Farming in the Flint Hills: A Photographic Essay

by Thomas D. Isern

The Flint Hills of east-central Kansas, a region of rolling to rough country embracing all or parts of at least a dozen counties, provide a distinctive environment for the development of agricultural practices and technologies. The valleys of the creeks and rivers contain good, black ground that sustains intensive farming. The soils of the uplands are loose, littered with bits of limestone, and laced with ledges of the same stone. Most of the uplands remain tallgrass prairie, the native bluestem, Indian grass, and switchgrass providing summer grazing and prairie hay. The geography of the Flint Hills, with limited acreage available for raising crops, dictates that the agricultural population should be sparse and that agricultural practices should vary from those in the Corn Belt to the east or the Wheat Belt to the west.

Various distinct types of agricultural operators have found their own niches in the Flint Hills. Bottomland farmers were quick to occupy the valleys and raise feed grains and livestock. Drovers from Texas arrived in the 1860s and 1870s to fatten cattle on the uplands. As railroads penetrated the area, ventriloquise upland farmers tried their luck on poor ground, while urban capitalists invested in stock farms in the bottoms. Herd laws and barbed wire ended the era of free range in the mid-1880s, ushering in a period when farmers diversified their operations in the bottomlands and transient grazing dominated the uplands, with southwestern cattlemen shipping steers by rail to Flint Hills pastures. Throughout the time since the 1890s, however, and especially since the 1930s, the farmers and stockmen of the Flint Hills have sought to establish well-integrated operations that balance production of feed grains in the bottoms with utilization of native pasture in the uplands. They have exploited the geographic diversity of their region to achieve diversification and stabilization in their operations.

Methods of agriculture, the basic elements in the relationship between farmers and the land, derive from a number of sources, and environment is only one of them. Soil, rainfall, topography, plants, animals, and other features of the environment in a particular region constrain and shape agricultural endeavor, but so do additional influences. One of these is the cultural heritage the people brought to the region when they settled there. Along with their language, religion, and other cultural attributes,

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1. By "Flint Hills" I refer to a region as conceptualized by geographers and by popular usage, not more narrowly to the hills themselves as defined by geologists. The twelve counties are Butler, Chase, Chautauqua, Cowley, Elk, Geary, Greenwood, Lyon, Morris, Pottawatomie, Riley, and Waubunsee. Osage County of Oklahoma might be considered part of the same region, but in Oklahoma that area is known as the Osage Hills.


2. Thomas D. Isern, "Farmers, Ranchers, and Stockmen of the Flint Hills," presents a fuller discussion of the evolution of farming in the Flint Hills upon which this summary is based. Paper delivered at the annual meeting of the Western History Association, Salt Lake City, Utah, October 14, 1983; copies available from the author.
they carried habits of farming. Another is intervention by external forces such as governmental programs, the international grain trade, or national corporations.

The most obvious influence on methods of farming, however, and one that interacts with the others, is technology. Most innovations of agricultural technology in the twentieth century have come from government-sponsored research. Farmers adopt the new technologies generated by the experiment stations and make them a part of their evolving relationship with the land.

Useful sources for the investigation of the role of technology in farming are the writings and other records of county agricultural extension agents. The mission of the county agent places him at the cutting edge of agricultural technology. Although primarily a disseminator of technologies developed through government-sponsored research, he is (or at least has been in the past) more than this. County agents not only promote up-to-date methods but also observe and report practices and technologies as they exist in the field.

County agents came to the field through a combination of local, state, and federal efforts. Inspired by the example of a few isolated organizations of local initiative and by a belief in the wonders of scientific agriculture, Congress in 1914 passed the Smith-Lever Act. This legislation created the United States Extension Service and spawned a network of state extension services to cooperate with the federal agency. The state services in turn sent agents into the counties. County farm bureaus were the local support organizations of the agents. Subsequently the county farm bureaus combined to form state farm bureaus and the American Farm Bureau Federation.3

Allied with local farm bureaus, the first county agents arrived in various counties of the Flint Hills at different times, ranging at least from 1918 to 1938. Fortunately for the historian, the annual reports of county agents during the 1920s and 1930s were not the dry, statistical, standardized documents county agents file today. They contained certain standard elements, but otherwise they were free form, and county agents reported all manner of phenomena. More fortuitously yet, these were the decades when ordinary people acquired and learned to use roll-film cameras. County agents therefore took numerous photographs and pasted them into their reports.

