

United States Department of the Interior

NATIONAL PARK SERVICE 1849 C Street, N.W. Washington, D.C. 20240

IN REPLY REFER TO:

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: MC64501260

Date Approved: 2-21-17

Multiple Property Documentation Form: Historic Agricultural Resources of Phillips County

County: Phillips

State: Colorado

The National Register of Historic Places multiple property documentation form is approved, subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper

Amended Item in Nomination

Section F should include the following statement in the part titled "Significance—General":

"Criterion B may be applied to agricultural resources in Phillips County if they are associated with leaders in agricultural organizations or movements, farmers or others associated with the theme who became important elected officials and influenced policy change or implementation, individuals who were associated with significant agricultural innovations, and others associated with the theme who made important contributions to the quality of life in Phillips County, as described in the National Register bulletins How to Complete the National Register Registration Form and How to Apply the National Register Criteria for Evaluation. The survey that resulted in preparation of this multiple property documentation form did not include the identification of such individuals, but this does not preclude the existence of properties associated with important leaders and innovators."

Notification and Distribution

National Register property file Nominating Authority, without nomination attachment United States Department of the Interior National Park Service

National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer, to complete all items.

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x New Submission	Amended Submission	
A. Name of Multiple F	Property Listing	
Historic Agricultural F	Resources of Phillips County, Colorado 1889-	1965
B. Associated Histori	c Contexts	
Settlement and Pione	eer Agriculture (1889-1900)	
The "New Nebraska:	" Progressive Farming and Economic Growth	(1900-1930)
Depression, Drought	and the Federal Relief (1930-1946)	
Midcentury Moderniz	ation (1946-1965)	
C. Form Prepared by		
name/title_Abigail Chris	stman, consultant	
organization Center of	Preservation Research, University of Colorado	date June 2015 (revised Jan 2017)
street & number Camp	us Box 126 P.O. Box 173364	telephone_303-315-5323
city or town_Denver	state_CO	zip code_80217-3364
D. Certification		
12		
the National Register docur Register criteria. This subm of the Interior's Standards a (See continuation sheet for State Historic Preserva State Historic Preserva	vation Officer Ing official Ation Office, Colorado Historical Society	f related properties consistent with the National set forth in 36 CFR Part 60 and the Secretary
State or Federal agency and	d bureau	
I hereby certify that this mul related properties for listing	tiple property documentation form has been approved by the in the National Register.	e National Register as a basis for evaluating
Signature of the Keeper	Date of Action	

Historic Agricultural Resources of Phillips County, Colorado 1889-1965	Colorado	
Name of Multiple Property Listing	State	

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheet in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

Page Numbers

E. Statement of Historic Contexts

(If more than one historic context is documented, present them in sequential order.)

F. Associated Property Types

(Provide description, significance, and registration requirements.)

G. Geographical Data

H. Summary of Identification and Evaluation Methods

(Discuss the methods used in developing the multiple property listing.)

I. Major Bibliographical References

(List major written works and primary location of additional documentation: State Historic Preservation Office, other State agency, Federal agency, local government, university, or other, specifying repository.)

Primary location of additional data:

,
[X] State Historic Preservation Office
[] Other State Agency
[] Federal Agency
[] Local Government
[X] University
[] Other
Name of repository:
History Colorado
University of Colorado Denver
Phillips County Historical Society

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 seg.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 120 hours per response including 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.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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Section E—Statement of Historic Contexts

The Multiple Property Documentation Form (MPDF) Historic Agricultural Resources of Phillips County, Colorado, 1889-1965 covers built resources and rural historic landscapes associated with the agricultural development of Phillips County from the creation of the county until 1965, in accordance with National Register guidelines. The MPDF will provide a context for understanding the conditions that shaped the settlement, development, economy, and agriculture of the county, as well as evaluating the physical resources that resulted from these activities. Key factors in the development of the county included transportation routes, the free government land offered under the Homestead and Timber Culture acts, the evolution of dry land farming techniques, and agricultural innovation and modernization. Agriculture has been the basis of the county's economy since settlement and the history of the farms and communities of Phillips County are closely intertwined. The settlement of the northeastern corner of Colorado began in the 1880s, as the lure of open lands drew American emigrants from states to the east as well as European immigrants.

In 1887, the Chicago, Burlington, and Quincy Railroad (commonly referred to as the Burlington Route and also known as the Burlington and Missouri through Nebraska) built a branch through northeastern Colorado spurring the settlement of what would soon become Phillips County. The affiliated Lincoln Land Company platted communities along the route. As in the case of neighboring Kansas, the railroad was a dominant factor in settlement: "It is difficult to overstate the influence of railroads on settlement and town location in western Kansas, and its effect on the vitality of all communities throughout the state. The railroad did more to create towns and shape the development of Kansas and the western United States than any other single force in the nineteenth century" (Wolfenbarger E-17). According to historian Lauren Giebler,

the county is one of the western-most (and last remaining) Burlington Route settlement areas (...) Recruiting immigrants achieved two goals for the railroad companies: 1. Selling land to incoming settlers helped recoup construction costs, and 2. Establishing stable farming communities ensured future earnings through a steady stream of agricultural produce that their trains could take to market. No other railroad was as progressive or aggressive about discovering and promoting new cash crops for the Great Plains as the Burlington Route (Giebler memo).

The communities of Phillips County—Haxtun, Holyoke, Paoli, and Amherst—developed as service centers for the surrounding farmland. They provided farmers with grain storage and shipping services, transportation links, agricultural implements, banking services, groceries, and other goods. Many farm families also came into town for school, church, and social activities.

The larger area comprising what is now Phillips County was Nebraska Territory prior to 1860-1861, becoming part of Weld County in 1861 with the creation of Colorado Territory. Platte County cleaved off of Weld in 1872, including the land of the future Phillips County. This configuration lasted until 1874, when that area reverted to Weld County. Colorado became a state on August 1, 1876. In 1887, Logan and Washington counties were cleaved off, with Logan including the future Phillips County. Finally, in 1889, Sedgwick and Phillips counties emerged from Logan (Stanwyck).

NPS Form 10-900a (Rev. 8/86) OMB No. 1024-0018

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The MPDF is based on an extensive reconnaissance-level survey of agricultural resources in Phillips County constructed prior to 1970, as well as selective intensive-level survey. Located in northeastern Colorado, Phillips County borders Sedgwick, Logan, and Yuma counties in Colorado and Chase and Perkins counties in Nebraska. Part of the high plains, the climate of Phillips County is semi-arid with an average annual rainfall of around 18". The elevation is 3,750 feet. The primary industry of the county is agriculture. Though a relatively small county (688 square miles), the land is intensively used with 432,154 acres of farmland as of the last agricultural census in 2007. The average farm size is roughly 1300 acres.

Though small in size, Phillips County is one of the most intensively farmed areas of the state and one of the most productive. According to the *Colorado Yearbook* in 1918, "This is one of the best non-irrigated farming sections of the state. There is almost no waste land in the county and the cultivated area is increasing rapidly each year" (163). The following year the *Haxtun Harvest* declared: "Phillips County is the state's leading agricultural county in proportion to its size, having a larger percentage of its area in cultivation than any other county" (*Haxtun Harvest*, July 31, 1919). Part of its success is due to the fact that northeast Colorado receives on average more precipitation per year than the rest of eastern Colorado. Phillips County also has a unique character based on its settlement patterns and location on the Nebraska border. The county attracted a large number of settlers of German and Scandinavian decent, many second- or third-generation immigrants coming from Nebraska or other Midwestern states. With them came Midwestern culture, family ties, farming techniques, and building traditions, creating a county that resembles Nebraska more than Colorado.

The historic contexts developed for this MPDF cover four themes: the late nineteenth-century settlement boom and subsequent bust in Phillips County; the early twentieth century growth in farming and associated town development; the drought and Depression of the 1930s; and mid-twentieth century modernization.

Settlement and Pioneer Agriculture (1889-1900)

Sodbusters in Eastern Colorado

In 1823, explorer Stephen Long labeled the Great Plains "The Great American Desert." For the next several decades, Americans believed that the absence of wood and water in the region was a barrier to settlement, viewing the lack of trees on the prairie as a sign of unfertile soils. During the 1850s and 1860s, eastern Colorado was viewed simply as an obstacle that had to be traversed in order to get to the Rockies and its gold camps. Most travelers followed the route of the Arkansas or Platte Rivers, sticking close to water sources. The popular contemporary image of the plains remained that of a wild, desolate place dominated by Native Americans (Wycoff 1999, 154-157). However, as settlers kept moving west in search of places with fewer people, open land, and greater opportunities, that conception of the plains changed.

For the early settlers arriving in the 1860s, there was automatic conflict with the Native Americans who called the area home. The complexity of the unfolding of the tension between an entitled belief in Manifest Destiny

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and Native American claims to ancestral homelands is broader than the scope of this study allows. The November 29, 1864 Sand Creek Massacre, wherein 675 U.S. volunteer soldiers under Colonel John M. Chivington attacked a peaceful village of about 700 Cheyenne and Arapaho, resulted in the murder of around 200 majority women, children, and the elderly. More information is available at the Sand Creek Massacre National Historic Site in Kiowa County, Colorado. Subsequently, under the Medicine Lodge Peace Treaty of 1867, representatives of the Comanche, Kiowa, Kiowa-Apache, Cheyenne, and Arapaho agreed to renounce their claim to the land between the Platte and Arkansas Rivers and to move to newly established reservations. Conflict, however, continued as other bands refused to move to the reservations. The last military engagement in northeastern Colorado was at the Battle of Summit Springs on July 11, 1869. The army pursued the Cheyenne Dog Soldiers in response to raids on Kansas settlements. The army caught the Cheyenne warriors about 20 miles north of present day Akron in northeastern Colorado, inflicting a decisive defeat. Potential settlers viewed this defeat as opening up the plains to settlement. Having previously supported large herds of buffalo, the value of the plains for grazing began to be considered. Cattle trails were developed through the region as the open-range cattle industry boomed in Colorado. The arrival of the railroad in Colorado provided new market links as well as an easier way for potential settlers to reach Colorado. However, the golden days of the open-range cattle industry were brief with over production, over grazing, several hard winters, and drought threatening its viability by the late 1880s (Wycoff 1999: 157-161).

As open-range ranching struggled and lands farther east were snapped up by eager homesteaders, people began to reconsider the farming potential of eastern Colorado's High Plains. The initial settlers coming to Colorado had claimed land in areas that could be irrigated, establishing farms along the Platte and Arkansas river valleys. But as these areas began to fill, attention turned to non-irrigated areas. During the 1880s, a variety of boosters began promoting Colorado's plains as fertile land just waiting for crops. Railroad companies, immigration boards, local newspapers, chambers of commerce, and agricultural journals all endorsed the belief that the planting of crops and trees would result in increased rainfall, or that "rain would follow the plow." The trees would block winds, thus reducing their drying effect. The trees and crops would increase the amount of moisture in the atmosphere, resulting in more rainfall. It was also suggested that the newly plowed earth could store water, slowly releasing it into the atmosphere. Western Kansas, southwestern Nebraska, and northeastern Colorado were dubbed as the Rainbelt by those who believed the region would quickly be transformed from prairie to farm fields, with settlement able to alter the environment. Many interpreted several years of above average rain fall in 1883-1885 as proof of the success of this theory. In 1891, the Union Pacific Railway proclaimed that "the rapid settlement of eastern Colorado is tending, by reason of the culture and tilling of the lands, to greatly increase the rainfall" (Union Pacific Railway 1891, 45).

During the 1880s, the eastern plains of Colorado were rapidly transformed from Native American grazing land into a patchwork of farms. The settlement of eastern Colorado was stimulated by the arrival of the railroad and the shortage of affordable land in adjacent states. As Kansas and Nebraska began to fill by the mid-1880s, settlement spilled into eastern Colorado, resulting in a settler boom from 1886-1889 (Wishart 2013, 8-37). According to *The Resources and Attractions of Colorado for the Home Seeker, Capitalist and Tourist:*

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The tide of immigration has surged up to the Colorado State Line and is now overflowing the eastern part of the State. This vast territory lying north and east of Denver, larger in area than the States of Massachusetts, Connecticut and New Hampshire combined, formerly denominated a part of the 'Great American Desert,' is, through the indomitable pluck and energy of the hardy settler, fast assuming all the characteristics of a superior farming region" (Union Pacific Railway 1891, 20).

As the railroads extended across the west, they promoted the vast western frontier as a land of opportunity. Railroads needed settlers to succeed and invested a great deal of effort and money in attracting them. A land agent for the Burlington Route, Charles Russell Lowell, acknowledged the key role of the railroad in recruiting settlers: "We are beginning to find that he who buildeth a railroad west of the Mississippi must also find a population and build up business. We wish to blow as loud a trumpet as the merits of our positions warrants" (as quoted in Cutlip 1995, 149). Successful settlement meant more commerce for the railroads, creating markets for goods as well as shipping points for crops and livestock. In a newssheet published by the Burlington Route in 1872, the railroad pronounced:

No road proves a good investment unless its local freight and passenger traffic is heavy. No such traffic can exist except in a well-tilled and well-settled region. Therefore the railroad men have every inducement to advance the development of the country which their line traverses. . . . It is to be expected that they will sell low to actual settlers and furnish them every facility in the way of long credit, cheap freights, etc. *It is not to be supposed that railroad corporations surpass all men in disinterested benevolence, but it is beyond question that they know their own interest, and so will take some pains to help you earn a dollar whenever they can thus make two for themselves"* (as quoted in Overton 1941, 339).

Railroad promotional methods included direct marketing through handbills, pamphlets, and advertisements, as well as indirect promotion such as building community relationships and encouraging successful settlers and various individuals associated with the railroad to write glowing accounts of new communities, railroad policies, and agricultural opportunity for newspapers. The materials could be produced quickly and provided a way to offer new incentives or respond to negative press (Cutlip 1995, 153- 154). They were also printed in multiple languages. The Burlington Route sent pamphlets, maps, and handbills to foreign ports to advertise the land available to potential emigrants (Overton 1941, 301). The Burlington Route also hired foreign agents and even established an emigrant home in Liverpool that offered cheap lodging (25 cents a night), coffee (four cents), and food (eight cents) for emigrants waiting to depart for the United States (Overton 1941, 362). The Burlington Route wanted to attract the settlers that were most likely to succeed and competed with other railroads and immigration offices to draw the most promising settlers to their route (Overton 1941, 342). When George Harris was land commissioner for the railroad, he prioritized settlers from England and Germany as having the most potential:

I have so poor an opinion of the French & Italian immigrants for agriculturists that I shall not issue any circulars in their languages. My effort wills will be most confined to Germans, Scandinavians, English, Welsh

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and Scotch, as they make good farmers together with all I can induce from the Northern and Eastern States & the British Provinces of America (as quoted in Overton 1941, 303).

The availability of free land under the Homestead Act of 1862 also spurred many to try turning grasslands into farmland. With its offer of free land to any settler willing to make it productive, the Homestead Act was one of the key motivators for eager pioneers who dreamed of owning their own farm. The act soon became popularized as an ideal representation of America as the land of opportunity, with anyone able to achieve success through hard work. Homesteading would be an essential part of the settlement of Colorado, with 107,618 homesteads claimed statewide between 1864 and 1934. With thirty-three per cent of the state settled under the Homestead Acts, Colorado is behind only Montana and Nebraska in the total number of acres homesteaded per state (22,146,400 acres).

Land Acquisition

Settlers acquired land through a variety of methods, including proving up a homestead or purchasing land from the federal government, state government, or railroad. All distribution of public lands in the West utilized the land survey system established by the Land Ordinance of 1785, which organized the way that "unclaimed" lands to the west of the newly formed United States would be surveyed. The Public Land Survey System (PLSS) created a grid across the United States. The largest sections on the grid were called townships, six miles long and six miles wide. Each township was divided into 36 squares, called sections. Each section was a square mile and contained 640 acres. The sections were further divided into quarter-sections of 160 acres each. Many county roads and property lines in Phillips County continue to follow the grid established by the PLSS.

The passage of the Homestead Act did not replace previous methods of land acquisition, it supplemented them. Prior to the Homestead Act, most settlers spreading into the frontier regions of the United States purchased public lands from the government. Under the Preemption Act of 1841, individuals could buy 160 acres of land, generally for \$1.25 per acre. Many of the requirements were similar to the later Homestead Act. Claimants had to be at least 21 years old, the head of a household, and a citizen (a declaration to become a citizen was also accepted). The process began with filing a declaration of intent at the local land office and paying a filing fee. Individuals then had to prove up before gaining title. Before gaining the title, individuals had to publish their intent in order to give anyone with a conflicting claim the opportunity to contest the claim. The act also allowed those who had been squatting on public lands to gain ownership of the land for a reasonable price. The Preemption Act remained in place for several decades after the passage of the Homestead Act; it was not repealed until 1891.

Under the Homestead Act of 1862, the federal government promoted the settlement of the West by granting 160 acres of public land to individuals who resided on the land and put it to agricultural use. This was a significant swing in federal land policy, with the government shifting from selling land in order to raise revenue to giving away land in order to encourage the development of the West. Supporters of the Homestead Act believed it would encourage those struggling to make a living in the crowded cities of the eastern United States

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and Europe to move west and develop the region, establishing agriculture and industry and expanding the American economy. The Republican Party wanted to create new population centers in the West that were populated by small farmers without slaves, denying Southerners the opportunity to expand slavery westward. Homestead bills were introduced in the 1850s, but the legislation could not pass until after the secession of the Southern states in 1861.

Men or unmarried women at least 21 years old could file for homesteads. Those filing had to either be citizens or declare their intention to become citizens. Married women could file for a homestead if they had been deserted by their husband, if their husband was incapacitated by illness or injury and unable to work, or if their husband was imprisoned. If a single female homesteader decided to marry, she could keep the homestead as long as the man she was marrying had not also claimed land under the homestead law. If two homesteaders married, then one had to relinquish a homestead.

For those interested in homesteading, the first step was to find out what land was available by contacting a local land office. Homesteaders were then encouraged to visit the land. The next step was filing a claim, which included the homesteaders paying a filing fee of sixteen dollars and swearing that they were "well acquainted with the character of the land" (General Land Office 1909, 5). After filing, homesteaders had six months to establish residency on the land. Once on the land, homesteaders had to build a residence, make agricultural improvements, and reside on the land for five years. An extended absence from the homestead without permission would result in cancellation of the homestead entry. The local land office granted a leave of absence when "total or partial failure or destruction of crops, sickness, or other unavoidable casualty has prevented the entryman from supporting himself and those dependent upon him by a cultivation of the land" (General Land Office 1909, 14).

Because agricultural expansion was a key motivator, homesteaders were required to put the land into agricultural production. According to the law, homesteaders were to "cultivate the land continuously" but this could be defined broadly in areas better suited to grazing than crop production where "stock raising and dairy production are so nearly akin to agricultural pursuits to justify the issue of patent upon proof of permanent settlement and the use of land for such purposes" (General Land Office 1904, 14). The government did not set specific agricultural production requirements, but the homesteader was to show a good-faith effort at continuous agricultural improvement. A claim that the lands were too poor to either produce crops or be profitably grazed was not acceptable.

Homesteaders who did not want to wait five years to receive title could make proof early in exchange for a cash payment. This was referred to as a commuted entry. Homesteaders paid the same amount as land obtained under the Preemption Act, \$1.25 per acre. Originally homesteaders could commute a claim after six months of residing on the land and cultivating it, but this was later extended to fourteen months (General Land Office 1909, 15). The chief motivation for commuting a homestead was to get the ownership sooner so that the homesteaders could either sell the homestead or get a mortgage. An article in *Harper's New Monthly Magazine* in 1888 estimated that nine-tenths of homesteaders took commuted entry. In farming areas, few had the funds

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to sustain a homestead for five years without borrowing money for supplies and equipment. In many areas, mortgage companies would accompany a homesteader to the land office, paying for the commuted entry (around \$600-\$800 depending on the location) and giving the remainder to the homesteader (Spearman 1888, 236).

Homesteaders could prove up any time after the residence and cultivation requirements had been met. But if a homesteader did not make his final claim within seven years of the original filing, the claim could be cancelled if the homesteader could not show a good reason for the delay. When the homesteader was ready to make proof on a claim, a notice was filed in the paper, providing an opportunity for any who disputed the claim to contact the land office. The homesteader then visited the land office to testify that all the requirements had been met, bringing two witnesses to support his claim. There was also a final proof fee of \$6. The land office then provided the homesteader with a final receiver's receipt as proof of land ownership. The government could take several years to process the claim and issue the final patent, but homesteaders could use the receipt to mortgage or sell the land.

The Homestead Act was criticized for providing too little land for the establishment of a successful farm in the West. The government increased opportunities to acquire land with the Timber Culture Act of 1873. The aim was to transform the West's treeless prairies by offering 160 acres to homesteaders who successfully established trees on 40 of those acres within ten years. The goal was to provide wood for fencing and building material. Some also believed that the planting of trees, and cultivation in general, would bring more rainfall to the West. In much of the West, however, homesteaders found it very difficult to meet these requirements. The act was also open to fraud. It did not require those who filed claims to reside on the land, but allowed them use of the land for a decade without formal ownership or taxes. Manipulation of the act included homesteaders acquiring a tree claim with the specific goal of selling it to help fund the development of their homestead and ranchers using tree claims as a way to control the use of land without taxes. A timber culture claim could be kept for thirteen years before it lapsed if no one contested it, sometimes even longer if no one noticed the failure to fulfill requirements and make final proof (McIntosh 1975, 353-355).

Many speculators filed timber claims, hoping to benefit from the rise in value of the land. The speculators had a minimal outlay because it only cost \$14 to file on 160 acres and the filer did not have to pay taxes on the land (McIntosh 1975, 353). One way speculators could profit was by selling a relinquishment of a claim. A relinquishment was when the person who had filed a claim voluntarily cancelled the claim. The individual purchasing the relinquishment would accompany the original filer to the land office and file on the land as soon as the former claim was cancelled. Though it was illegal to sell a relinquishment, this became common practice. The General Land Office Commissioner William A.J. Sparks estimated that relinquishments sold from "fifty to five hundred dollars and upward," depending on the location (as quoted in McIntosh 1975, 353). Filers also took advantage of the system by relinquishing claims to other family members (such as holding land until a child was old enough to file a homestead claim), acquiring a tree claim with the specific goal of selling it to help fund the development of their homestead, and using tree claims as a way to control use of land for stock grazing without taxes (McIntosh 1975, 353-354). Only about thirty per cent of Timber Culture Act claims filed were successfully

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proved up. The Timber Culture Act was repealed in 1891, along with the Preemption Act. The act failed to transform the plains. By the early twentieth century, a Colorado extension employee reported that "nearly all the timber claims planted in the early settlement of the country have been abandoned. Just enough trees are alive to show what trees can be depended upon if given extra care" (Payne 1903, 11-12).

Several other acts were also passed in 1862 that helped support the settlement of the West. The Department of Agriculture was created to promote farming and agricultural expertise. The Morrill Act of 1862 provided funding to create universities offering agricultural instruction by granting federal lands to states. The states could sell or develop the lands in order to raise funds to establish "land-grant" universities. Colorado's land-grant university was created in 1870 when Territorial Governor Edward McCook signed legislation creating the Colorado Agricultural College in Fort Collins. The Pacific Railway Act of 1862 (as amended four times) designated a route for the transcontinental railroad and encouraged construction by granting large amounts of public land for railroad right-of-ways as well as additional sections of land that the railroads could sell to help fund construction. Completed in 1869, the transcontinental railroad helped move settlers westward and transport their products to market. However, transcontinental completion did not immediately create a stream of settlers, due to the sparse nature of towns and amenities (Giebler memo). The Burlington Route could not afford land grants until 1876, when it purchased tracts in Nebraska (Giebler).

Railroads marketed the public lands granted by the government directly to settlers. The Burlington Route offered multiple payment plans and other incentives in order to make their land as attractive as possible. For example in the South Platte district of Nebraska, settlers had four options to choose from: a ten year payment plan at 6% interest with only interest payments for the first four years; a six year payment plan at 6% interest with only interest payments for first 3 years and a 15 % discount off the ten year amount; a two year payment plan at 6% interest and a 20% discount off the ten year amount; and cash payment with a 25% discount (Burlington and Missouri Railroad Company 1878, 8). In order to encourage farmers over speculators, the railroad also offered a discount if the purchaser improved the land, "either cultivating one quarter of the land, or erecting building or fences equal in value to one quarter the price of the land" (Burlington and Missouri Railroad Company 1878, 6). Though making money from land sales was desirable, the primary goal was to fill up the county (Overton 1941, 293-4).

