 cattle were being pastured on what is now the Chase-Butler county border, the earliest reference to what would soon become the defining feature of life in the Flint Hills--grazing transient cattle during the warm-weather pasture season. Cattle, some of them shorthorns from Midwestern states, others longhorns from Texas, were driven into the Hills overland by mounted drovers during this period, then most of them were shipped out by train. In the 1850s and early 1860s the railroads were in Missouri and Iowa, but in September of 1867 the cattle pens opened for business at Abilene and the American cowboy in all his mythic glory entered the national consciousness. Many of the thousands of cattle driven up from Texas in the spring of the year were fattened on the tallgrass prairie of the Flint Hills.

A few railroads were snaking their way into the Flint Hills in the later 1870s, but it was not until 1887 that the Santa Fe ran a spur south a dozen miles from Strong City and thus transformed the hamlet of Bazaar into the major cattle shipping point on the entire line, a distinction it would hold until 1923 when the line extended south through Matfield Green and Cassoday, the title then transferring to the latter town. Although a few cattle were still being trailed overland as the Gay Nineties began (and, in fact, some cattle would be trailed overland into Flint Hills pastures as late as the 1930s), **the Trail Drive Era had essentially given way to the Railroad Era sometime around 1890.** This second phase of Flint Hills history would last for some three-quarters of a century. During this period cattle coming into the Hills were shipped by train and nearly all of them left the same way. Although the days of trail drives hundreds of miles long were over, still many times cattle had to be driven scores of miles to get to their summer homes. During the 36 years between the time the railroad reached Bazaar until it extended south into Oklahoma, all the cattle that came into the heart of the Flint Hills that covered southern Chase, northeastern Butler, and northwestern Greenwood counties had to be unloaded at Bazaar to the north, Rosalia to the south, Hamilton to the east, or Burns or Degraff to the west. And for several years before tracks were laid through Degraff, cattle were unloaded at Newton and driven overland 40 to 50 miles to reach the pastures near Cassoday and Matfield Green.

Between the two world wars trucks began to be used in the hauling of cattle, particularly from summer pasture to terminal markets in Wichita or Kansas City. Sometimes, as well, in the spring cattle would be unloaded from trains, then hauled by truck from the stockyards to surrounding pastures. After the Second World War, bobtail trucks and flatbed semi-trailers became more common in the Flint Hills, some of the latter being used for the long distance hauls that brought cattle from their home pastures in Texas to their summer quarters in the Flint Hills. A semi, particularly if it were a double decker, could haul more cattle than a railroad car, and it had the added advantage of being able to take cattle directly to a pasture--and pick them up there, as well, if pens were available, thus eliminating the long and costly (in terms of shrinkage, i.e., loss of weight on the cattle) drives from pastures to the railroad stockyards.

Sometime around 1960 the triple decker trailer, nicknamed at first a "possum belly," then later acquiring the name that eventually stuck, "pot belly," was introduced. This innovation, combined with the obvious desire of the railroads to get out of the often nettlesome cattle shipping business and into other types of more lucrative freight traffic (such as containers), led directly to the third period of Flint Hills history, the Trucking Era. By the late 1950s and early 1960s trucks were taking on more and more of the shipping business, and by the mid-1960s nearly all the railroad stockyards in the Flint Hills had become empty. A few might have lasted until around 1968, but by the mid-1970s most of the stockyards in the Flint Hills were not only abandoned, but had been torn down. Today there are railroad stockyards in various stages of disrepair, some still being used by local ranchers for sorting or working cattle, still standing at Matfield Green, Diamond Springs, and Sallyards, but most of them, including the giants among railroad shipping pens at Bazaar and Cassoday, at Grand Summit and Volland, at Hamilton and Root Station, at Virgil and Batesville, have all been torn down, the heavy dimension lumber and posts, saturated with creosote to protect them from rot, salvaged or burned.