One copy of each report went to the state extension service in Manhattan and one to the federal extension service in Washington. These copies have been destroyed. The federal copies were microfilmed on 16mm microfilm by the National Archives prior to their destruction, and microfilm copies are available at the state extension service office and at the Federal Records Center in Kansas City.4 Because of the order in which the reports were filmed, however, they are difficult to use, and they do not preserve the photographic images in usable form.

A third copy of each report was retained at the county office. These records have fared unevenly. Owing to changes in the administration of county extension programs and in some cases to the general neglect of county records, many have perished. Thus far three surviving collections of early county agent reports in the Flint Hills have been located. The records of Lyon County, long stored in the Lyon County Courthouse, have been transferred to the Lyon County Historical Museum. Similarly, the old extension records of Chase County are in the Chase County Historical Society Museum. Extension reports for Greenwood County are still shelved at the county extension office in the courthouse. In addition, many other original photographs by J. W. Farmer, Greenwood County agent during the 1930s, are available to researchers at the Greenwood County Historical Museum.5

This photographic essay is drawn from the agricultural extension reports for these three counties in the Flint Hills. The images selected not only portray elements of the technological history of farming in the region but also argue eloquently for the preservation of such valuable records.6

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4. The county agent reports were microfilmed from National Archives Record Group 33, Records of the Federal Extension Service. The microfilm series for Kansas is T861: Extension Service Annual Reports: Kansas, 1918-1944.

5. Lyon County Extension Reports, 1918-1964, Lyon County Historical Museum, Emporia; Chase County Extension Reports, 1920-1967, Chase County Historical Society Museum, Cottonwood Falls; Greenwood County Extension Reports, 1918-1930, present, Greenwood County Extension Office, Greenwood County Courthouse, Eureka; J. W. Farmer Collection, Greenwood County Historical Museum, Eureka.

6. Credits for photographs are abbreviated as follows: CCHM (Chase County Historical Society Museum); copy negatives on file at the Kansas State Historical Society); GCHM (Greenwood County Historical Museum); copy negatives on file at the Kansas State Historical Society); GCEO (Greenwood County Extension Office); and LCHM (Lyon County Historical Museum).
Lyon County 4-H chapter members harvesting their castor beans, 1944. This was a "victory project" to aid the American effort in World War II, or at least to make the 4-H members aware of it. Castor beans yielded valuable oil for war production (LCHM).
TOP LEFT: Farmers loading lime along the Santa Fe Railway branch near Madison, 1929. The application of lime reduced acidity in the soil and produced better stands of legumes. The railroad offered special rates for shipping in agricultural lime and dumped it at designated points along the right-of-way (GCHM).

BOTTOM LEFT: Cultipacker, Chase County, 1935. During the 1930s county agents encouraged the planting of legumes, such as nitrogen-fixing plants as alfalfa and sweet clover. The nurture of such crops required a fine, well-prepared seedbed, hence the need for a cultipacker. The cultipacker, often weighted with logs or stones, broke up clods of earth (CCHM).

BELOW: Creep feeder at V. A. Boone’s place, near Neal, 1930. By the early 1930s county agents were encouraging stockmen in the Flint Hills to build up their own breeding herds and to depend less on cattle shipped in from elsewhere. They called this establishment of native cowherds the “Bluestem System.” Under this system stockmen started their own calves on feed with creep feeders such as the one pictured here. Calves could pass through the gap in the posts and get grain from the feeder, but cows were excluded (GCHM).
TOP RIGHT: Spraying cattle with DDT, Moxley Ranch, Lyon County, 1945. Developed for government use during World War II, DDT was used after the war to control lice, flies, and other insect pests on livestock and crops. Indiscriminate use and the residual character of the chemical led to its subsequent removal from the market, but in 1945 the Lyon County agent termed DDT “a wonder drug” (LCHM).

BOTTOM RIGHT: Vaccinating calves for blackleg, Chase County, 1920. Blackleg is an infectious disease of cattle, almost always fatal. Calves are especially susceptible to it. Many stockmen still were skeptical of the merits of the vaccine. County agents often went to the farms and did the vaccinating themselves in order to prove its efficacy (CCHM).