Settling Phillips County

The Burlington Route entered northeastern Colorado in 1887, building a branch line from Nebraska to Cheyenne, Wyoming. Established in Aurora, Illinois in 1849, the Burlington Route expanded rapidly after the Civil War, extending across Iowa and Nebraska. By the time the Burlington Route extended into eastern Colorado, the railroad and its affiliated town companies had decades of experience with recruiting settlers. Phillips County was one of 13 new counties created by the state legislature in 1889 in response to the huge population influx in eastern Colorado. According to local histories, the county was named for R. O. Phillips, a secretary of the Lincoln Land Company. Holyoke was selected as the county seat, and the Holyoke Board of Trade was soon established

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to encourage immigration to the county. This included publishing statistics aimed to promote its business potential. According to the Board of Trade, in 1888:

108 tons of broom corn were shipped from Holyoke; 103 cars of immigrants, goods shipped in; also 122 cars of coal and 11,000,000 feet of lumber were received at that point; 200,000 brick manufactured for buildings; 200 head of dressed hogs shipped out; 20 cars of beef cattle exported to eastern markets; 900 hides shipped by Witherbee Bros (Hall 1895, 269).

It is impossible to know what brought each settler to Phillips County, but contemporary boosterism likely influenced their decisions. Through newspapers, pamphlets, posters, and railroad agents, accounts of Colorado's landscape, climate, and investment opportunities reached far-flung audiences across America and Europe, illustrating in hyperbolic language the splendor, productive land, and profits to be made in the West. However, limited objective information on settlement conditions was available to those arriving in the early decades. Most publications had a clear agenda and were actively promoting settlement. When specific information on agricultural conditions was included is was generally highly optimistic, focusing on a few early stories of success.

The majority of Colorado promotion emphasized its mining wealth, scenic beauty, and healthy climate rather than its farming potential. *Crofutt's Grip-Sack Guide of Colorado* was typical, lauding the superior features offered by Colorado including:

The greatest number of mine locations. The greatest number of medicinal and mineral springs. The longest and deepest canons in the world. The grandest canon and mountain scenery. . . . The most healthful climate. The highest mountain ranges, peaks and parks in the union, and the source of the greatest number of large rivers. The finest, most abundant and greatest variety of game, feathered and haired, as well as the most numerous streams stocked with the finest trout. . . . These superior advantages, together with one of the most complete school systems, place the young State of Colorado in the front rank of progress, and should we judge from the rapid advancement of the past twenty years, before the dawn of the second Centennial of American Independence, she will be the most populous as well as one of the wealthiest of all her sister States (Crofutt 1881, 23).

Official state publications were equally complimentary. According to *Colorado: A statement of Facts prepared* and published by authority of the Territorial Board of Immigration:

In the valley of the Platte and its tributaries . . . are many thousand acres of land already under cultivation, while hundreds of thousands of acres in these valleys, second to no lands in the world for productiveness, now unoccupied, only await the application of skillful labor to yield gigantic crops, the profits of which, in view of the proximity of to a certain market, furnished by the mines on the eastern slopes of the mountains, would be almost incalculable (Territorial Board of Immigration 1872, 6-7).

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These descriptions are typical of the general praise found in guides to the West and Colorado. Few publications included specific information on Phillips County. One exception was the *Resources, Wealth and Industrial Development of Colorado* which described the county as

Exclusively an agricultural and stock raising county, cattle and sheep predominating. . . . It is admirably situated and is throughout a beautiful level prairie. . . . All the cereals, grasses, vegetables and melons are successfully raised, and the sheep and wool industry is important, particularly on account of the wide range of good pasturage. . . . The various settlements in county, with their numerous schools and churches, show a healthy condition, and as the results of the past two year's farming has fully sustained every enterprise (Agricultural Department, Colorado Exhibit at the World's Columbian Exposition 1893, 154-155).

The Burlington Route published a variety of promotional materials for all the areas where they had land for sale. Much of it was general boosterism such as this from an 1893 settlement guide to Nebraska, Kansas, and Colorado:

A marvelous and inexhaustible productiveness of soil, a climate uniformly healthful and invigorating, good markets within easy reach, unsurpassed transportation facilities, good schools and churches, and social advantages equal in every respect to those of the older settled districts of Illinois and Iowa, are offered to the farmer in Nebraska and contiguous portions of Kansas and Colorado (Chicago, Burlington, and Quincy Railroad 1893, 25).

But the publication also included some specifics on agriculture in Phillips County: "The corn average here begins to perceptibly fall off, on account of the altitude, which compels the planting of varieties that ripen more speedily and do not produce so enormously as the kinds planted further east, and lower down the slope" (Chicago, Burlington, and Quincy Railroad 1893, 10). It also included an account of successes in Phillips County: "D.J. Funkhouser raised 400 bushels of wheat on ten acres. E. Money sowed 195 acres and threshed 4,400 bushels. C. Elder harvested 29 bushels of wheat per acre. O. Herwig sowed 14 acres of barley and had a yield of 700 bushels; while S. D. Goddard had 950 bushels from the same area" (Chicago, Burlington, and Quincy Railroad 1893, 10).

However, not everything the Burlington Route published was uniformly rosy; it also included cautions in some publications since it was in the railroad's best interest to only attract settlers with the potential to succeed. According to a publication from 1873:

Before coming to purchase lands, see to it that you have the necessary means, and make careful consideration as to their expenditure. None should come without proper forethought and needful capital; but with these the way is open and prospects bright. It is difficult to make progress anywhere without capital, and nowhere is the need of money more keenly felt than in a new settlement. You will require money for the expenses of transportation for yourself and family, and such household goods and stock as you may determine to bring; for the first small payment of interest on the land purchased; for

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buildings and other improvements; for farming tools and provisions until you can make and sell a crop (as quoted in Overton 1941, 349).

For those seeking to buy railroad land, low prices likely attracted many to Phillips County. Land along the Burlington Route got cheaper the further west it was located, with land in eastern Colorado some of the cheapest available in the early 1890s. The Burlington Route recommended that prospective buyers with more funds should look in eastern Nebraska, those with less should look towards western Nebraska, and "the man with little besides a team" should look to the "extreme west" of eastern Colorado "if he is willing to work hard and live economically" (Chicago, Burlington, and Quincy Railroad 1893, 27). According to the Burlington Route, land in western Nebraska and Eastern Colorado that sold for \$10 per acre would "produce just as much, with less work, as land that can be sold in lowa for \$50, in Illinois for \$75, and in Ohio, Kentucky and New York for \$100 per acre" (Chicago, Burlington, and Quincy Railroad 1893, 26).

Potential settlers may also have been swayed by proclamations that the land currently available in Phillips County offered a unique opportunity for land ownership that would not last long. According to the Burlington Route,

The opportunity of cheap homes is disappearing and will never come again. The homeless of the next generation will, in all probability, always remain homeless. Land for farming and grazing will soon be practically unattainable by the average citizen; its price will rise to its value, and men who acquire it in time will have the future of themselves and children amply secured (Chicago, Burlington, and Quincy Railroad 1893, 28).

The majority of Phillips County's public land was claimed during the initial land rush of the late 1880s and early 1890s (unlike some eastern Colorado counties that experienced an initial homesteading boom in the late nineteenth century and a second homesteading boom in the early twentieth century). The choice farm land was claimed during Phillips County's initial settlement period with generally only less desirable federal land available by the early twentieth century. During the reconnaissance-level survey of rural properties in Phillips County conducted in 2010, 147 farmstead complexes were surveyed. Land acquisition information was obtained for the portion of land on which farmstead complexes were located. While these farm complexes reflect only a portion of the land acquisitions in the county (since many of Phillips County historic farmsteads have disappeared since the mid-twentieth century, consolidated into today's much larger farmsteads), they provide a good sampling of acquisition trends. Of the 147 farmsteads surveyed, 114 were patented during the 1880s and 1890s. Sale-Cash Entry was the most common acquisition type, with fifty-five farmsteads. This entry refers to land purchased from the federal government, either land claimed under the Preemption Act or a commuted homestead entry. Twenty-eight settlers claimed land under the Homestead Act of 1862. Twelve settlers purchased land from the railroad. Nine settlers had successful Timber Culture Act claims. Ten settlers acquired land from the state under the Colorado Enabling Act (which gave land to the state that could be sold to support the state university). According to census records settlers' birthplaces included Iowa, Minnesota, Indiana, Pennsylvania, Illinois, Ohio,

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New York, Sweden, and Germany (census information not available for the many of the settlers since they did not remain in Phillips County long enough to appear in census records). By 1890, the Phillips County had a population of around 4,000, which was described as "mostly from Illinois, Iowa and Nebraska and the Southern States" (Union Pacific 1891, 87).

However, the acquisition of land title does not mean that these settlers were successful. Like elsewhere in eastern Colorado, there were a high percentage of failures in Phillips County. However, unlike some other areas in eastern Colorado, the majority of settlers in Phillips County appear to have been able to hang on long enough to receive their land patents (one of the reasons other counties in eastern Colorado still had a great deal of land available for homesteading in the early twentieth century was that earlier homesteaders did not stay long enough to receive land patents, leaving the land open for a new wave of homesteaders).

"The Great American Desert," an article from Harper's New Monthly Magazine in 1888, identified three stages of settlement; these appear to align closely with settlement patterns in Phillips County. During the first stages, homesteaders arrived. They eked out a living until they were able to prove up, by then often eager to sell out. During the second stage, settlers bought land from the initial homesteaders. But most of these settlers still struggled. They went into debt and eventually sold out as well. During the third stage, "thrifty farmers" arrived. These settlers were better prepared and able to make a success of the farm and stay (Spearman 1888, 233). The article went on to affirm that the only first stage settlers who succeeded were generally hard-working Germans and Scandinavians:

These men, drilled into the most rigid habits of economy by the experience of hundreds of years in a hard struggle for existence, will start with the Americans under precisely similar circumstances, and while the latter give way under the severe conditions imposed upon them, the foreigners will surmount the same obstacles, and make a success of life (Spearman 1888, 238).

This trend also prevailed in Phillips County, where families of German and Swedish descent have dominated the farming population (Phillips County Historical Society 1988, 239-664).

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Town Establishment

Railroads played a major role in western settlement, not just in transportation and commerce but also in town establishment. Town companies were formed and run by employees of the Burlington Route, but operated as a separate entity from the railroad. The purpose of the town companies was to develop communities at convenient distances along the route. The companies purchased land, platted towns, and then sold lots to settlers. This involvement of the railroad in town creation was common on the plains. In 1888, *Harper's New Monthly Magazine* reported that: "The railroad now precedes the population everywhere, and makes its own towns. So true is this in some parts of the desert that the roads own all of the principal town sites on their new branches" (Spearman 1888, 240). The Lincoln Land Company was established in 1880 when Burlington extended to Nebraska's Republican River Valley (Overton 1941, 411-412). Phillips County's three incorporated towns (Haxtun, Holyoke, and Paoli) were all platted by the Lincoln Town Company. Holyoke's newspaper praised the town company's choice of location:

The selection of the site is due to the fine taste and correct interpretation of the future promises of places so well understood by the Lincoln Land Company. Holyoke has all the needed advantages of position, its railroad communication with the markets of the world being as good as any on the great B. & M. highway, and it has a country to support it on all sides as fertile as any in the west (*The State Herald*, March 28, 1890).

The Lincoln Land Company sold the Burlington Route a 100' right-of-way through the towns it platted for a dollar (Wishart 2013, 33). Railroads typically maintained ownership of land along the tracks, leasing the land to businesses that needed direct access to rail shipping including grain elevators, lumber yards, and stock yards. Businesses such as elevators were often part of larger companies that owned numerous elevators along a rail line. Town companies generally laid out their communities in a simple grid, planned entirely before any lots sold. The plats followed a standard design and were easily expandable. The typical town block was 300' square with lots 140' deep backed by a 20' alley. Blocks were divided into six residential lots (which were 50' wide) or twelve commercial lots (which were 25' wide). The narrow commercial lots were intended to give an appearance of density and activity to a commercial district. It also meant that early commercial buildings would have a common form and size, generally all frame false-front buildings. The streets were designed based on the anticipated traffic with the main commercial street widest and residential streets narrower (Hudson 1985, 87-88). Building was usually restricted to the town grid, creating a sharp division between a town and the surrounding farmland (Mahar-Keplinger 1993: 46). The town companies often overestimated the needed size of a town, with plats presenting a grand vision of potential growth rather than the realities of a frontier community. Churches, schools, courthouses, and parks were often located on the margins of the plat where the town company would donate unsold lots for public use (Conzen 1994, 183-4).

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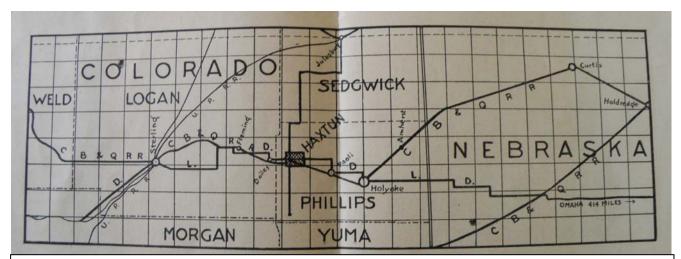


Figure 1: Map showing the route of the Burlington Railroad and Detroit, Lincoln and Denver Highway through northeastern Colorado. Source: *The Haxtun Country*, circa 1923. Courtesy of the Phillips County Historical Society.

The towns in Phillips County were laid out in a T-shaped town plan, one of the most popular late nineteenth-century forms for railroad towns. In this plan, the main commercial street was oriented at a right angle to the railroad tracks, forming a "T." The advantage of this plan over earlier plans, which ran tracks through the center of a town, was the elimination of the danger of a major crossing point with the railroad. It also moved the agricultural and industrial facilities typically placed along the railroad tracks to the edge of town. This isolated the activity associated with these facilities, such as deliveries of grain and livestock, to one end of town so that this traffic would not clog businesses on the commercial main street (Hudson 1985, 90-96).

Town companies located towns to maximize economic development and efficiency along railroad routes. The railroads wanted to develop a sustainable business and did not want too many or too few shipping points for the local market they sought to develop. Seven to ten miles between towns was considered an ideal distance. This was based on the distance that a wagon team could haul a load of wheat round-trip. A longer distance would require the farmer to stay overnight in town (McKee 2012).

An agent for the Lincoln Land Company sold commercial and residential lots, hoping to attract the businesses needed to support the growth of the region and attract farmers to the surrounding land. Town agents often tried to boost the initial lot sales with an auction, to create competition and excitement for the formation of a new town. An auction for lots in Holyoke was held on September 21, 1887. The first lot was sold to George Clark for \$1400 for a bank. The first day's land sales totaled \$33,000. Businesses were rapidly established. The next month construction was underway on three banks, four hardware stores, two hotels, three restaurants, two barber shops, two printing offices, two drug stores, four saloons, three livery barns, three groceries, three general stores, one laundry, three lumber yards, and three feed stores (*Holyoke Enterprise*, Jun 13 2013).

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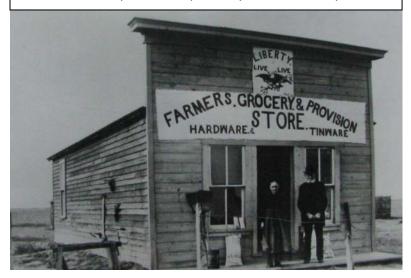
The county's first post office was opened in Holyoke in December 1887. Post offices in Amherst, Bryant, Emerson, Haxtun, and Paoli followed the next year. Some of these communities were short lived. Located about 12 miles south of Holyoke, Bryant was plated in 1888. It was situated on a proposed rail line from Holyoke to Akron and, when plans for the rail line were abandoned, so was the town. Some of the buildings were moved from Bryant to Haxtun, such as Swedish immigrant Manuel Anderson who moved his general store to Haxtun in 1892. Southwest of Holyoke, Emerson was also on the proposed rail line. It reached a population peak of 50 in 1889, but its post office was discontinued the following year (Phillips County Historical Society 1988, 207).

Haxtun appeared in the *Colorado State Business Directory* for the first time in 1889: "Station on the B&M Ry. In Logan County, 30 miles from Sterling. Agriculture the leading industry. Population 100." Business listings included a railroad agent, restaurant, newspaper, four general merchandise stores, a blacksmith, and a lumber yard (see Fig. 2). By the mid-1890s, the directory still listed the same population but some new businesses were listed including a meat market, hotel, livery, grain elevator, jeweler, and real estate and loans.

Holyoke was incorporated in April 1888. An article in the State Herald proclaimed that

While other towns are crying 'boom' for themselves, they are none more worthy than is Holyoke, and the Frenchman Valley. . . . It is only six months old. And has more business houses than any town near its size in the west, which number one hundred all told, and the stocks carried are a fair average for any western town. . . . Our country is well settled up, and on any fair business day a thousand people are seen on our streets. . . . we are located where we have good reasons to expect a large and flourishing city, the foundation of which is already laid, having now seven hundred inhabitants (*State Herald*, Apr 3 1888).

Figure 2: First general store in Haxtun, established 1888. Photo date unknown. Courtesy of the Phillips County Historical Society.



The *Colorado State Business Directory* in 1888 described Holyoke as a "new and

growing town in Logan County, on Sterling branch of the B&M. Town platted September 1887. Present population, 700." Businesses listed included liveries, a barber, a drugstore, a lumber company, banks, saloons, a general store, a shoemaker, an attorney, a real estate agent, a flour and feed mill, a confectionary, a hardware store, a grocery, a meat market, a blacksmith, a hotel, a jeweler, a billiards parlor, a harness maker, a furniture maker, an undertaker, a dentist, and a physician. By 1890, the boom had passed. The commercial directory listed

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fewer businesses and a population of 500.

Schools were established as soon as settlers started arriving. By 1890, 62 school districts and 35 schoolhouses were in the county, and total school enrollment was 777 pupils. Most of the schools were small, relatively temporary buildings, many constructed of sod, like the settlers' first homes (Stone 1918, 597). A county teachers' association was also established to provide teacher training. A two-week course was offered in August 1890 with areas of study including psychology, physiology, arithmetic, reading, United States history, geography, language, orthography, grammar, writing, and elementary sciences. School management and practice teaching were also included (*State Herald*, Jul 25 1890). One-day teacher's institutes were also offered. The program for December 6, 1890 included how to teach reading, advanced geography, grammar, the history of the civil war, civil government, and the gradation of schools (*State Herald*, Nov 28 1890).

Dispersed rural communities also formed across the county, generally focused around rural schools. These communities also sometimes included a church and/or cemetery. One example is the community of Pleasant Valley, south of Amherst. Situated near the border with Nebraska, the community was also referred to as State Line. The Pleasant Valley School District was established in May 1887, with 24 children living in the district. The first school was constructed of sod, but was soon replaced with a frame building. Community events at the school included a box supper at Halloween, a Christmas program, and a picnic at the end of the school year.

The Pleasant Valley Cemetery (5PL.252) was established in the 1880s. Many families that settled the Pleasant Valley community are represented by multiple burials in the cemetery including Hall, Harte, Jaycox, Lutze, Martin, North, and Radtke. George A. Hall homesteaded in 1888, bringing his family out by emigrant car from Illinois. Clifton Everett Harte was born in 1876 in Missouri, grew up in Nebraska, and brought his family to farm and ranch in southeastern Phillips County in 1918. Born in New York in 1878, Bertrand Jaycox tried farming in Nebraska before bringing his family to Phillips County in 1915. William Lutze and Friedericka Schwab were German immigrants who met in Denver and moved to the Pleasant Valley community in 1890. Robert and Charity Martin came from Missouri to Colorado to homestead in 1886, settling in the Pleasant Valley Community. They had nine children, several of whom also settled in the Pleasant Valley community. George W North, born in Indiana in 1855, brought his family from Iowa to homestead in Phillips County around 1901. One of their children, Claude North, who farmed and ranched in the area, married Goldie Hall, a teacher at the Pleasant Valley School, in 1927. Carl Radtke, born in Germany in 1882, immigrated to American in 1901 and farmed in Nebraska and Amherst, before moving to the Pleasant Valley community in 1912. His wife, Freida Eichele, was the daughter of German immigrants and was born in Phillips County in 1891.

The Pleasant Valley community built its first church in the 1890s. Known as the Stateline Church, it was a small frame building. The church was associated with the United Brethren faith. The church was a meeting place for the community and hosted many community celebrations including May Day and Children's Day. The church was located a half mile north of the cemetery. In 1922, a tornado destroyed the Pleasant Valley School and Stateline Church. The church was not rebuilt. The school district insurance covered most of the cost of rebuilding with a bond issue covering the remaining cost of new furnishings and equipment. The new building was completed in

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1923 and functioned as a community center as well as a school. The school was also used for funeral services (Christman 2011).

Breaking the Sod

Settler guides like L. P. Brockett's *Handbook of the United States of America and Guide to Emigration* provided advice on establishing a homestead:

We would say, first, to all intending emigrants, whether from our own or foreign countries, do not go West without some ready money beyond your traveling expenses, and the amount necessary to secure your lands. If you are intending to be farmers, you will need money to stock your farm, to buy seed and food for your stock, and to support your family until you can realize your first crop. The emigrant who is thus unprovided will fare hard in a new county, though the settlers there are as generous and helpful as they can be. The larger the amount of ready money an emigrant can command, the more easily and pleasantly he will be situated. The building of a rude house, and furnishing it in the plainest way, will consume considerable money—and the first breaking up of his land, the necessary agricultural implements and machines, and the hire of help in putting in his crops, aside from the cost of stock and fodder, will add to his early expenses (Brockett 1883, 102).

For those who came to homestead in northeastern Colorado, establishing a farm was no easy task.

Figure 3: Sod House near Holyoke, date unknown. Courtesy of the Phillips County Historical Society.



Homesteaders were limited by the availability of building materials. This was especially challenging in Phillips County, which lacked both the trees and sandstone used by homesteaders in other areas of Colorado. The first buildings were generally simple and utilitarian, built as quickly as possible, and intended to be temporary. The homesteader needed a dwelling, a well, a basic shelter for livestock, a chicken coop, and fencing. Many of the first buildings were constructed of sod. Others were makeshift shacks made of lumber

whatever materials could be cobbled together to provide shelter. The initial dwelling was often no larger than 10' x 12'. When constructed of frame, these were often referred to as Claim Shacks, because they were constructed to meet the minimum requirements of the Preemption Act or Homestead Act to establish a land

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claim. The simple shacks could be constructed wherever lumber was available and then transported to a homestead. They were commonly built of milled lumber and nails, covered with tarpaper and often had the building sill set directly on the ground (Peterson 1992, 56). Often, a man might immigrate to the area ahead of his family, living in a tent while constructing the essential building, and then sending for the family to join him.

Looking for alternate building materials, plains settlers discovered that they could use the prairie itself as a building material. Sod houses could be constructed wherever prairie grasses were the dominant vegetation. The thick, tough root structure of the grasses created a turf that could be cut into blocks using a steel plow. The sod blocks were laid like brick with the space between blocks filled with soil (see Fig. 3). Sod buildings were generally temporary, lasting an average of six to seven years. Some, however, lasted much longer. There were several advantages to sod construction: it was inexpensive, had excellent insulating qualities, could withstand high winds, did not require specialized skill for construction, could accommodate standard-size windows and doors, was not susceptible to fire, and could be constructed in about a week. But there were also disadvantages: sod houses were vulnerable to rain damage, were not entirely weatherproof unless the interior walls were plastered, settled unevenly and were often infested with mice, insects, and snakes, and frequent maintenance was required (Noble 1984, 71-73).