Distinctive Features of Flint Hills Folklife

Ranching in the Flint Hills differs from ranching in most of the rest of the ranching West in several distinctive ways. These distinguishing features include a mix of farming and ranching, custom grazing, and pasture burning.

The reasons for these features are determined by both culture and nature: by settlement and land ownership patterns and by rainfall. Ranches in most western states tend to be self contained and cover large amounts of ground. Ranches in the Flint Hills

are much smaller and their pastures are often scattered rather than contiguous. One reason for this difference is rainfall. Precipitation in the Flint Hills averages over 30 inches per year, whereas on the big spreads in Texas, the desert Southwest, or the Great Basin, rainfall runs 15 to 18 inches in a good year, far less in most. Because of the relatively abundant and relatively consistent rainfall, combined with the richness of the tallgrasses, Flint Hills ranchers do not need nearly as much land as a Texas or Nevada rancher to handle the same number of cattle. An 8,000 acre ranch in the Flint Hills can handle as many cattle as 80,000 on the High Plains of Colorado. A cow and a calf that can be kept year round on eight acres here will need twice that in western Oklahoma, four to five time that in west Texas.

There's a song in the musical Oklahoma!, "The Farmer and the Cowboy Can Be Friends." In the Flint Hills the farmer and the cowboy can be, and often are, the same person. Because of the rainfall and fertile bottom lands along the many streams running through the Hills, combined with the native grasses on the rocky, untillable uplands, many agriculturists here are farmer-stockmen, combination farmers and ranchers. A man might well drive a tractor one day and ride a horse the next, raising both grains crops and cattle. Drive some of the back roads in the Flint Hills and you'll see broad fields of alfalfa, wheat, corn, and soybeans, fields that get smaller and narrower as you go upstream until finally there are no fields at all, only grass and cattle. The proportion of farm ground to grazing land is small, however, for both the underlying rock of the uplands (nature) and the early-established practice of transient grazing (culture) have made the Flint Hills one of the premier cattle-ranching regions of the American West.

Custom grazing of transient (i.e., non-native) cattle is not necessarily unique to the Flint Hills, but it is much more prevalent here than in any other major ranching area in the nation, partly because of settlement and land-holding patterns but largely because of the nature of the four major tallgrasses--big bluestem, little bluestem, Indian grass, and switch grass. These warm-season grasses burgeon forth in mid April and grow vigorously as the weather warms in May and June. By mid July the high protein level of bluestem (a term used generically in the area to include all four tallgrasses) peaks and declines as the plants begin to transfer the sun's energy from the leaves to the roots, storing up energy for survival over the fall and winter months. Bluestem roots go deep into the ground, which help it survive both drought and overgrazing. Its ability to regenerate after years of grazing abuse is amazing, but it will not recover from the plow. By the time of the first frost the grass might still be bright in color but its nutritive value has declined steeply. During the winter months a steer without supplemental protein would get almost no food value whatever from the brown grass. Contrast that to some of the short grasses out West, which have even greater food value during the winter months than during the growing season. But on bluestem in the spring, when it greens once again, that steer might gain two or three pounds a day.

It is more than protein-rich grass, however, that is responsible for the rapid weight gains in cattle on Flint Hills pastures. The roots of these grasses go deep into the ground, soil that is underlain with limestone. Limestone, easily soluble, is brought by the roots into the leaves where it is transmitted to grazing cattle as calcium, a mineral that helps to build bones. Thus at the same time that protein from the grass is packing meat onto the animal, the calcium is increasing the size of the bones (what a cattleman calls the "frame"), which means that even more meat can be packed on. No wonder that cattlemen revere the Flint Hills as steer country. This is not to say that there are no cow-calf operations in the Flint Hills, for there are many, and some registered herds (Herefords raised by Robert Hazlett of El Dorado, for instance, or by Elmore Stout of Cottonwood Falls) have gained national reputations. Still the chief use, and greatest fame, of Flint Hills grass has been for adding weight to stocker cattle.