BELOW: Cattle arriving at Bazaar, 1920. Each spring carloads of cattle from Texas and other neighboring states arrived in Bazaar, a major shipping point on the Santa Fe Railway, to be put on upland grasses for the summer. “Pasture is the one thing we are blessed with,” the Chase County agent reported with this photo (CCHM).
TOP LEFT: Snow fence silo, Greenwood County, 1920s. Cement or tile silos were expensive, and thus many Flint Hills farmers, in order to take advantage of good silage yields from sorgo cane in the 1920s, erected snow fence or “corn slat” silos. Silage often proved to be a more economical winter feed for cattle than corn (GCHM).

BOTTOM LEFT: Results of a rodent control demonstration, Chase County, 1926. Extension rodent control specialists conducted demonstrations of the effectiveness of cyanide gas against gophers and rats (CCHM).

BELOW: Spraying bindweed among shocked corn, Greenwood County, 1931. State law provided that the county commissioners should purchase spraying equipment to combat noxious weeds. Generally the counties turned the spraying units, such as this one, over to the farm bureau. Bindweed, a prolific and persistent flowering vine, was the worst noxious weed in the Flint Hills (GCHM).
TOP RIGHT: Hogs at a self-feeder, Chase County, 1920. Hogs ate well and gained rapidly if feed was available at all times through a self-feeder. "In a county like Chase, hogs do not pay very well," remarked the county agent. "Corn is usually scarce, and is very expensive to ship in. We have induced a few farmers to plant early varieties of corn for hogging down." "Hogging down" meant turning the hogs into the field to knock down and eat the corn (CCHM).

BELOW: Portable poultry house, Mrs. George Miller's farm, Chase County, 1934. A portable poultry house could be moved periodically to transfer the birds away from vermin and disease on the old site. The county agent quoted Mrs. Miller as saying, "It pays to raise poultry on clean ground" (CCHM).

BOTTOM RIGHT: A. D. Fry and a temporary farrowing pen on sweet clover pasture, near Eureka, 1925. Farmers in the Flint Hills often put their sows on pastures of clover or alfalfa. With this temporary farrowing pen, Fry could load up a sow ready to give birth in the field. The piglets dropped through the slats to safety from the mother (GCHM).
TOP LEFT: Smut treating demonstration on the Sam Brookover farm, near Eureka, 1926. To prevent infestations of smut, a destructive fungus, in crops of kaffir corn, an upland feed grain, farmers used churn or barrel treaters to coat their seed with copper carbonate dust. They purchased the dust at local drugstores, placed it in the barrel along with the seed, and turned the crank to mix it (GCHM).

BOTTOM LEFT: Demonstrating a Corsicana terracer on the Charles Newman farm, near Virgil, 1930. County agents, along with extension specialists from Manhattan, conducted conservation terracing schools during the 1930s in an effort to stop soil erosion. The Greenwood County Farm Bureau bought this terracer and leased it to farmers to make terraces (GCHM).

BELOW: Hillside ditch on the George Schwab farm, near Madison, 1930. The ditch caught run-off from hillside pastures and prevented the erosion of cropland below (GCHM).
BELOW: County agent F. D. McCammon and farmer William Berends inspecting a concrete outlet ditch, Chase County, 1933. Concrete outlets allowed water to flow off terraced ground without eroding it. McCammon commented, "Probably 50% of the tillable land in Chase county should be terraced. At the present time there is less than 1% of land terraced" (CCHM).

TOP RIGHT: W. T. Ball and his hopperdozer, Lyon County, 1936. To combat plagues of grasshoppers, Ball mounted a coal oil pan and a tin barrier on his go-devil (an implement for gathering hay). The hoppers were supposed to fly up in front of the implement, hit the tin, and fall into the coal oil. This was called a hopperdozer (LCHM).

BOTTOM RIGHT: A. J. McCabe cleaning out his hopperdozer, near Cottonwood Falls, 1937. McCabe brought the hopperdozer into the automotive age by mounting it on the bumper of his Model A (CCHM).
R. A. Randall, near Climax, making a creosote chinch bug barrier. Chinch bugs and grasshoppers were the most serious insect pests in the Flint Hills. To stop chinch bugs migrating from small grain stubble into growing corn or sorghum, farmers turned a furrow between the fields and laid down a line of creosote on the ridge. Randall is allowing the creosote to drain from a hole in a bucket onto the loose dirt (GCEO).