The homestead testimony of Gustaf Adolf Lindholm provides a good description of a typical homestead in Phillips County. Lindholm homesteaded the southwest quarter of Section 21 in Township 8N Range 46W (east of Haxtun) in 1887. Born in Sweden in 1852, his year of immigration is unknown. He followed his older brother, Sven August Lindholm, to the United States. The Lindstrom brothers were part of a wave of Swedes who immigrated during the second half of the nineteenth century. The majority came in search of good, affordable farm land. They settled predominantly in the upper Midwest, but many also came to Nebraska and northeastern Colorado. The Lindstrom brothers settled in Nebraska, where Sven was a clergyman in a Swedish Lutheran Church and Gustaf worked as a farm laborer. Gustaf arrived on his homestead in Phillips County in March 1887 and constructed a sod house. The house had 7'-high walls and measured 16' x 18'. The roof was constructed of boards, tar paper, and sod. Gustaf also dug a well and began constructing a barn. During the spring he broke and planted 23 acres of prairie. The initial crop was corn, potatoes, and vegetables, but most of it was destroyed by hail. The value of the crop produced was estimated to be \$25 (Land Patent file No. 8809, National Archives and Records Administration, Washington, D.C.). Gustaf died in July 1887. His brother Sven acquired the property under the Preemption Act as Gustaf's heir. Preemption allowed those with an established residency claim on public lands to purchase them for a minimum of \$1.25 per acre. Sven paid \$200 for the farm, which was described as prairie land with sandy soil, good quality for farming. Sven does not appear to have ever lived on the farm. By 1900, he had moved to Minnesota and sold the farm to another Swedish immigrant, Samuel Lindstrom, for \$100.

A less common immigrant experience was that of Henry C. Hargreaves (5PL.24, listed 12/3/2013, NRIS# 13000873), one of the rare early homesteaders to find success in Phillips County. The Hargreaves farm is unusual for having remained in the same family since it was homesteaded. Hargreaves settled the southwest quarter of Section 8 of Township 44N Range 6 W (south of Holyoke) in April 1887. Henry was born in Liverpool, England in

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1859. He married Catherine Lynch in 1884. Their sons, John and Thomas, were born in 1884 and 1885. Henry Hargreaves raised dairy cows, but, after hoof-and-mouth disease killed off his herd, Henry decided to immigrate to the United States. They arrived in Phillips County in 1887. Henry filed a declaration of intent under the Pre-Emption Act in April 1887 and began construction of a sod house. The Hargreaves family moved onto the land in May when the house was completed. The sod house was 16' x 40' with 7'- tall walls; it was located to the west of the current house. The roof was constructed of boards, tar paper, and sod. The house had three rooms, the interior was plastered with a lumber floor. The house was furnished with three bedsteads and bedding, a table, five chairs, a cupboard, a set of dishes, cooking utensils, a stove, a lamp, a clock, and a mirror. Henry also constructed a barn/chicken house (29' x 61') and sod hog pen (8' x 16'). The farm also had wire fencing, a 125'deep well, and a windmill. By the time Henry filed his proof on the property in December 1887, he had broken out 24 acres of land and planted 17 acres in corn, vegetables, and feed. The Hargreaves had two horses, two colts, two cows, two pigs, and 57 chickens. Henry received the patent to the land in December 1890. Henry Hargreaves expanded his holdings through the Homestead Act and Timber Culture Act. Around 1890, he filed a homestead claim for the northwest quarter of Section 8 of Township 44N Range 6W. He received the patent to the quarter section in December 1895. Henry also claimed the SE ¼ of the section under the Timber Culture Act. The Hargreaves replaced their sod house with a one-story frame house around 1900.

The era of the sod house did not last long. Successful homesteaders replaced them as soon as possible. The sod houses left on abandoned homesteads quickly dissolved back into the ground. Agricultural extension agent J. E. Payne described the landscape in 1903:

The houses built of sod from sandy loam soil do not usually stand much more than fifteen years, while those made of adobe soil last indefinitely. . . . In nearly all cases wooden houses have taken the place of the 'soddies' when they became uninhabitable. When first traveling over the country in 1900, we found very few who were intending to stay in the country. Each year we have traveled, we have found more people who were improving their places and deciding to stay and make real homes for themselves. The result is that permanent improvements are taking the places of temporary makeshifts which were put up to last until the owners could get away. And now, not so many places have the 'I want to sell out' appearance once so characteristic of nearly all (Payne 1903, 15).

Due to the difficulty of plowing up the virgin sod, only a small area of the county was actually devoted to crops. A typical settler might plant ten to 20 acres of wheat or corn their first year, gradually expanding their acreage in future years and planting additional crops. In 1891, it was reported that "in the absence of ditches the county is yet mostly devoted to the range interests. . . . There are this year 2,700 head of cattle on the range; 1,500 horses, 1,200 sheep, and 1,200 hogs" (Union Pacific 1891, 87).

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The 1890s: Drought, Foreclosure, and Abandonment

Though the Homestead Act was widely celebrated as offering land ownership to all, it has also been harshly criticized for failing to live up to expectations. Some contemporaries called the act deceitful, because for many homesteaders it was not possible to survive on the amount of land provided, dooming them to failure. The goal of the Homestead Act was to promote the agrarian ideal of the small, independent farmer but this did not match reality in the arid lands of the West. In the wetter and less rocky lands of the eastern United States, success was more likely for a farmer on a 160-acre plot. The original Homestead Act was based on the premise that what worked in the East could also work in the West. However, agricultural potential in the West was more uncertain. At higher elevations, growing seasons were shorter. Climate and rainfall also varied dramatically, both yearly and regionally.

The initial wave of Phillips County settlement reached its peak around 1890. The following decade saw many farm failures. Too many homesteaders "started in an arid climate, penniless, without any knowledge of the methods needed, and with seed, feed and family supplies to be purchased for six months to two years before any revenue could be expected" (Cottrell 1910, 4). Several wet years in the 1880s were followed by several dry years in the early 1890s. In 1890, there was a major crop failure, and Phillips County farmers published pleas for assistance including this letter sent to the *Rocky Mountain News*:

What are we going to do for seed and feed the coming spring, with neither money nor credit to get the same? I am aware that the general opinion of Denver and the western part of the state is that there is no use in trying to make this arid region an agricultural success. The farmers here, after making two total failures, still believe in final success. Many of these farmers are from Nebraska and have lived through the same trials, and they have seen as good success there as any state of this union, and even Western lowa was not any better at first. Cultivation has pushed West, and rains have followed, and they believe it will come here. . . . The outlook here for the coming season is better than it has been for four years past and farmers are anxious to try one more season. The question is, will Colorado help these farmers as Nebraska is doing, or shall they abandon what they have done to develop this beautiful country for want of means to prove their faith? I am aware that prejudice is against us, but if this state will give us the money to buy or furnish us with wheat, oats, barley, corn, potatoes, etc. and feed for teams, I will guarantee that the work will be done in good farmer like manner and if proves as we believe it will we can supply your needs with butter, beef, pork, corn and all this great state with farm products. Shall we have the help needed, or shall this most beautiful part of this great state be depopulated? - P.B. Reynolds (republished in *State Herald*, Feb 13 1891).

Another settler from Fairfield wrote:

There are plenty of persons that have no feed at all, except the prairie grass and that for the greater part of the time is covered with snow. Teams are so weak now that the outlook for putting in crops, even if seed is furnished, is not the most flattering. People are without butter now, for no other reason, than scarcity of feed, fresh cows hardly being able to sustain their calves. It is very humiliating, to say the

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least, to ask for aid, but most of us have been placed in such a position, after a season of toll [sic] and labor, for naught, that it is absolutely necessary that we have help to live and I hope and believe that all that have received such help, feel thankful and believe that it is God's special providence (*State Herald*, Mar 6 1891).

Settlers found farming on the plains much more challenging than the optimistic pictures painted by promotional publications. Rainfall could fluctuate greatly from year to year, making crop production uncertain. The 1888 crop was fair, but 1889 and 1890 were dry. There was more rain in 1891 and 1892, and good crops were harvested, convincing some that the previous dry years were an exception. But drought conditions returned from 1893-1896. There were extensive crop failures and many lost their farms to the county for failure to pay taxes. Settlers had various reactions to the drought. Some settlers left temporarily, seeking work in irrigated areas or in the mountains, planning to return when conditions improved. Others gave up on eastern Colorado and returned to the states from which they had emigrated. When farmers gave up, businesses also suffered, leading the population of the communities to shrink. Those who stayed began to adjust their farming methods to the climate. They also shifted from a focus on crops to cattle ranching (Dunbar 1944, 43-49). This change is evident in the shift in the way the county was promoted. In 1897, the Holyoke Land Agency advertised its "Choice List of Prairie Lands. Stock Ranches with plenty of water" (*State Herald*, Jun 27 1897). The newspaper proclaimed that:

...the dry weather does not discourage our . . . settlers. They have nice bunches of cattle that furnish them a sure and comfortable living, by selling milk to the creamery they are certain of a cash return and are thus enabled to hold the young stock, while at the time paying the every day expense. This is the county for a man of small means with a disposition to improve (*State Herald*, Sep 24 1897).

Counties across eastern Colorado suffered during the 1890s. Many had gone deeply into debt in order to build public facilities, such as schools, courthouses, and roads. Success had seemed certain during the boom of the 1880s, and each county was competing with its neighbors to attract settlers and investors. Counties had little income in the first couple decades after settlement because settlers did not have to pay taxes until after they had proved up and received patent to their land. And during the 1890s, many struggling settlers could not afford to pay their taxes. The population was very fluid in early years. Many had come only in search of a quick profit during the boom years and left when the boom ended (Wishart 2013, 2-3).

The challenges of settlement were exacerbated by the Panic of 1893, when the cost of farm products fell below the cost of production. This was followed by a drought in 1894, during which few farmers succeeded in growing anything. Many gave up their claims and left the region. In northeastern Colorado, Yuma, Washington, and Phillips counties all lost more than 30 per cent of their populations between 1890 and 1900. The population of Phillips County fell from 2,642 in 1890 to 1,583 in 1900. The number of cattle rose from 3,701 to 23,633 during the same period as farm land was turned over to grazing land and the region was promoted for ranching rather than farming.

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According to one early resident, "almost any of the settlers would have gone back East had it not been for the fact that they were so far in debt and had all their possessions so far mortgaged that they could not get away" (Haxtun Harvest, Oct. 30, 1919). The concept of the region as the Great American Desert returned. In 1897, the local paper reprinted an article from the Chicago Record that described the region as a place with "sunflowers and cactus as the leading crops. These thrive tolerably well, thank you. The coyote and the gopher are both extensively raised here. . . . the main business of those holding down claims consists in hauling water to wash dishes and visiting the post office" (State Herald, Apr 9 1897).

The failure of many of the initial settlers led to large delinquent tax lists during the 1890s. Land-ownership records from the county's early decades show landowners frequently losing their land due to an inability to pay taxes, often buying it back from the sheriff only to lose it again. There was a high level of turnover in land ownership, including speculation by non-residents.

Though there had been a land rush in the 1880s, the county was not yet totally transformed. The establishment of farms was still tenuous. The ability of farmers to successfully raise crops on the plains was still unproven. The county had attracted early settlers willing to take a risk, but was still a frontier. In 1891, the Resources and Attractions of Colorado for the Home Seeker, Capitalist and Tourist stated that: "the presumption is that next year, when the experimental crops have been successful as they will, the people will see a greatly increased population. It is in the direct track of immigration and it requires only a few good crops to attract the eye of the settler" (Union Pacific 1891, 87). Early farmers focused on corn with some wheat, oats, and rye, as well as sorghum, millet, and hay (Wycoff 1999, 174). Farmers tried to transplant the farming methods from the eastern states they had emigrated from, areas with much greater annual rainfall. Believing the hype of "rain follows the plow," they were unprepared for when it failed to rain.

In the *History of the State of Colorado* published in 1895, Frank Hall remained optimistic about the potential of Phillips County, but acknowledged the challenges of farming on the plains. The early years of any settlement would include experimentation and some failures. According to Hall, there were still Phillips County farmers that believed in the potential of dry land farming: "They still have faith in the final triumph of their experiment, and while the probabilities are not wholly promising, judging by what has already occurred, the prospect is by no means so dark as the champions of irrigation would have it appear" (Hall 1895, 270). Hall concluded that: "Unquestionably, Phillips County is capable of producing quite as large and varied crops as any other section of the state when the natural rainfalls are sufficient, but, as we have seen, these are uncertain, and where lands are seeded in the rainbelt region, the farmer is compelled to take the risk" (Hall 1895, 269).

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The "New Nebraska:" Progressive Farming and Economic Growth (1900-1930)

Come Farm in Phillips: Boosterism

The first decade of the twentieth century was a period of recovery for Phillips County as a new generation of homeseekers was drawn to the region. Land in Phillips County was inexpensive compared to areas farther east, and the popular dry land farming movement inspired renewed optimism in the region's farming potential. Federal experiment stations and state extension agencies had also been working to develop strains of crops better suited to the arid plains. The new arrivals also diversified, raising stock as well as crops.

Many of the new settlers were likely drawn to the region by promotional materials. For the homeseekers coming to Phillips County in the early twentieth century, there was much more information about farming in eastern Colorado available than for the previous wave of settlers. However, the reliability of the information varied widely depending on who produced it. Publications by extension agencies and experiment stations provided practical agricultural advice and generally acknowledged the hardships and difficulties of farming in eastern Colorado, as well as the potential rewards. While encouraging agricultural development, they also urged caution. This can be seen in a publication from 1910 that recommended that anyone unfamiliar with dry land farming "should not settle on the Plains unless he has sufficient capital to erect the buildings that are absolutely necessary, to buy the needed teams and implements, and after making these expenditures, have sufficient money left to pay for seed, feed and living expenses for two years" (Cottrell 1910, 4).

This was quite different from the boosterism of the publications produced by the railroads and local business associations. These publications seemed to be primarily concerned with attracting homeseekers to eastern Colorado, rather than their long term success after arrival. They were often filled with hyperbolic descriptions of local prospects. "The Haxtun Country" told potential homeseekers that "the land of plenty bids you welcome and golden opportunity reaches out with beckoning hands" (Haxtun Realtors Association 1923). There were also publications by various regional publishers and promoters. Many of the publication authors may have truly believed in the potential of the West, but they were also likely largely motivated by selling copies of their publications, with optimistic portrayals of the boundless opportunities of the West more likely to sell than more circumspect descriptions. All About Colorado for Home-Seekers, Tourists, Investors, Health-Seekers by Thomas Tonge published in 1913 represented the typical audience for these publications. One popular Colorado guide was Free Homestead Lands of Colorado described: A Handbook for Settlers published by George Samuel Clason in 1916. A businessman, Clason established the Clason Map Company in Denver and published the first road atlas of the United States. Clason later became famous as the author of "The Richest Man in Babylon" one of a series of parables set in ancient Babylon and designed to teach thrift and financial success.

As they had in the nineteenth century, local boosters worked hard to entice more farmers to Phillips County. Land companies advertised their bargains in newspapers in Nebraska and other states to the east. The railroads also publicized the region, with promotional brochures lauding the productivity of the land and healthy climate. The railroad ran special emigrant trains to bring out home seekers. Families loaded all their possessions on the

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train including clothing, furniture, farm machinery, cattle, and horses (Phillips County Historical Society 1989, 440).

One of the first tasks for those promoting farming in eastern Colorado was to establish Colorado as an agricultural state. Previously associated with its mountain and mining resources, farming in Colorado received limited attention. Clason's guide addressed this misperception:

The scenic attractions of Colorado have been so widely heralded, that many people have formed a wrong conception of the State. They too often think of it as Switzerland on a larger scale, and as a panoramic conglomeration of mountain peaks and narrow valleys. As a matter of fact, the great plains that extend westward from the Missouri river across Nebraska and Kansas, continue uninterrupted across the entire eastern half of Colorado, where they first meet the foothills, a few miles west of Denver (Clason 1916, 5-6).

Railroad brochures such as "There's a Farm for You in Colorado," published by the Burlington Route circa 1914, also worked to change this perception:

Colorado IS an Agricultural State. To most people this is rather a new idea, because the name Colorado has been associated with the vacation—mountain scenery idea, of mining and its allied interests, for so long a time, the agricultural opportunities have been more or less lost sight of. The fact is, however, that the continued and successful raising of large crops on lands which were believed to be only ordinary and valuable mostly from grazing purposes and rough feed production, has brought about an agricultural progress so rapid that the settlers could hardly realize that this state's big crop production is placing them in the front rank among the great wealth-producing farmers of the United States (Burlington Route, circa 1914).

However, like the mountains, which had been drawing health seeking tourists and consumptives for decades, eastern Colorado was also promoted for its healthy climate:

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

Phillips County was promoted for the quality of land and the high percentage of productive land. A Burlington Route brochure proclaimed that "93.55 per cent of the area of this county is adapted to agricultural uses, and in this respect it stands third among the 63 counties of Colorado. This fact, coupled with good yields, gives Phillips County a predominance in agricultural production. In proportion to its size, Phillips County produces more hogs, corn, winter wheat, millet and sudan grass than any other county in Colorado, and ranks second in production of

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oats" (Agricultural Development Department of the Burlington Route, circa 1923). According to the 1918 *Year Book of the State of Colorado* the county's sandy loam soil was "uniformly fertile and generally contains just about the right proportion of sand to make it work easily. There are few sections of the state where the soil yields better crops without irrigation" (State Board of Immigration 1918, 163). *The Haxtun Country* promotional brochure proclaimed that "there practically is no waste land in western Phillips county and eastern Logan county. It can all be farmed. While one of the smallest counties in the state, Phillips County enjoys the distinction of having a greater percentage of its area under cultivation than any other county in Colorado" (Haxtun Realtors Association 1923).

Unlike those who arrived in the previous decades, the majority of these settlers were buying farms rather than homesteading. Many also had the advantage of previous farming experience in a similar climate. As land in Nebraska rose in price, many of its farmers sought more affordable, but similar, land across the border in Phillips County. Large numbers of farmers moved west from bordering Nebraska, transplanting their farming methods and creating a cultural landscape that shared more with Nebraska and the Midwest than it did with other parts of Colorado, a connection that Phillips County residents embraced. *The American Midwest: An Interpretive Encyclopedia* describes the ideal of the Midwestern farm:

Midwestern farms in the American imagination are operated by families who are dedicated to their land and to farming as a way of life. These are decent, self-reliant people who are viewed both by themselves and by others as friendly, honest, forthright, and practical, yet idealistic, egalitarian, traditional, and moral, the Jeffersonian ideal—the yeoman farmer—thrives in this image. Furthermore, these farmers operate in a specific context—small, vibrant family farms are set in a landscape of picturesque small towns (Sisson 2006, 61).

The settlers arriving in Phillips County and adjacent counties in northeastern Colorado brought a Midwestern culture with them. The majority came from Midwestern states (largely from neighboring Nebraska) and brought Midwestern character as well as Midwestern farming practices and building types. According to one promotional brochure, "There's a Farm for You in Colorado":

Phillips County citizens are from among the best people of Illinois, Iowa, Nebraska and other Eastern states, who, as a general thing, are a prosperous, industrious and contented people. The farming community around Holyoke is quite evenly settled with prosperous farmers, who live in elegant frame houses and have fine barns and stock sheds" (Burlington Route, circa 1914).

An article in the *Haxtun Harvest* in 1919 noted high land sales and that it seemed "that the people of our neighboring state of Nebraska are quite partial to this part of the world" (*Haxtun Harvest*, June 19, 1919). A railroad publication declared that "community life in Phillips County approaches the ideal. It is typically American, rural and Middle Western, with a progressive live-wire population that places a value on things moral and spiritual" (Agricultural Development Department of the Burlington Route, circa 1923, 7).

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In many ways Phillips County and northeastern Colorado had more in common with Nebraska than with the rest of Colorado. Although individual elements can be found elsewhere in Colorado, the unique combination of elements found in northeastern Colorado are what give it a character more evocative of the Midwest. Key features include:

- Fertile soil suited for intensive farming
- · Sufficient annual rainfall for successful dry land farming
- Flat topography and prairie landscape without timber or stone resources
- Buildings constructed of lumber brought in by rail
- Farm complexes placed next to section lines and clearly visible and easily accessible from county roads
- Farm buildings placed on the landscape rather than incorporated into the landscape
- A farming economy based on large-scale grain production (particularly corn and wheat) supplemented with livestock production
- Farm complexes developed for the needs of diversified farming with large frame barns built to house livestock, implements, hay, and grain as the centerpiece of the farm complex. Other typical buildings included a frame house, garage, chicken coop, granary, workshop, and hog barn.
- Farm buildings tend to utilize the standard forms advertised in catalogs and through plans available at local lumber yards. Farm buildings are generally unified in appearance, with the same siding and paint colors (white or red) used on multiple buildings.
- Pattern of railroad development with its towns platted by the railroad in a T-plan and evenly spaced for the most efficient marketing of agricultural products.
- Large number of farmers moving into the area from Nebraska farms

Phillips County had been first choice land claimed by homesteaders, desirable both for its productivity and location on the railroad (Clason 1916, 5-7). However, many early residents found farming in Phillips County more challenging than anticipated, so in the early twentieth century, a lot of land was for sale in Phillips County. Land prices depended on the quality of the land, the distance from town, and the value of the buildings and improvements. Local banks aided development by offering settlers loans for purchasing a farm as well as for making building improvements or buying livestock and equipment. The Haxtun State Bank advertised loans starting at seven per cent interest (*Haxtun Harvest*, Jan 29 1920). Land speculators also purchased farms, anticipating a rise in land values. Speculation was encouraged by the many promotional publications encouraging the settlement and development of the West. The Paoli Land Company marketed land specifically to speculators, stating that the land they offered for sale was good "for either the establishment of a home or for speculation" with a speculator able to earn "\$10 to \$15 an acre just to rent it out, owner taking one-third of the crops" (*Haxtun Harvest* Dec. 18, 1919). Smith & Armstrong in Haxtun also advertised to speculators. In an advertisement in the *Haxtun Harvest* titled "Buy for a Home, Buy for Speculation, Buy for a Safe Investment,"

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they offered a payment plan for those who could not afford to buy a farm outright. Under the Crop Payment Plan: "you may own a farm by a very small payment down and the balance to be paid with one-half your crop (be it little or big) each year" (*Haxtun Harvest*, Nov 6 1919). The House Land Company in Haxtun advertised that they would look after taxes and rentals for non-resident property owners (*Haxtun Harvest*, Apr 17 1919).

According to Clason's guide, "the easiest money a farmer can make is what he can make out of the increase in the value of his land. Every \$10.00 per acre increase on 320 acres amounts to \$3,200. Colorado's cheapest lands today will rapidly increase in value as they are cultivated and become more productive" (Clason 1916, 7). Farmland in Colorado could still be purchased for much less than in states to the east. Land in lowa that was selling for \$250 to \$500 an acre could be purchased for \$30 to \$100 an acre in Phillip County (*Haxtun Harvest* June 5, 1919; *Haxtun Harvest* August 28, 1919). Clason suggested that this was "easily accounted for from the fact that the available farm lands exceed the supply of farmers in the state five to one" (Clason 1916, 7). However, the productivity of the land also played a role, though Clason, somewhat deceptively, claimed that farmers were "finding that there is not so much difference between what can be produced on an acre of Colorado land and on an acre in the Mississippi valley" (Clason 1916, 7).

Though most early twentieth-century settlers were purchasing land, there was still some homesteading in Phillips County. Of the 147 farmsteads surveyed in the reconnaissance project, 33 were homesteaded in the 1900s and 1910s. Twenty-five of these homesteads were acquired under the original Homestead Act of 1862. Six were Sale-Cash Entries, and two were Timber Culture claims. Much of the later land to be claimed was in the southern part of the county where the Sand Hills made farming less attractive.

In 1909, the federal government passed new homesteading legislation allowing settlers to claim 320 acres of land in areas that could not be irrigated. Supporters hoped that the increased acreage would reduce the rate of homestead failure. The Enlarged Homestead Act of 1909 brought a new wave of settlers to eastern Colorado in the 1910s. However, the act does not appear to have been utilized in Phillips County. None of the farmsteads included in the reconnaissance survey were claimed under this act. Based on survey results, it appears that most land in the county had already been acquired by the time this act was passed. Though 25 per cent of the state of Colorado was still unclaimed in 1915, this was primarily land in less desirable, more arid, isolated locations such as the canyon lands of southeastern Colorado. This area drew either those who wished to ranch or those with limited resources for whom homesteading provided their best chance to become land owners. Comparing survey results from Phillips County with southeastern Colorado, those who settled in Phillips County generally had more resources as well as more experience with farming. They came in search of the best value land for establishing successful farms. By 1918, there were only 561 acres of public land still available for homesteading in Phillips County, "principally small isolated tracts of little economic value" (Haxtun Harvest, August 28, 1919).