One reason that there are few large, self-contained, contiguous ranches in the Flint Hills is because of the way the land was settled here. When Kansas Territory opened for occupation in the 1850s, most of the settlers were farmers who took up relatively small acreages. **In the Flint Hills these pioneers would set up individual farmsteads in the lowlands while cattle were being run communally on the open range uplands.** In only a few places were large tracts of pasture land available for establishing large ranches, as was the case half a century later in the Osage Hills, which had been an Indian reservation and thus not open for settlement. While there have been many pastures of 5,000 acres or more, most Flint Hills pastures range from one to four sections in size.

A distinctive figure in the Flint Hills is the pastureman (some of whom are women). The pastureman, or a custom grazier in the terminology of the Kansas Livestock Association, is a middleman, a go-between who serves and deals with both pasture owners and cattle owners. He may or may not be a rancher with land and cattle of his own, but in the parlance of the Flint Hills he "runs cattle" and "looks after grass." His mode of operation takes many forms. Sometimes he owns pastures and takes in other people's cattle rather than buying or raising his own. Sometimes he is contracted by a cattle owner or a pasture owner to care for cattle at so much per head or so much per acre. Sometimes he leases grass from a landowner, then "fills" it with steers or heifers from a cattle owner, making his money from the difference between the lease and the sub-lease prices. Rarely do the landowner and cattle owner ever meet. Sometimes even the landowner and pastureman don't meet. A landowner's heirs have been known to, in essence, inherit a pastureman along with a pasture, and sometimes a pastureman with a good reputation will get hired by telephone from a cattleman he has never met. Sometimes pasture deals are sealed with a handshake; sometimes there are signed contracts.

In this triumvirate of land owner, pastureman, and cattle owner, each has specific duties. The land owner is responsible for paying taxes and paying for major capital improvements, such as new fences, stock pens, or ponds. The cattle owner must provide transportation of his livestock to and from the pasture, pay for any special feeding needs or veterinary expenses, and pay the pasture bill when the cattle are shipped at the end of the season. The pastureman is responsible each spring for repairing fences and water gaps and for burning pasture (to be explained below) before the cattle arrive, for receiving cattle, for looking after them during the grazing season and providing routine medical care (such as doctoring for pink eye or foot rot), for providing adequate salt and access to water, and for providing a crew to gather the cattle at shipping time. Traditionally, the pastureman was responsible for the "count," i.e., for the number of cattle placed in his care. In other words, if he received 2,000 cattle in the spring, he must produce enough live cattle or their brands (cut from the hide) or bones of dead ones to equal the 2,000 placed in his care. If he cannot, then he must pay for each animal, at the average cost per head minus the pasture bill, that has strayed or been stolen and thus

cannot be accounted for at shipping time. More recently, being responsible for the count is not automatically assumed, but it is often made part of the pasturing agreement between owner and caretaker.

The most colorful feature of ranching folklife in the Flint Hills is the custom of burning pasture. In the trail drive era pasture burning was relatively easy, but today it is, in the words of the late Slim Pinkston, "the hardest part of the job." In the nineteenth and into the twentieth century, almost all pastures were burned. Cattle owners insisted on it, often in writing, because they believed that cattle did better (i.e., gained more weight more quickly) on burned than on unburned ground. A steer had much easier access to new grass if there was no mass of old dead grass in the way. Agricultural burning in one form or another is practiced world wide, but it has been especially prevalent in the Flint Hills. In earlier days burning was widespread, general, and usually done in March, sometimes as early as February. As public opposition, backed by scientific opinion, mounted, however, some landowners began to oppose the practice, or wanted to burn later in April, which meant that by mid-twentieth century most pastures had to be burned individually rather than several all at once.