A new wave of settlement in Phillips County began around the turn of the twentieth century, though large numbers did not arrive until around 1908. The majority of these settlers purchased farms rather than homesteaded. The local newspapers reported optimistically on the new arrivals. According to the *Holyoke Enterprise* in 1902: "It is beginning to be apparent to everyone acquainted with existing conditions that the

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country to the north of Haxtun is rapidly being taken up and settled and it's is only a question of a short time until the entire country from Haxtun to the river will be taken up by small farmers and ranchmen" (Holyoke Enterprise 2000, 10). In 1906, the Holyoke Enterprise reported that "the population of Phillips County is being very materially increased this spring by parties coming in from the eastern states to locate in our country. Most of these parties have bought land in the county and are coming early in order to be ready to put in the spring crop" (Holyoke Enterprise 2000, 13).

Phillips County also attracted foreign immigrants, with 8.8 per cent of the county's population in 1910 foreign born (State Board of Immigration 1918, 163). Many more were the children of immigrants moving westward from Midwestern states in search of more affordable land. The most prominent groups in Phillips County were Swedes and Germans. Chain migration was common, with early immigrants later followed by other family members. Those of similar ethnic background also tended to cluster together.

Between 1830 and World War I, around six million German immigrants came to the United States. Many settled in the Midwest and Great Plains, drawn by the economic opportunity and chance to be land owners. In Germany, traditional farming was being supplanted by industrialization, making the affordability and availability of farmland in the United States very attractive to small farmers, sharecroppers, and farmhands displaced by industrialization. The first generation often established churches or other community organizations and then later settlers were drawn to communities with those of similar cultural, religious, and language backgrounds. Large numbers of Swedes started immigrating to the United States in the 1860s, with Swedish migration reaching a peak between 1890 and 1910. Many of the Swedish immigrants settled first in Swedish settlements in Illinois or others Midwestern states before moving farther west. Many of the settlers of German heritage settled around Holyoke and Amherst, whereas those of Swedish decent settled around Haxtun and in Fairfield, a loosely organized farming community to the north. Swedish farm families in Phillips County include Ahnstedt, Anderson, Bjorklun, Eckman, Hadeen, Ham, Hedstrom, Johnson, Lindgren, Lundberg, Olson, Sandquist, and Seger. German farm families in Phillips County include Biesemeier, Fulscher, Gansemer, Hagemann, Heermann, Koberstein, Koch, Kropp, Krueger, Kuhnke, Kurtzer, Leben, Mailander, Oltjenbruns, Schmidt, and Welper (Phillips County Historical Society 1988, 239-664).

The Fridhem Svenska Missions Forsamling was formed in 1888 by a group of Fairfield residents meeting in the sod house of homesteader Edward Anderson. The first pastor was G. Norseen, who was also a homesteader. In 1889, the church joined the Evangelical Mission Covenant Church of America. In the early pioneer years, funding the church was a struggle. The congregation could not afford to build a church building, so services were held in local school buildings. Each church member planted an acre of corn, referred to as "Mission Corn," to serve as the pastor's salary. In 1893, the congregation came together to build a sod building to serve as a church, but then the drought of 1894 hit and the building was never completed. Many church members moved away and meetings became irregular. The church was revitalized in the early twentieth century, and in 1905 the congregation acquired land on which to build a new church. In 1907, a parsonage was constructed on the property, costing \$600. The Fairfield Evangelical Covenant Church (5PL.223) church was completed 1909 at a cost of \$1800. The church was remodeled several times, including the addition of a basement in 1929 and the

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sheathing of the building in brick in 1949. A new Ranch-style parsonage was constructed in 1966. The church played an important role in maintaining the heritage, culture, and language of the Swedish emigrant families in the Fairfield area. The church upheld Swedish traditions, such as holding a picnic on Midsummer Day and a Julotta service early on Christmas morning. Summer Vacation School included instruction in the Bible as well as in the Swedish language. In its early decades, church services and business were conducted primarily in Swedish until around 1930. Church minutes were recorded in Swedish until 1927. The congregation also celebrated its Swedish heritage with smorgasbords organized with Swedish dishes such as *kottbullar*, *potatis kirv*, *lutfisk*, *bruna boner*, *ostaka*, and *spritz* (Christman 2010).

St. Paul's Lutheran Church (5PL.53) was established by a group of nine German settlers living in the Amherst area in 1910. For the first few years the congregation held services in the local public school. In 1915, the congregation began construction of a church building with a basement for school use. The new church was dedicated on January 16, 1916 and cost \$2728.16 to build. Church services and classes were held in German. In 1917, the church stopped teaching confirmation classes in German due to American's anti-German feelings during World War I. The following year it was decided to discontinue the teaching of German in the school until after the war and to start conducting services in English every other Sunday. German instruction was reintroduced in 1921. German services were discontinued in 1933. As the congregation grew, a larger space was needed and in 1931 a new church (5PL.52) constructed adjacent to the original church. The original church was converted to a school, operating until 1957 (McColloch 2010).

Many of the terms used to describe Colorado's early German population are similar to those used to describe Midwesterners. In 1917, Mildred Sherwood MacArthur completed a thesis on the "History of the German Element in the State of Colorado." MacArthur described the key German characteristics as "long-suffering endurance, patient plodding, strict business integrity, respect for law and order, keen initiative in agriculture and commercial lines, accurate training and efficiency both in the foregoing and in professional fields, a sense of the importance of creative enjoyment and a fine show of public spirit in the advancement of philanthropic and educational projects" (MacArthur 1917, 13). MacArthur also attributed the Germans' success to these characteristics: "Many adventurous pioneers, lured by the generous distribution of homestead land, failed or met with but meager success in agriculture, because they knew no more about it than they did about prospecting, and in farming chance played a smaller part. The German pioneer, however, peculiarly adapted to agriculture from long and thorough acquaintance with it, almost invariable succeeded. The Germans too, possessed the desirable characteristics of steady plodding industry and persistent effort" (MacArthur 1917, 20).

There do not appear to have been too many conflicts between those of various immigrant groups and other Phillips County residents until the tensions caused by anti-German feelings during World War I. In April 1917, the Holyoke Enterprise reported that a U.S. Marshall had come to Holyoke to investigate the "alleged disloyalty of one or two German citizens who expressed themselves in opposition to the war at its outbreak two weeks ago" (Holyoke Enterprise 2000, 19).

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There were two key peak periods in Phillips County's early twentieth-century growth: 1908-1909 and 1917-1918. The first marks the end of the county's frontier period. Permanent settlers replaced speculators and permanent buildings replaced earlier sod houses and frame shacks. In August 1908, the *Haxtun Herald* reported that: "Many eastern men from Missouri, Kan. Iowa, Neb., are coming in and rapidly filling up our prairies. Very much more land has been put in this year than for many years and still the breaking is going" ("Haxtun's Corn Prospects,"

Haxtun Herald, Aug 21 1908). Between 1900 and 1910, the population of Phillips County grew from 1,583 to 3,179 with the number of farms rising from 244 to 508.

The boom in Haxtun corresponded with the incorporation of the town, which occurred in 1909. In June 1908, the *Haxtun Herald* reported "there are a good many land seekers in our country these days, glad to see them, and if they mean business they can be satisfied for we surely have some find land in the neighborhood of our prosperous little town" (*Haxtun Herald*, Jun 5 1908). The land around Holyoke was also filling up. In 1908, the *Holyoke Enterprise* reported that "the diagonal road leading southwest from Holyoke has been fenced up and now people from the southwest are forced to turn square corners and come into town from the south or west. In fact the whole country surrounding Holyoke is being fenced so that there is no longer a possibility of leaving Holyoke by driving across the prairie in most any direction" (*Holyoke Enterprise* 2000, 14).

Several years of proven agricultural success and good crops prices attracted the new settlers to Phillips County. In 1909, the *Holyoke Enterprise* reported that:

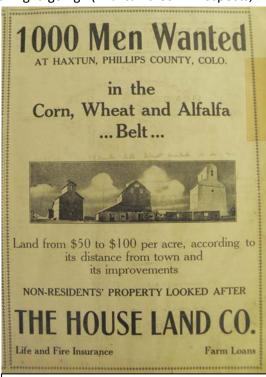


Figure 4: Land advertisement from the Haxtun Harvest, April 3, 1919. Courtesy of the Phillips County Historical Society.

The returns from the sale of Colorado wheat crop this year is estimated at seven million dollars. This is a large sum of money for a single crop in a new state like ours, but wheat raising in Colorado has only just fairly commenced. The acreage of wheat is making a rapid increase and especially is that the case in the eastern portion of the state. The people of eastern states, who have for years looked upon our state as simply a mining and stock raising state, are having their eyes opened to the fact that agriculture is now one of the leading industries of the state and the homeseekers are flocking into our state to secure farms (*Holyoke Enterprise* 2000, 15).

The 1910s saw continued growth which peaked during World War I (see Fig. 4). Much of this was due to the continued availability of reasonably priced farm land, with farming becoming particularly lucrative during World War I due to high crop prices. The 1910s were a good time to be a farmer, with a huge demand for crops created by the war. The United States sought maximum production from its farmers, making them a key part of the war

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effort. An editorial in the *Holyoke Enterprise* proclaimed that "the man behind the plow will be as truly the savior of this country as the man behind the gun" (*Holyoke Enterprise*, Jun 30 1988). The government encouraged the production of staple foods, especially wheat and hogs. Farm production in Europe had dropped during the war, and the government needed food to supply its allied nations and friendly neutral nations. A government bulletin reported that:

There is necessity of greatly increasing food exports in 1918. The farmers of the United States made a generous and patriotic response to the appeals for increased production in 1917. . . they planted the largest acreage in the history of the country, produced and harvested record crops of most products except wheat, and succeeded in increasing the number of live stock, including not only work animals, but milk and meat animals as well. . . . The achievements of the farmers and live stock men last year furnish cause for congratulation and encouragement, but not for complacency or let-up this year in efforts to better the production record and to conserve food (US Department of Agriculture 1918, 3-4).

The railroad itself also promoted wheat production: "they [Burlington Route] also hired an agricultural consultant, conducted irrigation and dryland farming experiments, published educational materials, and created experimental farms to test new wheat varieties. Farmers in Phillips County are still growing these wheat varieties" (Giebler memo). Increased production continued through 1919. In July, the *Haxtun Harvest* reported that: "The harvest is on! Already the reapers are busy in the fields near Haxtun and the greatest wheat crop ever known in Phillips County is being rapidly put in the condition for conversion into money. . . . total return from the land in a radius of ten miles from Haxtun will be more than two million dollars (*Haxtun Harvest*, Jul 3 1919).

The influx of farmers also brought an influx of merchants, bankers, builders, and others to the county to serve the farming population. The population of the county increased from 3,179 to 5,400 between 1910 and 1920 and the number of farms rose from 508 to 680. The average farm size was around 400 acres. At the end of 1919, the *Haxtun Harvest* reported that:

Inquiries now being received by the state immigration department indicate that the movement of land seekers to Colorado during the coming winter and spring will be heavier than it has been for several years. Prices of land have reached such high levels in the older agricultural states that large numbers of experienced farmers are selling and moving west in search of farm lands that can be had at lower figures. This movement has been under way for more than a year and Colorado has apparently profited more from it than any other western state" ("General Survey of the State at Large" *Haxtun Harvest*, Dec 18 1919).

The Dry land Farming Movement

The term dry land farming refers to crops grown in semi-arid regions without the aid of irrigation, typically by employing drought-resistant crop varieties and moisture conservation methods. The vast majority of farming in Phillips County in early twentieth century was dry land farming. There are no waterways in the county capable of

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providing water for irrigation. The Ogallala Aquifer underlies the county, but it was challenging to bring this deeply located water up to the surface. As a result, only very limited irrigated crops were produced in the county, with some farmers using windmills to pump enough water to irrigate an acre garden plot.

First promoted in the late nineteenth century, dry land farming was also initially called Scientific Farming. The movement grew in the early twentieth century with the first Dry Farming Congress held in Denver in 1907. The dry land farming movement promoted a series of techniques that could be used to retain moisture in the soil. On the plains, most of the rainfall tended to run off the surface of the prairie, rather than being absorbed. In order to get rain into the soil, dry land promoters recommended breaking the soil to a depth of at least a foot. After any rainfalls, farmers were then encouraged to use a disc to turn and stir the soil in order to work moisture into it and then pack the subsoil and cover it with mulch to prevent evaporation. Farmers were also advised to let fields lie fallow in order to collect moisture.

The rise of the dry land farming movement brought renewed interest to farming in eastern Colorado. In addition to more "scientific" farming methods, the farmers who arrived in Phillips County in the early decades of the twentieth century had many other advantages over the previous generation of settlers. One key advantage was that new settlers learned from the efforts of previous settlers and took advantage of their efforts to break the sod and prepare the ground for planting. "There's a Farm for You in Colorado" declared: "no longer is it necessary for the newcomer to pass through the pioneer's experience. The best method of farming has been proved—the adaptable crops tried out—markets established and now the fruit of the pioneer's ripe experience is yours for the asking" (Burlington Route circa 1914). Trial and error was a key part of the settlement of the plains as farmers learned through harsh experience what worked and what did not. Agricultural practices were adapted, including the types of crops raised and the rise of more diversified farming practices. In 1903, J. E. Payne, an agricultural extension agent, reported that "the settlers have taken to stock raising, and now the country is upon its proper feet. When the settlers first came in, they attempted to live by grain farming alone. They were taught that grain growing is not the proper basis of successful agriculture on the Plains. They have learned that farming without stock soon impoverishes the man in this country" (Payne 1903, 8). Experience also provided knowledge about the crops best suited to particular locations. Despite its small size, there is variety to the soils and topography of Phillips County, with a mix of sandy and silt loams as well as the Sand Hills of the south, an area of prairie grass stabilized sand dunes that extend into Nebraska. According to a railroad publication: "The sandy loam area in the western part of the county in the vicinity of Haxtun is noted for its corn production. In the eastern part of the county in the vicinity of Holyoke the soil is somewhat heavier and this section is especially noted for its wheat" (Agricultural Development Department of the Burlington Route, circa 1923).

Many of the new generation of farmers came from Nebraska where they had experience with farming in similar conditions. Technological improvements also made farming easier. Early twentieth century farmers benefited from the numerous educational materials being published for farmers. Arriving by immigrant train, many brought livestock, farm machinery, and supplies with them, making them better prepared than the previous generation. Extended family groups often decided to move together to a new location, providing support for

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each other. For those coming from Nebraska, some came out to prepare the farm and establish a crop, before moving their families to Phillips County. An example of these trends can be seen in the history of the Gansemer Farm (5PL.226). Brothers William and Fred Gansemer decided to move to Phillips County in 1917. The Gansemer brothers grew up in Gage County, Nebraska. They were the children of immigrants, with their father Peter from Prussia and their mother Elizabeth from Switzerland. William purchased a farm north of Paoli, and William and Fred came to Phillips County in 1917 to prepare the ground, plant a wheat crop, and construct a shed to live in (later converted to a chicken house), a barn, and a well. They also excavated a basement for the house to be built the following year. William sold the farm to Fred in 1918 for \$4800, and purchased another farm nearby. Prior to coming to Phillips County, Fred was a farmer in Lancaster County, Nebraska. His wife, Johanna Alberts, and two daughters remained in Nebraska while Fred worked on preparing the new farm. In 1918, Johanna came out with the children by emigrant train along with their horses, cows, and household goods. Two other brothers, Edward and John Gansemer, also moved to the Paoli area.

In the early twentieth century, there was increased government funding for agricultural research. Experiment stations and university-based extension programs worked to improve farming conditions. Projects included developing new crop varieties, fighting pests and diseases, and improving livestock breeding. They also provided advice on a wide range of farm management topics beyond just crops and livestock. Many were tied to Progressive ideas of improving the quality of life for rural populations. There were publications with advice on farm buildings and farmstead arrangement including titles such as "Practical Suggestions for Farm Buildings," "Beautifying the Home Grounds," "Improvement of Home Grounds in Colorado," "Hints to Plains Settlers: The Home Garden," "An Improved Poultry House for Colorado Flocks," and "Water Systems for Colorado Farm Houses." There were also many publications for farm women, offering advice on domestic tasks and professionalizing their essential contributions to farm operations. Publications of the Colorado Extension Service included "What's What in the House," "Advanced Sewing and Housefurnishing," "Serving the Family Meals," "Better Breakfasts," "Serving in Large Quantities: Menus and Recipes for Serving Fifty Guests," "Dishwashing," "One-Dish Meals," and "Remodeling Garments." The U.S. Department of Agriculture established an Agriculture Experiment Station in Akron (about 60 miles southwest of Haxtun) in 1907. The experiment station tested a variety of grains, forage crops, and trees to see which were best suited for the high plains and successful seed varieties were shared with local farmers. It also experimented with methods of cultivation, seeking methods to provide the highest yields as well as those with reduced labor requirements (Burlington Route, circa 1914).

Great faith was placed in science to solve the challenges of farming. Wrote Clason, "the secret of this success is not that conditions have changed; not that the soil is any different; nor the rainfall any greater; but that scientific investigation has proved how to cultivate the land to get the best results from the growth of crops and how to feed the products to stock, thereby realizing a greater amount of returns from it" (Clason 1916, 11). However, not all advice was equal. Some publications had an agenda, such as those published by the railroads which were created to draw settlers. There was also a lot of hype and exaggeration. One of the leaders of the Dry land farming movement was Hardy Webster Campbell. Born in Vermont, Campbell homesteaded in Dakota Territory in the 1870s. Based on his experiences he developed the Campbell System of dry land farming, which promoted

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plowing, cultivation, and tillage methods designed to hold moisture in the soil. His confident proclamations of the superiority of dry land farming methods, and their ability to overcome climate, weather, and drought, received wide press coverage. In a 1907 speech, Campbell made the lack of rainfall in eastern Colorado sound like an advantage:

I do not think there is any question about the assertion we make that we have found the way, the how, the time, the manner of cultivating the soil by which we are sure to get results, and if the plan can be carried out there is no question in my mind but what the prairies of Eastern Colorado, Western Kansas, Nebraska, and the Panhandle of Texas, and a good portion of New Mexico —those regions I am more familiar with than I am with the country farther north —can grow better average crops than they are growing in Illinois today, because we can secure the ideal condition, and control it, and they cannot do it in Illinois, because they have too much rain ("What Mr. Campbell Says About His System," 1907).

Settlement guides repeated variations of these claims. Clason's guide claimed that all of the rain would come at the ideal time for farmers: "in the plains section, the bulk of the precipitation comes in the form of rain from April to July, or just when needed by the farmer. By harvest time the rains are over. The Colorado farmer never worries from fear of rain spoiling his grain or crops" (Clason 1916, 12). "The Haxtun Country" made a similar claim: "The average rainfall is from 18 to 20 inches and as the greater part of this falls during the growing season good crops are assured. The only crop failure recorded in the past thirty years was in 1894 and that was not a total failure" (Haxtun Realtors Association, 1923).

Dry land farming, however, was not as easy as promoters such as Campbell led settlers to believe. Agricultural experiment station publications painted a more realistic portrait of eastern Colorado agriculture. The semi-arid climate and unpredictable weather of eastern Colorado posed serious challenges. With such limited amounts of rain, just a difference of a few inches could determine the success or failure of a wheat crop. *Dryland Farming in Eastern Colorado* described farming in the region as "a continual fight against relentless, unfavorable conditions" (Cottrell 1910, 4). The bulletin warned that even with the best seed varieties and recommended tillage methods, there would be years of reduced crops or complete failures and that dry land farmers needed to plan accordingly. The bulletin went on to caution that "those who do not understand the conditions, who are not adapted to them, or who do not have capital enough to tide over one or more unfavorable years are apt to meet with bitter disappointment" (Cottrell 1910, 3). The bulletin warned against over reliance on new "scientific" practices promoted as a means to ensure crop success or claims that the climate of eastern Colorado was changing. Rain would always be essential to crop success, but farmers could follow practices to conserve as much water as possible. "Suggestions to the Dry-land Farmer" recommended winter wheat as a crop because, if it was killed by harsh winter, the farmer still had the opportunity to plant other crops in the spring. Corn, sorghum, feterita, milo, millet, Sudan grass, and beans were also suggested (Clark 1919, 8).

At the beginning of the twentieth century, Phillips County was still primarily devoted to the ranching that had taken over after early farming efforts failed. But over the next decades, there was a rapid increase in the amount of land under cultivation. Livestock continued to be important but there was a shift to farm-raised and fattened

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livestock versus stock left to range on open pastures. Many dairy cattle were kept for cream production, and hogs also became a key part of the farm economy. In 1919, the *Haxtun Harvest* reported that:

Stockraising was formerly the principal industry, but the range upon which stockmen depended for pasture has in recent years been cut up into comparatively small farms and stockraising operations are now being carried on in a different way. Most of the farmers keep some beef cattle and hogs, but cattle here are now usually fattened for market instead of being sold for feeders as they were during the early history of the county" (*Haxtun Harvest*, Aug 28 1919).

Dry land farming required more land than farming in wetter climates, because the land could not be farmed as intensively. For a 320-acre farm, considered the minimum acreage for a successful dry land farm, the Colorado Agricultural Experiment Station recommended a combination of farming and livestock raising with 80 acres devoted to growing crops, 80 acres in summer fallow, and 160 acres in pasture (Cottrell 1910, 5). But many farms in Phillips County were larger. Farming in northeastern Colorado was on a very different scale than in the eastern United States. In 1919, a large farm in Phillips County was 800 acres. By comparison, a large farm in the eastern United States was 200 acres. In Phillips County, "the wheat and corn tracts of more than 200 acres are in the majority" (*Haxtun Harvest*, Oct 9 1919).

Local farmer A. M. Axelson gave a summary of Phillips County farming in Eugene Parsons' A Guidebook to Colorado:

The crops raised in eastern Colorado are corn, wheat, oats, barley, rye, potatoes, and forage, such as millet and sorghum. The yield of corn runs from 25 to 40 bushels per acre; wheat to 10 to 40 bushels per acre, fall wheat being raised very successfully and with better yield. Rye, barley, oats and potatoes are grown with success. The general method of farming is such as is used in Nebraska and Iowa. Some experiments with the Campbell method of soil culture have been made with material increase in yield of crops and it will pay to carry on that system extensively. The dairying industry pays well, either as carried on in connection with farming or as a separate business. Stock-raising, by itself or in connection with farming, is a profitable business. Cattle, horses and sheep do well and get along with small amount of feed, as winters are mild and short of duration. Here are small tracts irrigated by windmills pumping water for two to four acres which proves very profitable. This can be done on every farm and even on a larger scale, as the water supply is inexhaustible. Since the setback in the '90s, the county has steadily forged ahead and prospered. Its people are intelligent, progressive Americans, and its industrial development, though belated, has been placed on a solid footing by the successful solution of the problems of dry farming" (Parsons 1911, 260-261).

Diversified farming, raising both a mix of crops and livestock, was recommended as the key to success in dry land areas. It provided multiple sources of income, with income from livestock able to help the farmer survive bad crop years. In the years it was too dry to raise wheat, there was usually still enough moisture for forage crops

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like milo, sorghum, and hay. Though not cash crops like wheat, they could be fed to dairy cows and hens, and thus be turned into a profit from cream and eggs (Cottrell 1910, 6). Clason recommended that "the secret of the farmer's success on the unirrigated lands is stock raising; feeding his grains and forage crops to the cattle and marketing these in the form of beef, pork, cream, butter and cheese" (Clason 1916, 13).

Several new technological innovations in the early twentieth century made farming in Phillips County easier. At the beginning of the century, farmers still relied on horses for most farming tasks. But the use of mechanized tractors, planters, cultivators, and harvesters grew rapidly. The development of new farm machinery profoundly changed the way farmers worked (see Fig. 5). Early twentieth-century tractors were expensive, heavy, and not very reliable. But after Henry Ford's Fordson tractor was introduced in 1917, they were quickly adopted. The Fordson was the first mass-produced tractor, costing \$750. Tractors enabled farmers to plow, plant, and harvest much greater acreage. With a horse and plow, it took a farmer about an hour and a half to till an acre, whereas a tractor could cut that time to fifteen to thirty minutes. Tractors also required much less maintenance than



Figure 5: Harvest in Phillips County, date unknown. Courtesy of the Phillips County Historical Society.

horses. A farmer needed to raise around five acres of feed crops to maintain each horse; if he replaced his horses with a tractor, he could plant cash crops on these acres instead. In 1908, the State Herald reported that: "two big steam plows are turning over the prairie sod within two miles of Holyoke this week. This looks like business and it is business by the whole sale. The land around Holyoke is being rapidly put under cultivation and Holyoke people will soon be forced to take a drive when they wish to see the buffalo grass prairie" (State Herald, Jun 26 1908). Local banks offered loans to help farmers cover the cost of the new equipment. Neighbors might also go in together to buy

equipment or a farmer might rent a tractor. In 1919, the *Haxtun Harvest* reported that there were 168 tractors in use in the county, meaning roughly a quarter of the farms had tractors (*Haxtun Harvest*, Dec 18 1919). The county's rapid adoption of the tractor was an indication of the prosperity and productivity of farmers in Phillips County, with a railroad publication in the early 1920s proclaiming Phillips County as first in the state in the number of tractors (Agricultural Development Department of the Burlington Route, circa 1923).

Threshing machines or combines, which separate grain from stalks, were introduced in the late nineteenth century, but they were expensive and it took time for a more commercially successful model to be developed. At

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first, their use was generally limited to combine operations hired by farmers to help them harvest their grain. But because of the large size of wheat farms in Phillips County, combines were adopted there more quickly than elsewhere:

Wheat harvesting on the plains of Eastern Colorado is being revolutionized by use of the harvester-thresher, generally known as the combine. This machine cuts and threshes in one operation, being a combination of 12-foot header and threshing machine which handles 20 to 25 acres of grain a day. Two men do the work which under separate operations in the old way requires six of more men. Cost of cutting and threshing is cut to about one-third by use of the combine. The machines were introduced in this state in 1918 and there are literally hundreds in use now, many sales being made this season in spite of unfavorable financial conditions. Most of the combines are being bought for individual use, the machines being found economical on farms having upward of 200 acres to cut (*Western Farm Life*, Aug 15 1921).

The combines cost about \$1800 in Denver. They worked best on flat or gently rolling land.

According to *Suggestions to the Dry-land Farmer*, the ultimate success of a farming operation depended on the amount of land and the farmer's utilization of that land with the best-suited crops and methods. The publication also urged farmers to be cautious in purchasing machinery, advising them not to go into debt until they were certain what was really needed. For livestock, at least 50 laying hens were recommended and six to eight dairy cows. Like crops, the number of livestock that could be raised per acre was less in Colorado's dry climate than in more humid areas. The extension service recommended that the number of animal units for a farm should not exceed 40. A cow or horse was equal to one animal unit; seven sheep equaled one unit; five hogs equaled one unit; and 100 hens equaled one unit (Clark 1919, 3-14). A farmer should ensure that there is "live stock enough to consume all the straw and other roughage. The dry farmer must depend most largely upon live stock, because his chief crops must be the cultivated, drought-resistant forage plants. Corn forage, wheat and bean straw and other such crops have no value unless fed to cattle, sheep or horses" (Clark 1919, 9).

Farmers were encouraged to keep some dairy cows as a source of supplemental cash income. The small size of Phillips County, and the railroad running through the center of the county, made it ideal for dairy production because farmers could easily transport dairy products to local creameries, which then shipped them on to larger cities. The farmer could sell milk, cream, or butter. *Dairy Work for Plains Settlers* recommended dairy cows because: "while learning how to raise profitable crops under his new conditions, the farmer will need an income to support his family. One of the best ways of securing this is by milking cows and selling the cream to a factory. Range cows selected for milking qualities and fed on the native prairie pastures of Colorado alone will produce through the summer from \$2 to \$5 worth of milk per head a month" (Cottrell 1907, 2). *Dairying on the Plains* further recommended dairying as valuable to raising thrifty and industrious children because: "with cows to milk and care for regularly and the calves to feed, there will be something for every child to do who is strong enough, and each member of the family may be helping to earn something to provide luxuries as well as necessities"

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(Payne 1904, 24). In 1908, the *State Herald* reported that "about \$450 worth of cream was shipped from Holyoke last week. About \$2,000 a month is now being paid to the farmers for cream shipped from our town. This is quite an important industry for that amount of money put in circulation every month helps business considerably" (*State Herald*, Jun 26 1908). The successful dairying industry was lauded in promotional materials. According to a railroad publication:

Dairying is one of the principal industries of this county, and it has been demonstrated that six average milch cows will bring the farmer a net revenue of \$40.00 per month. The silo and the cow are the sure cash producers for the farmers of Phillips County, as there is always a ready market for butter fat at from 23 cents to 35 cents per pound. Phillips County is conceded to be the greatest cream shipping county west of the Missouri River (Burlington Route, circa 1914).

Eggs were another crop that farmers could sell locally as well as ship by rail to more distant markets. In 1913, the *Holyoke Enterprise* reported that about 100 cases of eggs were shipped each week from Holyoke, representing a net income to local farmers of around \$500 (*Holyoke Enterprise* 2000, 17). In 1919, the *Haxtun Harvest* noted:

Around Haxtun it is noticeable that chickens are kept on almost every farm, and in some cases there are scores and even hundred, and in almost every case they are proving a wise investment and are making their owners a neat sum each week. . . . Last Saturday, the Drake Mercantile company paid out slightly over \$700 for eggs alone" (Apr 10 1919).

Like dairy cows, tending chickens and gathering eggs was also often a task for farm children.

Hogs were also recommended for northeastern Colorado because they did well on corn, a primary crop in the region. Some publications claimed that farmers could get a better return using the corn as hog feed than by selling the corn on the market. Hogs had several advantages that made them popular: hogs ate almost anything and could be fed kitchen scraps and any leftover farm products; hog meat was easily cured and preserved to last year round; and lard from the hog could be rendered for cooking. There were several farmers in Phillips County who raised pure bred Duroc-Jersey hogs. A railroad publication praised Phillips County as an ideal location for hogs both for its breeders as well as for its climate: "Phillips County feeds and climate are conducive to developing vigorous, strong and healthy hogs that fatten well, either in the home or outside yards" (Agricultural Development Department of the Burlington Route, circa 1923).

One of the leading hog producers in Phillips County was Rudolph Ewegen. Born in Nebraska in 1883 to German emigrant parents, Ewegen farmed near Crete, Nebraska before purchasing a farm (5PL.29) near Amherst in 1910. Rudolph farmed 1500 acres, growing corn, wheat, potatoes, and oats, along with raising cattle, horses, chickens, and hogs. The farm had a hog barn as well as an attached sale barn and extensive hog pen system. The barn was designed specifically for hogs. On the north and south sides it featured eight, evenly-spaced small doors at the ground level that allowed hogs to enter and exit the building from their individual pens. Skylights provided sunlight to each pen. According to his obituary, Rudolph succeeded in "farming, custom breaking of

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prairie sod, threshing and raising pure bred Duroc Jersey hogs." Rudolph was a member of the National Duroc Jersey Swine Association (Christman 2010).

The agricultural success of Phillips County was clearly demonstrated in the county's statistics from the federal agricultural census. Between 1900 and 1920, the total acreage of farms in Phillips County rose from 69,626 acres to 300,320 acres. At the beginning of the century, there were 5,485 acres of corn in the county and 3,802 acres of wheat. By 1920, this had increased to 51,438 acres of corn and 76,618 acres of wheat. The expansion continued through the 1920s with 72,736 acres of corn and 124,505 acres of wheat in 1930. The switch from ranching to diversified farming is seen in the decline in the number of cattle from 23,633 in 1900 to 10,425 in 1920. The number of hogs rose from 1,529 in 1900 to 8,166 in 1920 and 12,100 in 1930. The number of chickens rose even more dramatically from 10,283 in 1900 to 50,548 in 1920 and 119,565 in 1930. The growth in tractors is evident in that the number of horses peaked at 5,744 in 1920 before falling to 4,133 by 1930 and only 580 by 1950.

Building Phillips County

The arrival of a new generation of farmers in the early twentieth century also reinvigorated the development of Holyoke and Haxtun, which had stagnated after the initial-settlement boom. According to the *Holyoke Enterprise* in April 1900, "Holyoke has no boom and does not want a boom, but we predict that within the next six months there will be a greater demand for dwelling houses in Holyoke than there has been since the early days of the town" (*Holyoke Enterprise* 2000,8).

Similar development trends can be seen in Haxtun and Holyoke, the county's main communities. The economy of the towns was based on agriculture. The towns developed as a focal point for the surrounding agricultural lands, with town life extending far beyond the actual borders of the towns. Many of the businesses were based on agriculture, including selling farm implements, operating grain elevators, and processing farm products. Farmers were also important customers for general merchants, with the farmers purchasing some groceries, building materials, and other supplies in town. Advertisements in the Holyoke and Haxtun newspapers show the importance of agriculture to the economy with farm-related products prominent. The *Haxtun Harvest* boasted that Haxtun had "two regular firms carrying immense stocks of farm machinery and implements and ready at a moment's notice to furnish anything from a garden hoe to a farm tractor" (December 18, 1919). Farmers were also active members of the communities, attending church, fraternal meetings, and other activities in town. Many farmers opened businesses in town as well. According to the *Haxtun Harvest*, "the bankers of Haxtun are almost without exception men who got their start farming, and as a result their sympathies are with the men and women who are doing their part on farms or in business in building up the country" (*Haxtun Harvest*, December 18, 1919). Farmers also served as county commissioners, on co-op boards, on school boards and were active in grange, Farmers Union, Home Demonstration Club, and other community organizations.

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The strong ties between the towns and agriculture can be seen in the town description printed on the envelopes of the Holyoke Commercial Club in 1909, which emphasized both town amenities and the agricultural potential of the surrounding land:

Holyoke has city waterworks, fire department, large grain elevator, two lumber yards, two banks. Holyoke has two weekly newspapers, good graded school, county high school of four grades, four churches, good hotels, machine shop, cigar factory, creamery, etc. A city of comfortable modern homes, beautified by many large thrifty trees. The country is underlaid with finest possible water in inexhaustible abundance, fine level farm land with practically no waste land, 'beautiful for situation.' Soil largely composed of rich black loam, farm land sells for from \$10 to \$40 per acre. Excellent yield and quality of corn, wheat, oats, barley, rye, spelt, cane and millet. Wheat and corn yield from 20 to 40 bushels per acre. Dairying and stock raising are leading occupations of the farmer (envelope text reprinted in *Holyoke Enterprise*, Mar 31 1955).

In the early twentieth century, the temporary buildings of the frontier period were replaced with more permanent buildings. This was reflected both in the types of buildings being constructed and the materials used, with specialized brick commercial buildings replacing the sod and false-front buildings of the previous century. Frontier buildings were simple, basic, multiple-purpose buildings constructed as quickly and cheaply as possible. The buildings of the early twentieth century were constructed of better materials and more specialized in type and function. General sheds and livestock shelters were replaced with chicken coops, brooder houses, hog barns, milk houses, granaries, workshops, and garages. Because the county's economy was based on agriculture, the degree of prosperity seen in the towns reflected the prosperity of the surrounding farmland. Additionally, the amenities offered by Haxtun and Holyoke were used to attract farmers to the county. These were the buildings constructed by those who planned to stay. Many new houses were also constructed for the growing population.

Holyoke

The transition of Holyoke from a frontier settlement to a more established community can be seen in the types of buildings constructed. After the challenges of the 1890s, by the beginning of the twentieth century the number of businesses in Holyoke declined. However, a fair number of businesses were able to survive the hard times, because Holyoke was the county seat and a major stop on the Burlington route with extensive railroad facilities. In 1900, the *Colorado State Business Directory* described Holyoke as an agricultural town of 500. There were 32 entries listed in the directory, including the Bank of Holyoke and Farmers & Merchants Bank; a Baptist Church and Methodist Episcopal Church; three attorneys; four grocery and general merchandise stores; a hardware store; a dentist; a physician; a hotel; a blacksmith; a livery; a jeweler; a milliner; a carpenter; a house mover; a lumber and coal dealer; a real estate firm; the Holyoke Creamery Association; and the Irwin & Co. grain elevator (*Colorado State Business Directory* 1900, 508). In 1903 the *Holyoke Enterprise* described Holyoke as "a town of churches. There is no other town of its size better equipped in every way for satisfying the needs of the

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people in all that pertains to church advantages and privileges than Holyoke. With a population of 500, it has four church societies (Methodist, Baptist, Catholic, Presbyterian), four neat comfortable church buildings, three parsonage buildings and three resident ministers" (Holyoke Enterprise 2000, 11).

By 1905, the number of listings in the directory had doubled. New entries included an auctioneer; a pool room; a meat market; a barber; an agricultural implement dealer; a paperhanger and painter; two stock dealers; a piano shop; and a restaurant and bakery (Colorado State Business Directory 1905, 663-666). By 1910, the number of entries in the directory had nearly doubled again. The directory described Holyoke as: "a prosperous and growing agricultural town, county seat of Phillips County, 50 miles northeast of Sterling on the B&M Ry. Is surrounded by a good farming country and has progressive and enterprising business houses. Population 1,200." Most of the additional entries were expansions of existing business types, but there were also some new business types such as the Colorado Telephone Company and the Phillips Automobile Company (Colorado State Business Directory 1910, 829-832). Holyoke had also constructed its first power plant the previous year. By 1915, Holyoke's first theater had opened. There was also a huge expansion in creameries with new operations including the Beatrice Creamery, Boulder Creamery Company, Capitol Hill Creamery, Fairmount Creamery, Farmers Creamery, and the Phillips County Butterfat Association (Colorado State Business Directory 1915, 709-712). In 1920, the directory listed the population of Holyoke and the surrounding area as 2,500. The number of automobile businesses had grown dramatically with the directory including the Vesta Service Station, Chapman & Gentzler Autos, Continental Oil Co., an authorized dealer of Ford Motor Cars and Fordson Tractors, and Waln Bros Garage (Colorado State Business Directory 1920, 629-634).



Figure 6: Haxtun business district, 1912. Courtesy of the Phillips County Historical Society.

Haxtun

Growth in Haxtun was slower than Holyoke. In 1900, the Colorado State Business Directory listed Haxtun with a population of 100. Businesses included a hotel and livery, grain elevator, jeweler, two general stores, and lumber/coal/hardware business. By 1905, the population had actually fallen, with the directory listing a population of only 65. But some new businesses were listed including two blacksmiths, a creamery and meat market, a restaurant, a barber, and a physician. However, by 1910,

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there was a huge growth in local commerce with the entry for Haxtun expanding from 15 businesses to more than two pages, and the population was recorded as 400. The physical growth of the community was reflected in construction-related businesses, including a stone mason and plasterer, an architect, a carpenter, two lumber yards, and a manufacturer of cement blocks (see Fig. 6). Agricultural interests were represented with land companies (the Nebraska-Iowa Real Estate Company and the Pioneer Land Company) along with two agricultural implement companies, a veterinarian, and a grain company.

The establishment of modern town infrastructure was also essential. Haxtun constructed a waterworks in 1913, which was soon pointed out in promotional brochures: "Haxtun, the second largest town in Phillips County, is located in the corn belt. It owns its own city water and has good cement sidewalks, churches and schools. The principal lines of business are well represented. During the year 1913, many new brick business blocks were erected, one bank building costing \$25,000" (Burlington Route, circa 1914). The 1915 directory showed new businesses, including two motor car companies, a moving picture theater, two restaurants, cigar stores, and billiards parlors. Like Holyoke, churches were an important part of community in life in Haxtun: "Haxtun is a town of churches. The first sights that greet the eyes of passengers on the trains from either direction are the towering elevators, the church spires and the water tower, and it is just about in that that these things rank in importance. . . . In each church there are the usual societies and organizations, and the social life connected with the churches of Haxtun is not the least of the good features" (Haxtun Harvest, Dec 18 1919).

In 1920, the business directory recorded the population as 1,200. The town was described as:

A prosperous and growing town in Phillips County. . . . It is the center of the best grain growing district in the county. The town owns its own water system, has electric lights, cement sidewalks, a flour mill, three banks, three elevators, three churches, good schools, including a high school, and business houses representing all the principal lines of mercantile business. It is the center of the best corn growing district in the county, and perhaps the best in the state. About 200,000 bushels of corn annually are shipped from the station. There is also a large acreage of wheat raised in the territory tributary to the town and it is one of the principal wheat shipping stations on this branch of the Burlington road (*Colorado State Business Directory* 1920).

New businesses included Beatrice Creamery, Haxtun Plumbing & Heating, Economy Auto Sales, and Haxtun Machine Works. Growth continued through the 1920s. Agricultural expansion could be seen in the three creameries, farm loan association, and farmers' co-operative listed in 1925. The growth of automobile and truck traffic could be seen in Haxtun's transportation-related businesses, which included Brooks-Hartman Motor Co., Continental Oil Co., Ford and Lincoln Motor Cars/Plainview Garage Co., Forsythe Oil Co., Strickland Vulcanizing Shop, and Home Oil Company.

A wholesome image and strong sense of community were key parts of the promotion of Haxtun and Holyoke, used to encourage settlement in Phillips County. In the 1920s, a railroad brochure described Phillips County as:

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Substantially built, new towns, handsome, well appointed rural homes in which one finds all modern conveniences, good schools, churches, lodges, local and long distance telephone service, rural free delivery route in all directions from trade centers, widespread use of the radio, well-edited weekly newspapers, libraries, county and community fairs, women's clubs, Boys' and Girls' Agricultural and Home Economics Clubs, clean sports and healthy competition, good fellowship between towns, all are evidence of cultural and civic advancement distinguishing both town and county social life. There is an utter absence of unfavorable social influences. Such a section invites home making and home makers and assures a wholesome atmosphere for the family (Agricultural Development Department of the Burlington Route, circa 1923).

Residents voted to make Holyoke an anti-saloon town in 1908 (Holyoke Enterprise 2000, 14). Haxtun was also a dry town, with the local paper lauding the fact that "moral cleanliness is as evident here as municipal cleanliness. There is no illicit traffic in liquor—in fact it is proverbial that bootleggers fight shy of Haxtun—and immorality in the broad sense of the word is absent" (Haxtun Harvest, Dec 18 1919). A Midwestern, egalitarian character was also promoted. Service organizations and Progressive politics were a key part of the social life of the towns. Haxtun groups included the Odd Fellows, Modern Woodmen of America, Modern Brotherhood of America, Rebekahs, Grange, Farmers' Union, and Non-Partisan League. The Haxtun Harvest wrote of its town:

The social life connected with church, lodge, school and the farmers' organization is far ahead of that of the ordinary town of similar size. The stranger will find a warm welcome to the congenial life of this town, and his enjoyment and social climb will be limited only by his own actions. There is little of the social exclusion of older towns, the spirit seeming to be that of true democracy (*Haxtun Harvest*, Dec 18 1919).

Paoli

Though much smaller than Haxtun and Holyoke, Paoli was also developing into an important commercial hub and shipping point. Located midway between Haxtun and Holyoke, it expanded rapidly in the 1910s, spurred by the establishment of the Paoli Land Company. According to the *Haxtun Harvest*:

When the land company undertook to populate the land with new settlers . . . they met with little encouragement. Persistent advertising and boosting finally had its result, and Paoli land began to be more in demand. In the spring of 1916, when the real growth of the country began, there were less than twenty-five persons in Paoli. There perhaps was 3,000 or 4,000 acres of land broken. Today there is a population of ten times that number and it is safe to say that in the entire tributary country there is not more than four quarter sections on which no improvement has been done. . . . the development of the country naturally led to the demand for a central trading point, and this demand was filled by the creation of the town of Paoli (*Haxtun Harvest*, Dec 18 1919).

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By 1919, businesses in Paoli included a bank, a general store, two lumber yards, a hardware store, a barber shop, a garage, and the Paoli Telephone Company (*Haxtun Harvest*, Dec 18 1919).

Grain Elevators

With the rapid expansion of grain production in the early twentieth, new methods of grain storage and marketing were needed. Grain elevators were established, rising above the towns of Phillips County. Elevators were used to store loose, small, dry cereal grains. Elevators stored and moved grain vertically, using gravity flow. They became an essential part of the grain distribution system. Farmers delivered their grain crops to their local elevator. These country elevators were along railroad tracks in small towns across the plains. Farmers could either sell their grain to the elevator or pay the elevator to store their grain, holding it until market prices were at a peak. Storage at the elevator protected grain from spoilage. From country elevators, the grain was shipped by rail to terminal elevators in larger cities. From there grain generally went to processing elevators, such as feed mills or flour mills, where the grain was processed into a product for human or animal consumption. Some grain was also processed locally.

Early elevators were constructed of wood. Wood elevators were economical and easy to build. The primary

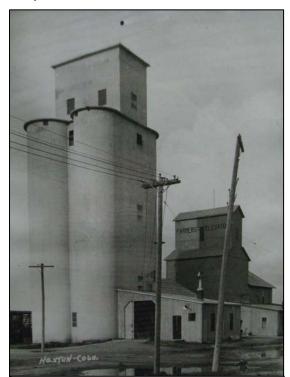


Figure 7: Haxtun's first concrete elevator, c. 1923. Courtesy of the Phillips County Historical Society.

disadvantage was high fire danger. This was reduced by covering the elevator in galvanized iron or tin siding. There were two primary types of wood elevators: cribbed and studded. Cribbed elevators were constructed of horizontally stacked wood (2"x10", 2"x8", 2"x6", or 2"x4") laid flat with the corners interlocking similar to log cabin construction. Larger boards were used at the base of the structure with smaller boards used higher on the walls. The boards were joined together with spikes or nails. Studded elevators utilized balloon framing techniques. This was less expensive, but also less sturdy, than crib construction. The walls of studded elevators were held together by horizontal wood braces placed around the elevator every 4'. Metal tie rods extended through the bins and were anchored to the external braces for additional support (Mahar-Keplinger 1993, 12-19).

Concrete elevators became popular in the 1910s (see Fig. 7). They were fire proof and also better at preserving grain from damp and pests. As a result, the insurance costs were less than for wood elevators. Concrete elevators could also be built larger than wood elevators. The development of slip-form construction allowed for circular tanks to be produced in one continuous pour without joints. Concrete walls were reinforced with steel

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rods.

The basic components of a grain elevator included storage bins for grain, a scale for weighing the grain, a covered drive over a pit (boot) where grain was unloaded, a bucket elevator for raising the grain, a conveyor to distribute grain into bins, spouts to distribute grain, and an office. Farmers dumped grain into the elevator boot. From the boot a vertical belt and bucket conveyor lifted grain to the headhouse where it was distributed into bins for storage. When the grain was ready to distribute, chutes at bottom of bins distributed grain into railcars or trucks.

In the early twentieth century, elevators were established in Haxtun, Holyoke, Paoli, and Amherst. Elevator companies often dealt in other commodities as well, including feed, seed, coal, oil, and lumber. Some were locally owned and others were part of state or regional networks. There was a movement towards co-operative marketing of grain in the 1910s with farmer's co-operatives established in Haxtun in 1919 and Holyoke in 1920.

Schools

A county high school was established in 1901 with an opening enrollment of fifteen students. After meeting in the grade school and courthouse, a purpose-built county high school was constructed in 1912 (Holyoke Enterprise, Jun 13 2013). The high school curriculum included Latin, algebra, general history, English, drawing, music, and physical geography freshman year; geometry, biology, Latin, history, English, drawing, and music sophomore year; physics, German, history, English, drawing, and music junior year; and chemistry, geometry, trigonometry, German, history, English, and music senior year. Graduates of the county high school were eligible to enroll as freshmen at Colorado State University or as juniors at the State Normal School of Colorado without any additional exams (Holyoke Enterprise 2000, 9). By 1916, 36 active school districts were active in the county with a total of 47 schools. Most of these were still small schools with just one teacher. Only the schools at Holyoke, Haxtun, Amherst, Highland Center, Fairfield, Amitie, and Paoli had more than one teacher. There were 910 students enrolled, including 78 high school students (Stone 1918, 597; Bradford 1919, 111-112). Frontier-era sod schools had been replaced with new buildings. A railroad brochure used the schools as a selling point stating that: "The rural districts have nice frame schools, fitted with the latest appliances and pay their teachers from \$50 to \$80 per month, having from six to nine months school annually" (Burlington Route circa 1914). Rural schools were generally one-room, small, and simple without any decoration (see the Rural School Buildings in Colorado National Register of Historic Places Multiple Property Documentation Form for more information). Schools in larger communities were larger, multi-room, more decorative, and often constructed of brick.