Public opposition started early because the smaller rural landholders and farmers not only did not benefit but also because many times the fast-burning, intense, uncontrolled prairie fires burned their hay stacks, destroyed their buildings, killed their livestock, and sometimes killed people. Townspeople in the Flint Hills complained about the soot and smoke. As early as the 1880s an editorial in an El Dorado newspaper blamed the practice for every ill besetting the countryside from drouth to grasshopper plagues. In the early decades of the twentieth century agricultural scientists at Kansas State Agricultural College began conducting experiments designed to show the negative effects of burning. Letters to editors throughout Flint Hills counties railed against burning. No one wrote in to defend prairie fires, but the farmers and ranchers quietly kept on burning. And, strange to say, the results of the K-State experiments somehow didn't turn out as to be as negative as had been expected. County agents, who were supposed to be encouraging ranchers and farmers to follow scientific advice, couldn't help but notice that burned pastures looked healthier--better grass, fewer trees and other weeds--than those that weren't being regularly burned. Over the past couple of decades numerous experiments at the Konza Prairie Natural Research Area near Manhattan (a Nature Conservancy property administered for scientific research by the Kansas State University Department of Biology that is internationally recognized as the premier grassland research facility in the world) have proven the efficacy of controlled burning, thus providing an instance of traditional folk practice being confirmed by scientific study.

The earliest definite record of ranchers deliberately burning prairie grass in the Flint Hills is found in an 1863 diary (held by the Kansas State Historical Society) kept by Elisha Mardin in Chase County. Mardin records what seems to be an accidental fire in March of that year, then describes two intentional burns in April. Mardin and other ranchers may well have learned this technique of prairie renewal from the natives. Oral tradition from Council Grove, site of the last two Kaw Indian reservations in Kansas, tells how each spring the Indians would gather large balls of dead grass, attach them to a rawhide lariat, set them afire, then drag them from the back of a galloping horse to set miles of grass alight. Their purpose--to provide easy access to new-growth grass, which, in turn, would attract the bison--parallels that of later ranchers and their steers. A few years ago Cottonwood Falls instituted an annual Prairie Fire Festival held during pasture-burning season to celebrate this colorful part of the Flint Hills work cycle. A few years ago I realized how ingrained the custom was, just how deeply rooted it is in Flint Hills folk culture, when I was asked to serve on a master's degree thesis committee for an anthropology student at Wichita State University. As part of her research she had observed a prescribed, intentional prairie burn in Chase County and one in the Gypsum Hills of Barber County, where the practice was just being introduced. The Gypsum Hills rancher had arranged for several motorized water sprayers and over three dozen people, including neighbors and rural fire department personnel, to help burn a few hundred acres. In the Flint Hills, where pastures have been deliberately fired for a century and a half, she watched one man burn a 3,000 acre pasture.

Conclusion

Bluestem grass is the economic backbone and the cultural core of the Flint Hills. The history and the folklife of the region all connect in one way or another to cattle and grass. Good ranchers in the Flint Hills don't talk about raising cattle; they talk about managing grass. Take care of the grass and it will take care of you is a phrase I have often heard.

Several years ago I gave a talk at the Grassland Research Institute in England. My topic was pasture burning, a concept the audience found intriguing, to say the least. But they seemed most astounded by my answers to two questions: "How much fertilizer is required?" and "How often does it have to be re-seeded?" None and never. **The Flint Hills and the bluestem grass with which they are covered are truly among nature's marvels.**

Throughout each of the three stages of its history the Flint Hills region has maintained its cultural integrity because the people who have lived here have maintained their focus on cattle and grass, just as the Native Americans before them focused on bison and grass. The late editor of the El Dorado Times, Rolla Clymer, known as the Poet of the Flint Hills for his evocative editorials about the beauty and the bounty of the Hills, once wrote: "The Flint Hills are changeless and unchangingand have so stood since their limestone ridges first broke from beneath the surface of prehistoric seas. All modern development, the growing complexity of civilization's advance have surrounded and hemmed them in but have failed to alter their essential character."

That essential character, the cultural integrity and, more important, the ecological integrity of the Flint Hills--would be permanently damaged by the introduction of large-scale wind turbines.