The Farmstead

Farms often took several years to establish. Often the men of the family came ahead to begin farming operations and construct essential buildings before moving the entire family to the farm. For example after Henry Heermann of Nebraska purchased a farm in Phillips County in 1920, he sent his sons out to break the sod. For three years, they came out to Phillips County in the summer and moved back to Nebraska in the winter. They constructed a small building to live in while farming (later to become a granary) and constructed a larger building

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to serve as the first house for the family (converted to a chicken coop after it was replaced with a two-story house) (Phillips County Historical Society 1989, 402).

By the early twentieth century, most Phillips County farmers had abandoned their sod houses for frame houses. Lumber, along with building plans, could now be obtained from local lumber yards. Farmers could also order a new house, barn, or other outbuilding from a catalog, to be delivered as a kit via the railroad. Farmsteads expanded and modernized as farming took hold. A typical farmstead might include a house, general barn, tank house, chicken coop, granaries, cellar, garage, outhouse, and corral. In addition, many included specialized structures such as milk houses or hog barns. Trees were also an essential feature of the farmstead; farmers planted dense windbreaks to block the stiff prairie winds and to prevent erosion.

Barns were essential to working farmsteads, and so they were often the first building a farmer constructed. A farm family might even live in part of their barn while building themselves a residence. Barns were typically farm with a gable or gambrel roof. Barns generally included horse stalls, a tack room, and equipment storage on the main level with a loft for hay storage above. Barns might also be built to accommodate dairying, for many famers also kept a few milk cows. Milk products and eggs were additional sources of year-round income for farmers. Granaries were essential for storing grain for cattle and hogs. Additionally, with granaries or small elevators, farmers could store their own grain for market, keeping it until the prices were best without having to pay an elevator for storage.

Moving entire buildings was a common practice in the county. Farmers were frugal and reused buildings whenever possible, moving them to wherever they were needed and often converting them to new uses. Buildings were moved from town to farm and from abandoned farms to farms in need of additional buildings.

Most farmers supplemented their income with dairy cattle and poultry (Cottrell 1910, 5). Both came with their own building requirements. Dairy cows needed a warm, dry shelter for the winter. Farmers also needed a clean place for milking to keep dust or dirt from the milk. The milk also needed to be stored somewhere cool. This could be a milk house, but a farmer could also hang the milk pail in the well or store in a cellar covered by a wet cloth (Cottrell 1910, 9-10). Chickens needed warm, well-lighted, dry, and well-ventilated buildings. Chicken coops were typically constructed with large windows on the front and a roof that sloped towards the rear. The experiment station recommended a building 7' high in front, 4'-6" high at the rear, and 14' to 16' wide. Windows were recommended to face south and the nest on the north side of the building in the dark (Cottrell 1910, 12).

A good example of a farmstead established during this period is the Flaker Farm/ Evergreen Corner (5PL.217, listed 12/24/2013, NRIS#13000960). Henry A. Flaker purchased the farm for \$2,000 in 1917. Henry Flaker was born in Ohio in 1867 to German emigrant parents. He left school after 6th grade and moved to Nebraska in the 1890s. He married Lena Albers, also the child of German emigrants, in 1899. Henry and Lena had three children while living in Nebraska: Ervin (1904), Minerva (1907), and Fern (1909). Henry was a merchant and operated a general store in Hallum, Nebraska. Though Flaker was one of many Nebraska residents to move to Phillips County in the 1910s, the vast majority were already farmers. Henry Flaker is unusual for deciding to give up a

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commercial business to take up farming, especially at the age of 50. Factors influencing Flaker may have included the many other Nebraskans moving to Phillips County, the progressive farming and back to the land movements of the 1910s, and the high crop prices during World War I.

There do not appear to have been any substantial buildings on the property when Flaker purchased it, with the property likely owned by a series of non-resident or out-of-state owners. The barn was constructed first (completed in 1918), and the Flaker family lived in part of the barn during their first summer on the farm while the house was under construction. The original layout of the barn included horse stalls on the western side with a grain bin in the northwest corner, stanchions for dairy cows, and a garage in the southeast corner. Farm machinery was stored in the central part of the barn. A hay loft was located above. In the winter of 1918/1919, the Flakers moved into the basement of the house while it was still under construction. A windmill and tankhouse were constructed behind the house to provide water. Flaker planted a windbreak of evergreen trees to shelter the farmstead and named his new farm Evergreen Corner. A Phillips County promotional brochure published by the Agricultural Development Department of the Burlington Route in the early 1920s featured a photograph of the Flaker farm, labeling it "an exceptionally well improved farmstead."

Another representative farm (5PL.163) is that of August Welper, who was born in the Duchy of Hanover (Germany) in 1862. As a youth August worked in a brewery and as a farm laborer. In 1866, Hanover was conquered by Prussia, which started conscripting men into the army at age 18. Wanting to avoid their older brothers' fate of being conscripted to serve a conquering nation, August and his brother John decided to immigrate to the United States (other family members would later follow). They traveled to Holland where they boarded an emigrant ship to New York. August and John arrived in 1881 and sought out other German immigrants, living and working in the neighboring communities of Eitzen, Minnesota and New Albin, Iowa for the next three years. In 1884, August went to work laying track for the railroad. In 1892, August married Emma Riesche in Lyons, Nebraska. The daughter of German immigrants, Emma was born in Newport, Kentucky in 1864. August filed for a homestead in Dawes County, Nebraska in 1892. After their marriage, August and Emma moved to a sod house on the homestead. August's brother George and Emma's brothers, William and Louis, also homesteaded in the county. Daughter Amelia was born in 1894. The 1890s were a difficult period with drought in the region and many farmers left. In 1897, August sold the homestead and the family moved to Lyons, Nebraska, where daughter Mathilda was born. August rented a farm in Lyons for a few years, then purchased a farm in 1900 where Herbert, Etta, and Irma were born. In 1910, August decided to move the family to a farm in Pierce County, Nebraska. Then, in 1917, August decided to move to Colorado. August Welper purchased 320 acres approximately 2.5 miles southwest of the community of Amherst in northeast Phillips County. The soil in that part of the county was ideal for wheat farming and had attracted many families of German descent. This was probably a large draw for the Welper family. A German Lutheran, August had sent his children to confirmation classes taught in German in Nebraska. August expanded the existing farm complex, building a wash house, barn, and chicken coop. He grew wheat and alfalfa on the southern half of the farm and used the northern half as pasture for horses and cattle. He also expanded the size of the farm, growing it to 800 acres.

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Although the railroad had been essential to the initial development of Phillips County, road improvements and automobile use played an important role in its early twentieth-century development. Automobiles were present by 1903 when the mail carrier of the Julesburg to Holyoke route ordered an automobile to replace his horse and wagon (*Holyoke Enterprise* 2000, 11). In 1909, the *Holyoke Enterprise* reported that there were six cars in Holyoke (*Holyoke Enterprise* 2000, 15). Automobiles greatly improved the ease and speed of transportation in Phillips County, especially for those on farms, making it easier for them to come into town to deliver agricultural products as well as to attend social and community gatherings.

Ford introduced the Model T in 1909, with an \$825 price tag that made automobiles more affordable than previous models. More than 10,000 cars were sold the first year. As automobile ownership became increasingly popular, a corresponding Good Roads Movement aimed at improving and promoting the nation's roads. In Colorado, these efforts led the state legislature to create the Colorado Highway Commission in 1909. The commission asked each county to submit its most traveled routes, and these were incorporated into the state's first highway system. In Phillips County, this was an east-west route that became the Omaha-Lincoln-Denver Highway. With the establishment of the route as a state road came state funding for road improvements and repair. Designation was also anticipated to bring more traffic. The *Holyoke Enterprise* was excited about the designation, hoping that travelers would help promote the county: "Every man who drives through our county advertises the county and he cannot be truthful, if he does not say a good word for it, after seeing what a fine county we have" (*Holyoke Enterprise* 2000, 16).

As part of the Good Roads Movement were civic and commercial groups that raised money to improve and promote named motor trail routes. The Omaha-Lincoln-Denver Highway was designated by the Transcontinental Highway Association in 1911. The goal of the new road association was "for highway improvement and uniform marking of the road for the safety and pleasure of local residents and the many hundreds of tourists who annually travel this route" (Parisoe 1913, 26). From Omaha the highway connected with routes to the East Coast and from Denver it connected to routes to the West Coast. By 1913, the association had spent more than \$400,000 on improvement of the route. The route offered the tourist "constant touch with telephone and telegraph, good hotel accommodations, and splendid garage facilities" (Parisoe 1913, 26). The highway became a selling point for Phillips County. The promotional brochure "There's a Farm for You in Colorado," boasted that "the great Coast-to-Coast highway runs directly through the county and touches the principal towns. The fact that there are 200 automobiles owned in this county shows that prosperity exists quite generally among its inhabitants" (Burlington Route, circa 1914). The distance from Omaha to Denver could be covered in two days.

By the 1910s, automobiles had become commonplace in Phillips County and many new businesses were established to serve local residents as well as those traveling through on the Omaha-Lincoln-Denver Highway. In 1918, the *Colorado Year Book* reported that despite the lack of natural scenery in Phillips County, the county was still seeing significant tourist traffic as travelers passed through on their way to the mountains, giving an economic boost to the county (State Board of Immigration 1918, 164). In 1919, the *Haxtun Harvest* reported:

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With practically every farmer and townsman the owner of an automobile and the roads open to traffic during the entire year it naturally may be supposed that the demand for first-class automobile repair men and garages is great. This is true, but the demand has been well supplied, and the wayfarer who may have need of repairs will have every reason to feel himself fortunate when he finds not only able mechanics ready to do his work, but the latest and best of machinery for the repairing and making of almost any part of anything from a Ford to a Pierce-Arrow. Haxtun has three first-class garages and a vulcanizing works (Haxtun Harvest, Dec 18 1919).

According to the 1920 census, 1750 of Phillips County's 5542 residents owned a car (Holyoke Enterprise, Jun 13 2013). The Holyoke Enterprise reported that the county was leading most of the U.S. in the number of cars per person (2000, 24).

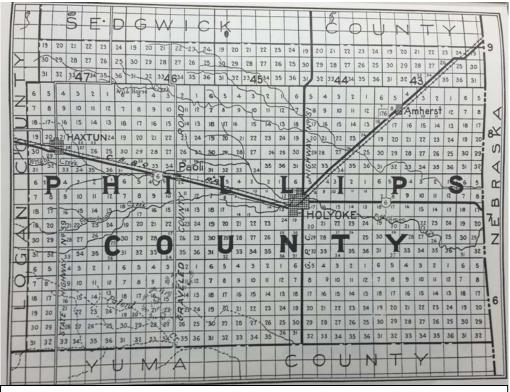


Figure 8: Map of Phillips County showing the route of Highway 6. Source: Those Were the Days (Phillips County Historical Society)

Moines, Iowa; Omaha, Nebraska; and Lincoln, Nebraska.

In 1919, Motor Travel promoted the Omaha-Lincoln-Denver Highway as the one "used by the majority of tourists to Denver, Colorado and Rocky Mountain points. It is a very good dirt road, thoroughly marked, and this year will see it in better shape than ever" (Motor Travel 1918, 21). In 1920, the route was expanded to reach Michigan and the Omaha-Lincoln-Denver Highway Association became part of the Detroit-Lincoln-Denver Highway Association. The route ran from Detroit through South Bend, Indiana; Joliet, Illinois; Des

Parts of the route were incorporated into the U.S. Highway system. The first national numbered highways were created in 1927. U.S. 6 was one of the first routes designated and extended from Provincetown, Massachusetts

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to Pennsylvania at this time (see Fig. 8). In addition to its number designation it also became known as the Roosevelt Highway in honor of Theodore Roosevelt. In 1931, the route was extended to Greeley, Colorado, passing through Ohio, Indiana, Illinois, Iowa, and Nebraska. In 1937, U.S. 6 was extended to Long Beach, California making it a transcontinental highway. Passing through fourteen states, the total length was 3652 miles, and renamed the Republic Highway to honor those who fought for the Union in the Civil War. Each state had to vote to adopt the name; the entire route was finally formally dedicated as such in 1953.

Depression, Drought and the Federal Relief (1930-1946)

During the 1930s eastern Colorado was hit hard by a confluence of disasters: a severe economic depression along with a severe drought. This combination was devastating to an agricultural industry that was already in trouble. Farmers in eastern Colorado were struggling even before the stock market crash of October 29, 1929. Agricultural prices fell dramatically after World War I, as American farmers produced surplus crops that far outstripped demand. There were several reasons for the surplus and fall in prices. First, was the increased amount of land being cultivated, as farmers had increased the acreage in production during World War I due to high prices and government calls for more food to help win the war. This included land previously considered unsuitable for farming being cultivated, including "land that, under cultivation, could return a fair living only while prices were high and, in some localities, only while the weather favored" (U.S. Department of Agriculture 1939, 14). Also, with the increased use of automobiles, trucks, and tractors on farms, there was less need for horses and mules. This made land previously used for grazing and growing feed crops available instead for more intensive crop production. External conditions also impacted the fall in prices. The U.S. had previously exported many of its agricultural products, but in the 1920s Europe increased production and stopped importing U.S. farm goods. Additionally, there was increased competition on the world market with new countries, such as Argentina and Australia, entering the world agricultural market (U.S. Department of Agriculture 1939, 12-14).

The fall in prices resulted in severe economic strain for many farmers. During the boom years of the late 1910s, many farmers borrowed money for land and equipment that they could only afford to repay if crop prices remained high. During the 1920s, farmers had to increase production, too often overtaxing the soil, in order to try to repay their debts. Other farmers took on additional debt. As a result, farm mortgage debts grew from 3 billion dollars in 1910 to 9 billion dollars in 1928 (U.S. Department of Agriculture, 1939, 14). As the U.S. entered the Great Depression, crop prices fell further. By 1932, farm incomes were less than half of what they were before the start of the Great Depression and land values had fallen by forty per cent (Conkin 2008, 61).

On top of the economic crisis, eastern Colorado experienced a period of extreme drought. When drought hit eastern Colorado in the 1930s, decades of agricultural expansion, dry land farming, and overgrazing left the region vulnerable. Dwain Schaffer, who grew up in Phillips County during the Depression, recalled: "It was so dry that we didn't raise anything to feed the livestock. I remember burning the spears off of the cactus plants so that the cows could eat the cactus. Everyone talked about leaving for greener pastures and some did." (Dawin

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Schaffer, as quoted in Waln n.d., 19). Drought led to barren fields and severe erosion, with blowing topsoil causing the dust storms of the 1930s. Schaffer recollected:

During my first grade at Pleasant Prairie grade school the dust storms started. A cloud would come in from the north and it would get so dark that we could not see. We would have to light the lamps. Many days, when the storms came, school was let out by noon. Everyone was scared. When it was real bad, my folks came to school to get us with a team of horses and the wagon. They would cover us up with blankets and just turn the team of horses loose and let them take us home (Dwain Schaffer, as quoted in Waln n.d., 18)

Keeping dust out of homes was practically impossible, but residents placed wet rags around doors and windows to block as much as possible. Any machinery left out could be destroyed by the dust storms. Tumbleweeds blew across the plains and piled up against fences. During dust storms, sand and dirt covered the tumbleweeds like snow drifts. The fences were often completely buried, allowing livestock to walk over them.

Scaffer remembered that "farm products were so cheap that it didn't even seem practical to plant a crop" (Schaffer in Waln n.d., 20). Even for those who were able to raise a crop or fatten cattle enough to bring to market, prices were so low it was hard to survive. Between 1929 and 1932, corn prices fell from \$.80 per bushel to \$.19 per bushel and wheat fell from \$1.04 to \$.32 (Wycoff 1999, 255). Beef prices fell 53 per cent between 1929 and 1932 (Schlebecker 1963, 119). Across eastern Colorado, many farmers and ranchers went bankrupt due to the decline in prices, and farms and ranches were sold at auction due to delinquent taxes. With the economy of Phillips County so dependent on agriculture, everyone suffered when agriculture collapsed. Banks struggled and stopped lending money.

When the Great Depression began, there were eight banks in Phillips County: First National Bank of Haxtun, Farmers State Bank of Haxtun, Haxtun State Bank, Paoli State Bank, Citizens State Bank of Holyoke, Phillips County State Bank, First National Bank of Holyoke, and the American State Bank of Amherst. As farms and other businesses failed, the banks' holdings changed from cash accounts to land holdings. With very little money in circulation, this placed great strain on the banks. Phillips County State Bank liquidated in 1931 and American State Bank of Amherst closed in 1932. The First National Bank of Holyoke and the Citizens State Bank of Holyoke merged into the First National Bank of Holyoke in 1931. It was hoped that the merger would create stability and enhance public confidence in the bank. The First National Bank of Haxtun and the Farmers State Bank of Haxtun also merged, but this was not enough to save them and the merged bank closed in 1932. President Roosevelt's support for the banking system after taking office in 1933 helped the remaining three banks stay in business.

Population declined across eastern Colorado as residents fled the region. Baca County, in southeastern Colorado and at the epicenter of the Dust Bowl, lost nearly half its population. Phillips County and northeastern Colorado were not as severely impacted as southeastern Colorado, but the county still lost around 1,000 residents during the 1930s. Others eked by until conditions improved. Phillips County resident Dick Waln recalled:

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My mother, with the help of the kids, always raised a big garden, canned everything she could get her hands on and raised as many chickens as possible. In the wild, there was an abundance of cottontail rabbits as well as pheasants and some prairie chickens and we ate more than our share of these. The one cow furnished milk, cream and butter. In those days on the farm, only sugar, flour, and such necessities, were purchased and there were no monthly bills for telephone, electricity, natural gas, etc. (Waln n.d., 52).

Federal Government Intervention

The Roosevelt administration created a variety of New Deal programs to address the issues contributing to the Depression and aid those who were suffering. Efforts included the creation of new government agencies, economic and agricultural reforms, direct relief programs, educational efforts, and programs to provide employment. The New Deal construction programs emphasized projects providing civic, educational, and health benefits for a community, and a large number of projects were related to recreation, athletics, and health (see *New Deal Resources on Colorado's Eastern Plains* National Register of Historic Places Multiple Property Documentation Form for more information). During the difficult times of the Depression, New Deal agencies recognized the psychological benefits of civic, recreational, and cultural activities. Two programs, Works Progress Administration (WPA) and the Public Works Administration (PWA), carried out construction projects in Phillips County.

The best-known of the construction programs was the WPA, established in May 1935. The primary goal of the program was to provide work for the unemployed. Most New Dealers believed giving the unemployed a job provided much more than a paycheck—it also restored dignity and hope. The WPA's projects were designed to provide employment for needy employable workers while also providing benefits to the community. In addition to community building projects, there were also service, art, and cultural projects that employed men and women, providing jobs to those who had lost related work in similar professions. Rural women were given jobs in sewing, gardening, canning, commodity distribution, and serving hot lunches to school children.

The vast majority of WPA projects were planned, initiated, and sponsored by counties, cities, or school districts. Road and school improvements were the most popular projects in eastern Colorado. New and better roads were considered critical for the state to take advantage of its tourist and recreational potential, whereas a network of "farm to market" roads was essential for the recovery of the area's agricultural and ranching economy. WPA construction projects in Phillips County included swimming pools in Haxtun and Holyoke, city park improvements in Haxtun, and a new municipal building in Holyoke. The WPA also offered new outhouses to farmers. The program goal was to provide jobs for those constructing the outhouses and better rural sanitation through improved outhouse design. The outhouses featured a poured concrete vault. The WPA also carried out road improvement projects in Phillips County, hiring farmers and their horses, to help construct and level roadways.

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Established in June 1933, the aim of the Public Works Administration (PWA) was to revive the economy, particularly the construction industry, by placing large sums of money in circulation and by creating a demand for construction professionals and materials. Unlike the WPA, the PWA was not an unemployment relief program. Construction was carried out by established firms, who were not required to hire unemployed from the relief rolls. The PWA funded both federal and non-federal projects. Federal projects were fully funded by PWA appropriations. Non-federal projects could be proposed by states, local governments, or public departments. Types of local projects included the construction of streets and highways; sewers, disposal plants, waterworks, and power facilities; and educational buildings, courthouses, city halls, armories, hospitals and social/recreational buildings. Two PWA projects were completed in Phillips County: the construction of a new county courthouse in Holyoke and a school gymnasium in Haxtun.

The Roosevelt administration also created a series of agricultural-related programs, with the primary goals of aiding farmers, regulating agricultural markets, and improving land-use methods. This was the beginning of an increased government role in agriculture that would continue through the rest of the twentieth century. The collapse of agriculture in the 1930s forced the federal government to acknowledge problems with previous land policies, especially the tendency to treat all lands the same, despite vast regional differences. In *Planning for a Permanent Agriculture*, the U.S. Department of Agriculture addressed this:

Land policies suitable for the humid East, for example, were not suited to the drier West. In many parts of the country the 160-acre homestead tracts were much too small to yield a family living. Many lands opened up to farming undoubtedly should have remained in trees and grass. Many thousands of families were permitted, and often urged, to settle on lands too poor or on farms too small to yield them an adequate living (U.S. Department of Agriculture 1939, 15).

In response, the government created new programs designed to reverse the damage caused to the Plains by overgrazing, dry land farming, erosion, and dust. This goal was pursued through greater government involvement in agricultural practice and policy including loans, subsidies, price controls, and educational programs.

In 1935, Congress passed the Soil Conservation Act, recognizing that "the wastage of soil and moisture resources on farm, grazing, and forest lands . . . is a menace to the national welfare" and created the Soil Conservation Service (SCS) as a permanent agency in the U.S. Department of Agriculture (Natural Resources Conservation Service). Numerous agencies were engaged with the issue of soil conservation in Colorado during the 1930s. These included the Colorado Agricultural Experiment Station (which engaged in research on methods of preventing erosion and published bulletins to share its findings), the Soil Conservation Service (which operated demonstration projects and sponsored Civilian Conservation Corps (CCC) camps focused on erosion control and land restoration), the Agricultural Conservation Program (which encouraged farmers to adopt soil conservation practices in exchange for payments), and the Farm Security Administration (which offered credit to farmers and promoted better farming practices) (Soil Conservation Service 1939, 31-33).

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The government published bulletins with advice to help farmers control soil erosion. Recommended control measures includes "use of special types of plows and cultivators, the planting of shelterbelts of trees, more carefully planned crop rotations and better control of grazing" (Holyoke Enterprise 2008, 35). The northwestern part of Phillips County was involved in a forestry project along with Logan and Sedgwick counties. Forty-two farmers in the three counties "planted 14,000 trees to serve as protective plantings for farm houses, livestock and in a few instances for protection of fields against summer winds and snow in winter" ("Officials Inspect Forestry Project in Sterling Area" Sterling Advocate, May 8, 1941)." Species planted included Chinese elm, hackberry, green ash, tamatix, caragana, and native plum, Ponderosa pine, Rocky mountain red cedar, and sumac.

There was also a shift towards more government control of agricultural markets. Before the New Deal, agriculture was largely left to develop under a market model with supply and demand driving prices and production. Previously, the government promoted agriculture at a general level but did not get involved in product marketing. This changed during the Depression. One example is the Agricultural Adjustment Act of 1933, which was designed to raise prices and reduce surpluses. Programs initiated by the Act included marketing agreements and a domestic allotment system for selected farm products. The allotments started with cotton, wheat, and hogs and added tobacco and corn the following year. The allotments under this act only lasted three years but set a major precedent for government involvement in agricultural pricing and production. Under this voluntary program, farmers agreed to reduce production by a recommended percentage with the hope that the reduction in supply would lead to an increase in market prices. In exchange for an agreement to produce less, the government paid farmers to compensate for lost income (Conkin 2008, 63-64).

Government involvement in marketing continued with the establishment of the Ever-Normal Granary program in 1939 as part of the Agricultural Adjustment Administration. The goal was to help farmers market their products more effectively and thus provide stability for agricultural markets. When market prices were low, due to overproduction or decreases in demand, the Ever-Normal Granary encouraged farmers to store crops until prices improved instead of sending them to market after harvest. This also helped stabilize prices for the consumer. Previously, few farmers stored crops after harvest because they needed cash to make farm improvements, buy supplies and staples, pay loans, etc. So the new program offered loans to farmers who stored crops, with the stored crops as security on the loan. The loans were made through the Commodity Credit Corporation. The program was voluntary. Farmers qualified to receive benefit payments if they planted crops within acreage allotments determined for their farm and stored crops whenever prices were low (U.S. Department of Agriculture 1939, 24-27). The Ever-Normal Granary program dramatically changed grain storage in Phillips County. Farmers started erecting new storage buildings on their farms, including wooden granaries, metal grain bins, and grain elevators, as well as retrofitting existing building with additional bracing to allow them to be used for grain storage when needed.

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Another New Deal program with that made a significant impact on Phillips County was the Rural Electric Administration (REA). Established in 1935, its mission was to bring electricity to rural areas. Through electricity, the government sought to improve the standard of living in rural areas and enhance the productivity of America's farms. Battery-powered Delco light plants had been popular in Phillips County since the 1920s, but these were only available to the more prosperous farmers and provided limited electricity. The cost of constructing miles of power lines to reach isolated farms had kept the power companies located in towns from extending into rural areas. The REA provided subsidized loans to electric companies or cooperatives to build the infrastructure needed to get electricity to the farms. The Highline Electric Association was formed in 1938 and in May 1939, the REA approved funding for its construction of 100 miles of electric line to serve 259 subscribed members in Phillips County, Sedgwick County, and Chase County in Nebraska. The first portion received electricity in February 1940 and expansion of the system continued through the early 1940s (Phillips County Historical Society 1989, 36-38).

The agricultural economy improved in the late 1930s, but it is impossible to determine how much of this was due to federal programs and how much to other forces, including the end of the drought and the beginning of World War II in Europe. The war brought an end to depressed crop prices as Europe again needed U.S. farm exports.

Midcentury Modernization (1946-1965)

An Agricultural Revolution and Farm Consolidation

American agriculture changed dramatically during the mid-twentieth century. Many people left rural areas for cities and towns, and farming was no longer the predominant occupation in the United States. Since 1930, the percentage of Colorado's population living on farms has fallen from 27 per cent to just one per cent. But with ever increasing productivity, agriculture has remained an essential part of the state's economy, with nearly half of its acreage devoted to farms and ranches. The 1950s were a key period in this shift, with farms becoming dramatically more productive and with fewer farmers working larger, more specialized farms. Farmers depended on increasingly costly and complex machinery and needed to plant more acres to get a return on their investment in equipment. Farmers transitioned from general (diversified) farming, with crops supplemented by chickens, dairy cows, and hogs, to focusing on single-crop production. Chicken and hog production began moving to corporate factory-farm operations, and large feed lots developed in the beef cattle industry.

As many were drawn to the diverse opportunities, culture, and modern amenities of the cities, those in the agricultural field worked to promote farming as a respected profession and to endorse the advantages of rural life. This can be seen in the introduction to *American Farming: Agriculture IV*, a textbook published in 1949. The book promoted farming as a healthy occupation, with lots of physical activity in the open air followed by good home grown food. It was also seen as ideal for children, providing "ample room for play and daily duties which teach thrift, order, and responsibility as companions and partners with their parents" (Boss 3, 1949). Farming was also upheld as an occupation offering independence and rewards for hard work: "There are few business

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enterprises which permit an individual to exercise such complete control over all the factors of production as one does in farming. The quality of the product is largely due to his own skill and effort" (Boss 1949, 8). Farming required a diverse range of skills. The successful farmer needed the talent of an engineer to lay out his buildings and fields, the skills of a mechanic to maintain his machinery, and the talent of a carpenter to repair and remodel farm buildings. He needed to be an agronomist to get the best return on his land and to keep up with new developments in plant varieties and methods to fight weeds, insects, and diseases. The farmer with livestock also needed to be skilled in animal husbandry, with a strong knowledge of animal breeding, diets, and diseases (Boss 1949, 5-6).

Though modern innovations brought record productivity to farm fields, they came at a high cost. Ever larger acreages were needed in order to cover the cost of equipment. The capital outlays needed for a successful farming operation became so high, that few new farmers could enter the industry because the level of investment needed was so great. Farming was no longer the occupation for the individual with limited resources but willing to work hard. Technological innovation brought dramatic changes to farming practices. Farming evolved from a traditional occupation to one at the leading edge of scientific innovation. There was a move away from diversified farming. The 1950s was a period of farm consolidation and specialization. Farmers stopped raising their own chickens, hogs, and milk cows. This decline can be seen clearly in agricultural census records. In 1930 there were 199,565 chickens in Phillips County; by 1940 the number had fallen to 63,904; and in 1950 it was 52,256. By the mid-1960s, there were only 16,855 chickens in Phillips County. This was further reduced to 3,443 by the mid-1970s and only 535 by the mid-1980s. In contrast, those who continued livestock production did it on a larger scale than previously.

Much of the advice provided to farmers by the Colorado Agricultural Experiment Station was similar to earlier decades, especially the emphasis on needing to be prepared to deal with good and bad harvest years, recommending the dry land farming motto of "Pay cash and ride the storms and droughts" (Burdick 1944, 6). A mix of cash crops and livestock was still recommended. Reflecting the lessons of the 1930s, protecting soil from wind erosion was emphasized as the key task of the farmer. Changing agricultural practices were also reflected in the experiment station's recommendation of much larger acreages for successful farming, a trend that would continue through the rest of the twentieth century. According to a bulletin from 1944, few farmers "find that they have purchased too large a farm" (Burdick 1944, 6). Between 640 and 1,280 acres were recommended as the minimum for a successful farm with the acknowledgement that several thousand acres can be successfully managed, especially with new machinery that needs large acreages for its most economical use (Burdick 1944, 4-6).

Rising beef prices led some farmers in Phillips County to add cattle feed lots to their farms. Like many other areas of the U.S. economy, the agricultural industry improved with the country's entrance into World War II. Cattle prices rose with increased demand for beef. Higher employment levels and better wages resulted in more people eating beef. The government also bought beef for the military. The government introduced price controls to halt inflation when the demand for beef rose above the supply and began meat rationing (Schlebecker 1963, 169-172). Government controls ended in 1946, followed by a steep rise in cattle prices. When the war ended,

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cattle sold for \$14.66 per hundred pounds, and by 1948, the price had risen to \$23.29. The boom in cattle prices was fueled by high employment, high wage levels, and rise in the popularity of beef (Schlebecker 1993, 186-187). During the 1950s meat consumption continued to rise. Whereas Americans had eaten an average of 53.3 pounds of beef per year in the early 1930s, by 1955, they were averaging 91.4 pounds of beef per year (Schlebecker 1963, 119).

In 1950, the census recorded 593 farms in Phillips County, with the average farm size around 800 acres. By the mid-1960s, there were 460 farms in Phillips County with an average size over 1,000 acres. This trend continued through the twentieth century. By the end of the century, there were around 330 farms in Phillips County with an average size over 1,300 acres. Increasing farm size has resulted in the disappearance of many historic farmsteads and a weakened sense of rural community. Once, nearly every quarter section of land contained a farmstead. As farms have been consolidated, many farmsteads have disappeared, leaving the remaining farmers with fewer neighbors. Additionally, increasing mechanization meant farmers no longer needed to rely on each other as much for help with major farm tasks, like harvesting and threshing.

The 1950 census recorded a population of 4,924 in Phillips County. This was a decline of about 800 from its population peak of 5,797 in 1930. Phillips County lost nearly 500 more residents by the 1960 census. Although Phillips County lost population, Holyoke grew with the population rising from 1,150 in 1940 to 1,558 in 1950, representing a shift away from farming. Haxtun also grew, though less dramatically, with the population rising from 985 to 1,006 between 1940 and 1950. After this mid-century transition period, the county and town populations have remained fairly stable, with mostly gradual shifts. As of the 2010 census, the county population was 4442 with Holyoke having a population of 2313 and Haxtun 946.

There were dramatic productivity gains in agriculture in the mid-twentieth century. Before 1935, agricultural productivity had increased by about 1 per cent per year. By 1940, the rate had at least doubled. According to agricultural historian Paul Conkin, "Since 1950, labor productivity per hours of work in the nonfarm sectors has increased 2.5 fold; in agriculture, 7-fold. In one generation, from 1950 to 1970, the workforce in agriculture declined by roughly half, while the value of the total product increased by approximately 40 per cent" (Conkin 2008, 98). Increased productivity led to crop surpluses (Conkin 2008, 124). As a result, government involvement in agriculture remained high during the midcentury period. High demand had raised prices during World War II and brought renewed prosperity to the agricultural industry. However, farmers were concerned about a fall in prices like what had occurred at the end of World War I. In 1942, Congress assured price supports for two years following the end of the war. However, due to the devastation of much of Europe during the war, the demand remained high into the early 1950s. But by the mid-1950s, the period of high demand relative to production ended and farm production began outstripping demand. The government took an active role in the agricultural economy as issues of surplus and price supports became a key part of policy development (Conkin 2008, 80-81).

Following World War II, the United States led in farm machinery production with hundreds of new inventions reducing the amount of labor needed for agricultural production (Conkin 2008, 100). During the first half of the twentieth century, tractors had greatly improved efficiency. Tractors were multi-purpose machines able to

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supply all the power needed for soil preparation, planting, haying, hauling, and cultivation. At midcentury, there was increased specialization of farm machinery, particularly combines. Combines cut the stalk of a grain plant, fed the plant into the combine, broke the seeds loose to separate them from the rest of the plant, and then cleaned the seed. Self-propelled combines (larger and more efficient than those previously pulled by tractors) became widespread at midcentury. Self-propelled wheat combines were introduced in the 1940s, and a combine that harvested corn was introduced in the 1960s. Great Plains farmers were the first to widely adopt the new combines. Their semi-arid, flat fields encouraged the planting of large fields of wheat. Combines easily and quickly moved through these huge fields without hitting stumps or rocks that were prevalent in the wetter areas of the Midwest and the South. Additionally, farmers on the plains were already planting varieties of hard winter wheat that ripened uniformly, encouraging a harvest system that brought the crop in quickly. And these fields were generally free of wet weeds that were difficult for combines to separate from the seeds.

To cover the cost of the new harvesting machinery, there was a shift in scale towards larger operations with a successful farm needing at least 1,000 acres (Conkin 2008, 101-102). According to Conkin, "the new tools required more specialized skills from farm operators, exponentially increased the amount of land needed for efficient farms, and widened the gap between highly efficient and specialized farmers and those who could not compete" (Conkin 2008, 100). Combines were so expensive that in order to be cost effective, farmers needed to either increase their acreage through purchasing or renting more land or hire a custom combine operator to do their harvesting (Conkin 2008, 101). Combines also replaced many farm workers, reducing the per unit price of crops. As prices fell, farmers had to expand the size of their farms in order to maintain the same income. Combines also pushed the development of more specialized farms, because the machinery was specialized to work with a specific crop. The use of combines changed the way that crops were planted, altering the width of rows, spacing of seeds, and depth that seeds were planted (Conkin 2008, 101-102). The development of grain bins with aeration and driers allowed corn to be harvested earlier, before it was completely dry, giving farmers a better chance of avoiding bad weather later in the fall.

Custom combine businesses were established to harvest crops for small and midsize grain producers who did not want to or could not afford to invest in their own combines. The crews started in Texas, where the wheat was ready for harvest earliest, and then moved northward, eventually into Canada. In 1947, Western Farm Life described Highway 51 through eastern Colorado as "one long, continuous caravan of trucks and combines, all racing to get the richest harvest jobs" (Oct 15 1947). The magazine recalled Holyoke at harvest time:

On the evenings of July 27 and 28 there was a string of more than 20 truck loads down through the town of Holyoke, leading to the elevators. At the same time—for this was the peak of the harvest—Holyoke streets were lined every night with scores of combines parked overnight, with their crews sleeping in their own bunks under the trees. At such a time, all rooming space is reserved for days in advance, while in daytime these harvester outfits sweep on northward in one long, continuous procession stretched out clear up through eastern Colorado and Nebraska as they try to beat each other to the best cutting jobs, and get the golden wheat crop in before any more hailstorms hit it.

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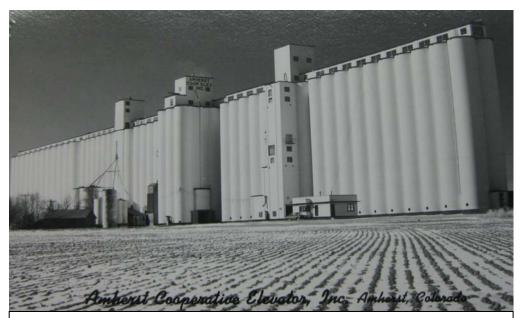


Figure 9: Amherst Grain Elevator. Courtesy of Phillips County Historical Society.

With larger harvests being conducted in a shorter span of time, grain elevators trouble keeping up with the demand for storage space. In 1947, Western Farm Life reported: "In any good year, a lot of grain is hauled in to Holyoke from neighboring Colorado counties and from Nebraska, and quite often some of it must be piled on open ground to await grinding or shipment" (Oct 15 1947). New,

large, concrete grain elevators were constructed in Amherst, Haxtun, Holyoke, and Paoli to try to meet the demand. The elevators were built by Chalmers and Borton, an industrial engineering and contracting firm based in Hutchinson, Kansas. The elevators were built using slip-form construction, which continuously pours concrete into a form that is raised using hydraulic lifts. Once the concrete pour was begun; work continued without break until the structure was complete.

Construction of the Amherst Elevator began in 1946. The Holyoke Enterprise reported:

A part of the foundation cement was poured into forms Tuesday, which make up the deep base for a new grain elevator at Amherst which is being built by farmers of the community under a cooperative plan. The capacity of the new structure will be 200,000 bushels of grain stored in eight tanks or 'silos' and a half of another one. There will be 22 bins for the various kinds and classes of grain. The tanks are 115 feet in height (Holyoke Enterprise 2000, 42).

The Amherst Elevator expanded quickly to meet demand (see Fig. 9). A new grain dryer was added in 1950; a new office and additional storage in 1951; and more additional storage was constructed in 1953, 1956, and 1958 bringing the total capacity to 2,704,000 bushels.

The Holyoke Co-op constructed a new concrete elevator in 1947. The elevator was at capacity almost as soon as it was completed. In 1952 ten additional storage tanks were added. The addition held 236,000 bushels of grain, bringing the total for the elevator to about 550,000 bushels (*Holyoke Enterprise* 2000, 47). Co-op expansion continued through the 1950s with a new gas station in 1953; more grain storage and a bulk fertilizer plant in

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1954; a new office building and a 50-ton platform scale in 1956; and an additional elevator and storage in 1958. The Haxtun and Paoli Co-ops also constructed new elevators during this period.

In December 1955, the U.S. Department of Agriculture reported that farmers that year produced a record volume of products, despite some restrictions on crop production. Factors contributing to increased production included "greater use of modern equipment, advances in control of plant disease and pests, greater use of fertilizer, expanded use of improved crop varieties and good weather" (*Holyoke Enterprise*, December 22, 1955).

The midcentury period also saw an increase in the development and use of chemicals on the farm including fertilizers, insecticides, fungicides, herbicides, and livestock medications. The use of fertilizers to enhance the nutrients in the soil allowed farmers to plant crops in the same fields year after year. This enabled increased farm productivity because, previously, farmers had to rotate their fields, allowing some fields to lie fallow and recover nutrients. Insecticides to eliminate pests also increased the volume of production as well as the aesthetic appearance of crops (Conkin 2008, 108-113). Herbicides were used to kill weeds, eliminating the need for most crop cultivation. This reduced the amount of labor needed and allowed farmers to plant their crop rows closer together, increasing the volume of crops a farmer could produce. The width of rows shrank from 3' or more to as little as 20", which could nearly double production. By 1982, herbicides were used on 95 per cent of corn produced in the United States (Conkin 2008, 115). Herbicides enabled no-till cultivation. Instead of cultivating the land to remove corn stalks after harvest and weeds, herbicides were applied to kill all plant growth. The corn stubble and other plant growth was left in place, helping to protect the soil from erosion. This was a revolutionary change in farming methods, allowing farmers to "now plant in one operation and, other than the follow-up application of a selective herbicide, do nothing more until they combine the corn in the fall. No-till does not necessarily increase production, but it saves labor, protects against erosion, and, in critical watersheds, lessens the chemical runoff" (Conkin 2008, 116). After World War II, farmers began using penicillin on farm animals in order to raise health and productivity. This introduction of antibiotic use in livestock facilitated the development of large-scale chicken and hog operations. Without the antibiotics, epidemics would have spread through the dense animal populations (Conkin 2008, 116-117).

Agricultural scientists were also involved in the selective breeding of new varieties of crops, with several experiment stations involved in research and development. Hybrid corn was introduced in the 1920s and started to gain more widespread acceptance by the 1930s. By 1949, hybrid corn was used by 78 per cent of corn farmers on the Great Plains (Conkin 2008, 120). Hybrid corn plants had many advantages: the hybrid plants were resistant to disease, produced higher yields, featured stronger stalks that made machine harvesting easier, and were hardier to better survive shipping. There were also drawbacks, though. The hybrid corn seed was more expensive. The seeds also could not be saved for use in planting in future years. So the seed companies gained a captive clientele (Conkin 2008, 120).

The use of chemicals hugely increased crop yields: "The yield for corn, our largest national crop, rose from around 25 bushels per acre in 1900 to 40 bushels by 1950, with the impact of hybridization; it doubled to 80 bushels by 1970, with the dramatic effect of herbicides and exceeded 120 bushels an acre by 2000" (Conkin

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2008, 95). Due to new machinery and the use of chemicals, the amount of labor needed to produce crops decreased dramatically. According to Conkin: "In 1900 it took 147 hours of human labor to grow 100 bushels of wheat. By 1950 this had shrunk to only 14, and by 1990 to only 6. For corn, the number of hours per 100 bushels shrank from 147 hours in 1900 to 16 in 1950 and 3 in 1990" (Conkin 2008, 98). Food prices fell with the greater efficiency in production, processing, and distribution. Supermarkets began taking over the grocery industry. As a result, farmers no longer needed to produce as much of their own food. Purchasing food in town became more affordable and more convenient. With rural electrification, farmers also had access to refrigerators, so they could store food longer. Frozen foods began replacing canned goods (Conkin 2008, 85-86).

In the mid-1950s drought and dust storms similar to that of the 1930s returned. In February 1955, the *Holyoke Enterprise* reported that "A violent dust storm reminiscent of dust bowl days in the 1930s hit Holyoke at noon Sunday" (Holyoke Enterprise 2000, 47). This sparked renewed interest in soil conservation methods. In 1950, the Department of Agriculture established the Great Plains Committee to examine drought issues and develop solutions. The Great Plains Conservation Program was passed in 1956. It authorized the Secretary of Agriculture to form contracts with farmers and ranchers to help with the cost of the implementation of conservation methods: including establishing cover vegetation on lands previously farmed for crops, reseeding rangelands, developing water facilities to support the shift to rangeland, contour terracing, irrigation, and erecting windbreaks.

The promotion of minimum or no-till farming was one soil conservation method promoted. In the early twentieth century, farmers preparing for planting plowed the entire field and then broke up any remaining clumps into finely worked soil with a disc to provide what was considered the ideal seed bed. The seeds were planted in wide rows, so that there was enough space for the farmer to come through with a horse to plow up any weeds. The problem with this method was that the finely worked soil was susceptible to blowing. Farmers discovered that leaving the remains of harvested crops in the fields helped hold the soil and conserve moisture. This led to the development of new planting machines, which prepared only a narrow band of fine soil for planting and left the surrounding crop stubble in place. The crop remains might be left on the surface or mulched into the top layer of soil. Leaving crop residue helped prevent wind erosion and conserved moisture. According to an article in the *Holyoke Enterprise* from 1950:

The trash or crop residue increases water penetration into the soil and thus increases the amount of moisture stored for next year's crop. These residues also intercept rain drops and prevent beating water from causing a crusting of the surface soil. Such crusting of the surface soils greatly reduces the amount of water which is absorbed by the soil (*Holyoke Enterprise*, Oct 12 1950).

This technique could be adopted because of the technological changes at midcentury. The need to cultivate in order to remove weeds was removed because herbicides were used to kill weeds. Additionally, new machinery allowed rows to be closer together.

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The Agricultural Act of 1956 initiated the Acreage Reserve Program (or Soil Bank) allowing farmers to sign contracts to take certain crops out of production. Their land was left uncultivated and the farmers received government payments estimated to be what they would have netted from planting a crop. This program operated from 1956 to 1958. The Act also included the Conservation Reserve Program under which farmers contracted with the government to withdraw land from production for a set period of time (three to ten years or 15 years if tree planting was included). The federal government paid farmers rent for the land and made additional payments for conservation measures, such as tree planting, soil conservation, and wildlife habitat improvement. The last contracts under the original Act were signed in 1960, but the program was reintroduced

Figure 10: Advertisement from the Holyoke Enterprise, August 18, 1955. Courtesy of the Phillips County Historical Society.



in 1985 for land considered to be highly erodible (Conkin 2008, 129-130).

As the size of farms grew and the level of investment increased (the average farm size grew from 510 acres in 1930 to 1290 acres in 2007), inheritance taxes and estate planning increasingly became a concern for farmers. Many started incorporating their farm operations. The inflated valuation of farm properties for estate taxes endangered the ability of farmers to pass on farms from generation to generation. Farm incorporation was an ideal solution if a farmer had several children to pass his estate to, but only one child that wanted to continue operating the farm. Dividing the land and equipment among multiple children could destroy the economic viability of a farming operation. Dividing shares of stock in a family farm was much easier. The child taking over the farm operation could control the corporate farm entity while still including siblings in the estate. Incorporation also provided income tax savings due to the different tax rates for corporations versus individuals and the additional tax deductions allowed (Melgren 1985, 552-557).

Midcentury Building: Quonsets and Ranch Houses

The mid-twentieth-century period brought modernization in building as well as agriculture. After limited new construction during the Great Depression and World War II, there was a large pent-up demand. During the 1950s, a construction boom took place in Phillips County with new buildings erected in town and on farms. However, the generally frugal farmers of Phillips County did not get carried away and continued to reuse and remodel existing

buildings when possible. This can be seen in towns as well as on farms. New construction and remodeling included housing, farm buildings, commercial buildings, municipal buildings, and schools.

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Housing

The mid-twentieth century saw large cultural shifts in the United States. Though changes were perhaps not as dramatic in Phillips County as in more urban areas, the county was impacted by the same trends. A new consumer culture arose in the 1950s. After the frugality, savings, and self-denial of the Great Depression and World War II, the post-war period brought a celebration of consumer goods and increased consumer spending. Products emphasized technology and labor savings. The growth of mass popular culture led to a rapid spread of design ideas. A model domestic life emphasizing a well-planned home and family domesticity was promoted through magazines, television, and advertising (see Fig. 10). These promoted an ideal of easier living and a casual lifestyle. Key features of the midcentury home included informal designs; labor-saving materials and appliances; combined living room/dining room; prominent kitchen; addition of a family room; patios instead of porches; large windows and sliding glass doors; and attached car ports or garages. The postwar period saw a massive building boom across the U.S. After limited construction during the Great Depression and World War II, there was a pent-up demand for housing. Housing demands increased as soldiers returned home, married, and the Baby Boom began. Returning servicemen were entitled to low-interest, insured "GI Loans," which made home ownership more widely accessible. The need for rapidly built housing for the masses encouraged the development of functional, practical, and economical designs. Several adaptations were made to new houses to reduce costs including: minimal ornamentation; building directly on a concrete slab without a basement; standardized windows and doors; centralized plumbing; open floor plan to maximize space; absent or shortened hallways; and single-story construction. New homes were designed with the idea that they could be expanded in the future to meet the needs of a growing family so that someone could build what they could afford at the moment and then build more later when additional financial resources were available. In order to make small houses feel more spacious, large windows and patio doors connected to outdoor space.

These national building trends are evident in Phillips County. The Minimal Traditional and Ranch houses popular at midcentury are both common in Phillips County. On farms, new houses were built to replace earlier farm houses and, in town, new streets with midcentury housing developed.

Many buildings were also remodeled to fit with new building trends. Generally, building owners remodel buildings for one or more reasons: as a more affordable alternative to new construction; to keep up to date with current trends; to add more space; or to reduce maintenance. All of these motivations appear to have been important in Phillips County. Many older houses were remodeled to incorporate midcentury design trends and look more like Ranch houses. Some of the most common design updates included the installation of picture windows. According to a 1949 home-design publication:

Liberal use of glass creates a healthful atmosphere that lets in a flood of natural outdoor light, brightening the entire interior. 'Picture' windows suitable for almost every type of architecture are readily available and many of them are handled as stock items that considerably reduce the cost. Because of their large size, these windows let in plenty of light, and afford picturesque, intriguing views (National Plan Service 1949, 7).

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Other popular modifications included replacing wood porch supports and stair railings with wrought iron supports; constructing brick planters; installing aluminum awnings over windows; and applying decorative wall materials such as stone veneer. Popular expansions included adding family rooms and bathrooms or enclosing porches. Many homeowners also added attached garages. Additions were often designed to give homes a more horizontal emphasis, thus also giving them a more Ranch-like character. Many new building materials were also gaining popularity at midcentury, promoted for their easy maintenance. Homeowners replaced older windows with aluminum-sash windows and clapboard siding with aluminum or vinyl siding.

At midcentury, it also became popular for homeowners to take on their own improvement projects, the beginning of the Do-It-Yourself (DIY) movement. This is evident in midcentury advertisements promoting the ease of installation and in home-design publications. *Extra Living Space* encouraged homeowner to hire a carpenter for exterior framing of an addition but to complete interior work (walls, ceilings, and floors) themselves: "You'll not only save money with this plan of operation but also get a lot of satisfaction from doing the work yourself" (Armstrong Cork Company 1958, 3). *Extra Living Space* suggested several remodeling ideas to update homes and provide additional living space: finish the basement and/or attic, convert minimally used spaces such as dining rooms to multipurpose rooms, enclose the porch to make it living space, and enclose the carport (Armstrong Cork Company 1958, 3).

Farm Buildings

As agriculture evolved, so did the function and design of farm buildings. Farm life changed dramatically during the mid-twentieth century. Technological innovations brought new equipment and machinery to the farm. Tractors and self-propelled combines replaced horses and mules. They also dramatically reduced farm labor. Improvements in transportation reduced the isolation of farms, making it easier for farmers to travel into town. Many farmers stopped raising their own chickens and dairy cows, instead purchasing eggs, milk, and other dairy products in town. This also made farmers less tied to the farm, because dairy cows required frequent milking. Without this responsibility, they could spend more time off the farm. As beef prices rose, many farmers introduced feedlots for beef cattle to the farm.

With these changes, came alterations to the farm complex. Previously, barns had been the hub of the farm, providing stalls for horses and dairy cows, an area for milking, and storage of farm equipment on the first floor and hay storage on the loft above. But with the removal of horses and dairy cows from the farms, the stalls, milking area, and hay storage were no longer needed. Barns became primarily used for storage, but as the size and scale of equipment and machinery continued to increase, barns began to outgrow this function as well. Chicken coops and brooder houses also became obsolete once chickens were removed from the farm. Some farmers removed unneeded buildings or left them vacant. Others converted them to new uses. With increased grain production at midcentury, some barns were converted to grain storage. Reinforced grain bins were

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constructed within barns and some farmers even installed elevators within barns. Chicken coops were commonly converted to storage or garden sheds.

New buildings and structures were also added to the farm complex at the same time that farmers often moved and repurposed buildings from elsewhere. With the addition of beef cows, farmers constructed corrals, loafing sheds, and feeders and often installed their own truck scales. Reflecting the increased use of tractors, trucks, and combines, gasoline storage and pumps were added to farms. Large, multi-purpose buildings, often with prefabricated components, replaced barns as the central farm building.

Most popular of these was the Quonset hut, which had been developed during World War II in response to the military's need for prefabricated, portable multi-purpose buildings that could be shipped anywhere and erected easily without skilled labor. After the war, the military sold off surplus Quonsets. Some were used for temporary housing for returning veterans and others were adapted to a wide range of commercial uses. Promoted as a quick, cheap solution to the post-war building shortage, Quonset huts continued to be popular through the 1950s. The Stran-Steel Company, which developed and produced Quonset huts for the military during the war, continued to manufacture them after the war, promoting them as "adaptable to hundreds of farm and industrial uses" and able to fill "a steadily increasing need for low-cost, all-purpose structures" (Haxtun Harvest, April 13, 1949). Other manufacturers also started producing Quonset huts after war. Manufacturers included Stran-Steel, Big Chief, Rilco, and Star-Bilt. The buildings were available through local distributors including Holyoke Lumber and Supply Company, Foster Lumber Company, White Implement Company, Northern Colorado Steel Building, Inc. Quonset huts varied in size and design but commonly were semi-circular in cross section, framed with curved steel ribs, and had walls of corrugated, galvanized sheet steel. For additional identification and differentiation between Quonset hut types--including Quonset T-Rib, Redesign, and Stran-Steel huts, Pacific Hut, Butler Hut, Jamesway, Armco Hut, Portaseal Hut, Emkay Hut, and Cowin Hut-refer to Julie Decker and Chris Chiei, eds., Quonset Hut: Metal Living for a Modern Age (2005). Additional profile information can also be found in Adam Thomas' Soldiers of the Sword, Soldiers of the Ploughshare: Quonset Huts in the Fort Collins Urban Growth Area (2003).

Though Quonset huts were marketed for a variety of uses, they were most commonly used for agriculture-related functions in Phillips County. Farmers rapidly adopted them as all-purpose farm buildings, due to their support-free, open plan interior space that was adaptable to a wide range of uses. They were most often used for machine and equipment storage and workshops, but they could also be adapted to grain storage. Quonset hut advertisements were common in the Phillips County newspapers after the war. Stran-Steel advertised that its steel Quonset huts were "fire-safe, rot-proof, sag proof, and warp proof" as well as "simple and speedy to erect" (*Holyoke Enterprise*, May 4 1950). Rilco advertised that its buildings "provide more space at lower cost than any other type of permanent construction. Engineered for strength and wind-resistance, attractive Rilco buildings can be covered with any type of roof covering. Ideal for use as machine sheds, barns, grain storage, hog or poultry house (*Holyoke Enterprise*, Aug 18 1955).

Other varieties of buildings with pre-fabricated components were also developed, such as Behlen buildings. In

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1950, Behlen introduced its S-Span system of metal, self-framing buildings made from corrugated steel sheet panels. These could span hundreds of feet without need for a frame or internal columns, which was ideal for large equipment storage.

The workshop remained a key feature of the farm complex, often incorporated into the farmer's new, large multi-purpose buildings. Shops were used to store and repair equipment. Farmers were encouraged to do their own equipment maintenance. According to an article in the *Holyoke Enterprise* by a representative of the Farm Electrification Bureau:

Mechanical skills generally are acquired through experience. When learned and applied they will save you money, time and considerable frustration. All agricultural specialists say that a shop should be a 'must' unit on every farm, even though it is located in a corner of the barn or in an addition to the machine shed. If your operations are small you may need only a few essential hand tools and, perhaps, a power grinder, drill and soldering iron. . . . You'll want to add more equipment as you go along. Here are a few suggestions: air compressor for inflating tires, cleaning machines, spraying whitewash and insecticides, and for operating grease guns; drill press and hand drill; forge with small electric blower; table saw, band saw and an electric welder for quick repair and for reinforcement or construction of machinery (*Holyoke Enterprise*, Feb 15 1955).

As the government's Ever Normal Granary program continued, grain storage on the farm also continued to expand, including grain bins, granaries, and grain elevators. The government also offered loans for the construction of grain storage: "Any producer of small grains in the county who is in need of additional storage on his farm to store wheat, barley, corn oats, rye or grain sorghums, is eligible for a loan of 85 per cent of the cost of the structure" (Holyoke Enterprise, Jul 20 1950). The increased yields and faster harvests brought on by improved technology also pushed the development of on-farm grain storage and drying systems. With increasing production, it was sometimes hard for the local elevators to keep up with demand. On-farm storage provided farmers more flexibility. If the local elevator was full, a farmer could store the crop in his own bins, dry it, and sell the crop when the market was the highest.

The Millage Farm (5PL.110) provides a good example of the midcentury evolution of the farm complex. For the Millage Farm, the post-war period saw a major expansion of the farm complex, during which the farm took on its current form. A hipped box house was moved to the farm circa 1949 and remodeled. Two barns were moved to the farm in the late 1940s and connected with a new center section. A grain elevator was constructed within one of the barns. Cattle operations were supported with the construction of calving sheds, a truck scale, and corrals. A huge amount of grain storage was added to the farm, reflecting mid-century trends in the county. A wood granary was constructed along with the installation of several metal grain bins, tie rods were added to an older hog barn so that it could be used for grain storage, sections of the barn were converted to grain storage, and a Quonset hut equipped for grain storage was built in 1958. The farm received electricity in 1949.

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The Oltjenbruns Farm (5PL.163) is also representative of midcentury farm evolution. The Oltjenbruns stopped raising dairy cows in 1952 and, instead, focused on feeder cows. They added a feeder barn and converted the chicken coop (no longer in use) to a calf shed. Pastures were removed and converted to crops. The grain storage capacity was increased dramatically with the construction of a free-standing grain elevator at the center of the farm complex. A new machine storage building was also added; it was part of a grain-storage building moved from Amherst. The size of the farm grew, expanding to 2070 acres.

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Section F. Associated Property Types

The property types covered in this MPDF include buildings, structures, objects, sites, and districts associated with the agricultural development of Phillips County from its establishment in 1889 to 1965 (fifty years prior to the completion of this MPDF). The identification of property types is based on a reconnaissance-level survey of all historic agricultural resources in the county. During a county-wide rural survey, 350 farm complexes (with more than 1000 farm-related buildings) were identified. Surveys of incorporated Haxtun, Holyoke, and Paoli recorded an additional 1057 properties, and illustrated the close links between the agricultural development of the county and the growth of its communities. Archaeological resources are not included in the MPDF because they were not included in the survey. Historic archaeological resources, both aboriginal and non-aboriginal, are certainly present, but these have not been recorded or evaluated. Criterion D potential may exist in association with the built environment and should be considered for individual nominations based on resource evaluation. Refer to applicable state archaeological contexts including the *Colorado Plains Historic Context, Colorado Plains Prehistoric Context*, and *Colorado History: A Context for Historical Archaeology* in conjunction with consultation with a qualified archaeologist. The property types are based on building functions and associations. Future survey may add to or alter existing knowledge about the property types.

Though railroads and roads were important to the development of the region, transportation resources are excluded from this MPDF because two other MPDFs cover these resources: *Colorado State Roads and Highways* and *Railroads in Colorado, 1858-1948*. There will be some overlap with three additional contexts, *New Deal Resources in Eastern Colorado* MPDF, *U.S. Post Offices in Colorado* Multiple Resource Submission, and *Rural Schools Buildings in Colorado* MPDF but these resources may also qualify under this MPDF. The National Register Bulletins published by the National Park Service also remain applicable.

Description—General

The majority of the historic rural resources inventoried in Phillips County date to the 1910s through the 1950s. Settlement of Phillips County began in the mid-1880s, but very few physical remnants from 1885-1909 survive. Buildings from the settlement period were intended to be temporary. If a settler was successful, the frontier buildings were generally replaced with more permanent buildings by the early twentieth century. If the settler failed, buildings were abandoned, moved, or taken apart to have any useful materials reused. Most farm buildings and rural schools built during this period were constructed of sod. These buildings were not intended as permanent construction. No surviving sod buildings were found during the survey, but could be identified in the future.

The vast majority of rural resources identified during the survey were farmstead complexes. The lack of other rural resource types appears to be due to two primary factors. First, is the relatively small size of the county. As a result, rural residents were able to travel to Amherst, Haxtun, Holyoke, and Paoli to purchase groceries and supplies, store their grain, go to the post office, or attend church. Some rural communities were focused around rural schools, but these generally lacked commercial or other community structures. Second, is that one-room

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schools, historically the primary rural resource type besides farmsteads, have either been removed and reused elsewhere or demolished. Only two buildings associated with rural school districts survive in their original locations.

Significance—General

Agriculture

Resources may be significant under Criterion A in the area of *agriculture* for their association with historic agricultural activities including homesteading, farming, and ranching. Agricultural development is closely tied to the region's settlement patterns. The region's agricultural heritage will most commonly be represented by farmsteads, but will also be represented by agricultural-related businesses, such as grain elevators and feed mills.

Farmsteads may be significant for their association with the history of farming in Phillips County and their ability to convey trends in agriculture in the county over the last century. Depending on how the land was acquired, farms may be significant for their association with the Homestead Act or Timber Culture Act. Alternately, they may also be significant for their association with the farming boom of the 1910s, when many hopeful farmers moved to the county and purchased farms. Agriculture has changed significantly since 1889, as most farmsteads will demonstrate. The major transition has been from diversified farming operations, growing wheat and corn and raising dairy cows, beef cattle, chickens, hogs, and sometimes sheep, to more specialized farming operations. In the mid-twentieth century, most farmers stopped raising dairy cows and chickens. Some turned their focus totally to crops, but others continued more focused livestock operations with beef cattle feedlots being most common, and a few developing hog or sheep operations. Farms may also illustrate the technological evolution of farming including new methods, crops, and machinery. These innovations led to increased mechanization and industrialization of agriculture, which resulted in a growth in farm size.

Many of the farmsteads have been in continuous operation by the same family for more than 50 years, representing the importance of family farming in the county. Farms may also demonstrate the significant role that immigrant families from German and Sweden played in the development of Phillips County agriculture. However, no distinctive architectural features were identified during the survey to distinguish the ethnic heritage of farmsteads; the general character of Phillips County farmsteads is fairly uniform. The archaeological record may have potential to provide distinguishing ethnic characteristics. The majority of farmsteads recorded during the survey are still in use. A total of 270 farmsteads with historic elements were recorded and, of those, 223 were still in use and 47 appeared to be vacant.

Architecture

All of the property types identified have the potential to be significant under Criterion C for *architecture*. Resources may be eligible under Criterion C if they are a good representation of a local building type or style, period of construction, or method of construction. This could include buildings that represent methods

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association with a specific era, such as a collection of farm buildings representing a typical farmstead from the 1910s; or buildings with a significant or innovative construction method, such as a cribbed-wood or slip-form concrete grain elevator (refer to specific property types for more information). Overall, the architecture of Phillips County is characterized by its simplicity and frugality. There are very few high-style buildings in the county. The majority of buildings are modest, single-story buildings of frame construction. Thriftiness is represented in building design and evolution. Buildings were commonly moved, repurposed, and reused. In general the trend was to remodel rather than rebuild.

Registration Requirements—General

The majority of resources may be eligible as contributing to a district rather than as individual resources. Although Phillips County has a high concentration of historic resources, most lack the significance and integrity needed to be individually eligible for listing. For example, a typical Phillips County farmhouse would likely not qualify for individual listing. Though associated with agriculture, just the farmhouse represents a small part of the farming operation and cannot tell the larger story of the farm's development and thus would not qualify under Criterion A. Most farmhouses in Phillips County are simple, one-story, frame buildings, lacking the distinctive design, type, or construction methods needed to qualify under Criterion C. However, farmhouses may be eligible as a contributing resource in a larger farmstead historic district. Though lacking individual distinction, the farmhouse is a vital component of the overall complex, both functionally and visually. On a farm, the interrelationship between resources is essential, both to understanding the evolution of farm and building types, construction methods, and overall site design. As a result, farmstead resources have greater significance collectively than individually.

According to National Register guidelines, "a district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (U.S. Department of the Interior 1991, 15). Generally, the level of integrity needed for a resource to be contributing to a historic district may be somewhat less than that needed to qualify for individual designation. In order to be contributing, a resource should have been constructed within the district's period of significance or moved into the district within its period of significance. Building alterations are generally acceptable if they occurred within the district's period of significance. Alterations after the period of significance should be sympathetic. The building should retain its key character defining features including form, roof, porch, and window openings. The Secretary of the Interior's Standards for Rehabilitation provide guidelines to how buildings can be adapted without losing their integrity. Buildings with alterations that comply with the Standards will generally retain the integrity needed to be contributing to the district. Some of the key recommendations include:

A property will be used as it was historically or be given a new use that requires minimal change to its
distinctive materials, features, spaces, and spatial relationships.

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- The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment in accordance with Secretary of the Interior's Standards for the Treatment of Historic Properties.

Boundaries for historic districts are drawn to include a significant concentration of historic properties and should be contiguous. Most historic districts will also include noncontributing properties, but the number and scale of noncontributing properties must not overwhelm a district's sense of time, place, and historical development.

Contributing Resources

- A contributing resource adds to the historic associations or historic architectural qualities for which the historic district is significant
- A contributing resource was present during the period of significance of the district (1859-1918)
- A contributing resource possesses historic integrity reflecting its character during the period of significance
- A contributing property does not have to be individually eligible for the National Register

Non-contributing Resources

- Do not contribute to the significance of the district
 - o Fall outside of the district's period of significance
 - Modified to the point that it offers nothing to the sense of time and place evoked by the district
 - Building openings have been altered using materials, profiles, and sizes not compatible with the district's period of significance
 - Non-historic building additions that do not respect the materials, scale, or architectural character of the historic building design have been added

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Agriculture

Resources with a strong association to agriculture may be eligible under Criterion A if they retain sufficient integrity. This includes resources related to the production, storage, or processing of crops or livestock. Integrity in the areas of location, setting, feeling, and association are essential. Surveyed farmsteads generally retained a high degree of integrity in these areas. The setting of Phillips County farmsteads, which includes landscape characteristics, such as topography, vegetation, relationship between buildings, and viewsheds, is generally remarkably intact. There has been limited new development in the region since the mid-twentieth century, especially outside of the towns. The primary change on farmsteads is the addition of new buildings rather than the removal of old. The landscape surrounding most farmsteads is much the same as when the farmstead was originally developed. There has, however, been significant consolidation of farms, resulting in larger acreages per farm and the removal of redundant farm complexes. But the visual character of continuous farm fields remains intact. Changes in the agricultural use of the land is acceptable (and expected for a working landscape), but the setting should remain agricultural. Most farms have experiences changes in vegetation, including changes in crop types planted, transitions of land from grazing to crops, or in the placing of farms into the conservation programs. Currently, there are very few non-agricultural, modern intrusions within the region but the construction of new power lines, non-farm housing, industrial hog farms, cell towers, wind farms, etc. could have a negative impact on the integrity of setting. The scale of new construction and the degree of visibility would need to be evaluated to determine impact. Farms will generally be nominated as a functional unit that includes the building complex and associated farm fields. As long as the visual relationship between the farm complex and fields is retained, adjacent visual intrusions outside of the farm district will detract from integrity but will not prevent a farm district from being eligible for designation. However, large, modern intrusions, such as cell towers within a potential farm district, will render a farm ineligible.

The integrity of feeling should be generally high. With few alterations and intrusions, the region's resources can be very evocative of the accomplishments and challenges of those who built them. For farmsteads that are still in use, the integrity of feeling is supported by the continued agricultural use of the property. The integrity of association, the direct link between significance and historic properties, should also be generally high. In order to retain integrity of association, a property must be able to clearly convey the historical themes or movements for which it is significant. Multi-generational family farms will have a high integrity of association.

Extant outbuildings are essential to convey the agricultural operations of the farm. Agricultural resources should maintain a good degree of design integrity. Design refers to the combination of elements that creates the form, plan, construction, and style or type of a property. Properties must retain sufficient integrity to indicate their historic function. For buildings still in use, the design may have been adapted to allow for continued use predicated by the evolution of working farm complexes, such as the conversion of a barn to grain storage or a chicken coop to a garden shed.

The integrity of materials and workmanship may be moderate. Some alterations are acceptable as long as they are not so extensive as to detract from the other areas of significance. Farmsteads are working landscapes and buildings that have remained in use have often had roofing or siding replaced. The impact that these alterations

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have on integrity will depend on the extent of the alterations and whether the alterations are compatible in design and materials with the original features. Alterations that obscure the original use of the building will generally make a building ineligible or non-contributing. Buildings should retain evidence of original construction methods even if the building has been altered over time. The date of alterations is also important; any alterations occurring during a farm's period of significance may be considered to have acquired their own significance, reflecting the evolution of the farmstead over time. Buildings and structures may have been moved around the farm complex over time as their functions have been adapted. As a result, the original placement is not essential. Resources should ideally retain their placement from within the period of significance as well as their placement within functional clusters of related resources.

The condition of surveyed farmsteads ranged from poor to very good, depending on their current use. In general, buildings that no longer have a clear function tend to no longer receive maintenance. This is especially the case with auxiliary buildings like chicken houses and granaries. Though barns tend to be underutilized, most generally still serve a storage function and thus receive at least some maintenance. Many farmers also maintain their barns because of their central place on the farmstead, both physically and sentimentally.

Architecture

To be eligible under Criterion C in the area of *architecture*, the resources must be good examples of a type, period, or method of construction (see the property types for specific information). The majority of resources eligible under Criterion C will be as contributing resources within a historic district rather than individually. Phillips County has relatively few buildings displaying high-style architecture or unique architectural types; these should be evaluated for individual eligibility. Additionally, resources potentially significant for engineering, such as grain elevators, may also be considered for individually eligible.

In order to be considered contributing, a resource should retain integrity to within the district's period of significance. Key questions to be considered when evaluating integrity are:

- Does the building appear to have been altered? Do these alterations look like they could have been completed during the district's period of significance or are they clearly more recent?
- How visible are the alterations?
- Does the form and design of the building appear to be intact? If altered, is the original form and design still visible?
- Have the original windows been replaced? If so, are the form and materials of windows compatible with the historic design of the building? Are the original window surrounds intact?
- Has the original siding been replaced? If so, is the new wall covering compatible with the historic character of the building? Does the profile/width of the new siding match that of the historic siding?
- Has the porch been altered? Are any new porch elements compatible with the historic design of the building? Have any new porch elements been added for which there is no evidence of historic

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precedents, giving the building a false sense of history (such as Victorian-style bargeboards added to a porch that historically featured simple, Classical-style posts)?

Are there any building additions? How visible are the additions from the street or main vantage point?
 Do the additions fit the historic character of the building? Are the additions subordinate to the original building?

In order to contribute to a historic district, a resource should retain:

- Historic character and feeling to within the period of significance.
- Original openings. If windows and/or doors have been replaced, the replacements should either date to within the period of significance or be sympathetic to the original design.
- The original wall cladding, wall cladding installed during the period of significance, or replacement wall cladding designed to replicate the original wall cladding.
- A form and plan that is original or dates to within the period of significance.
- If the building originally had decorative elements, such as porches, posts, roof decoration, window surrounds, etc., or decorative elements were added during the period of significance, these should be intact.

Although integrity of location is generally important, a moved building may still be contributing if it was moved within a district's period of significance. Moving buildings was a common form of recycling with houses moved from abandoned farms into town or unused outbuildings moved from one farm to another.

Some non-contributing buildings within the historic district are to be expected, but non-contributing resources should not overwhelm the contributing resources in size, scale, or ratio. Non-contributing resources should not detract from the overall sense of time and place presented by the district.

Following Criteria Consideration B, moved buildings are generally not considered eligible for the National Register because of the negative impact of the loss of the original location and setting (U.S. Department of the Interior 1991, 37). However, it is common practice to move buildings within farm complexes to adapt to changing agricultural needs and practices. Buildings were also moved from one farmstead to another. Houses were also moved between farmsteads and towns. Criterion Consideration B does not apply to buildings moved prior to their period of significance. Buildings moved onto a farmstead during the period of significance may be a contributing part of a district as long as they retain integrity. Refer to Criteria Consideration B: Moved Properties in *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* for more information.

Remodeling is common. Buildings may have been altered for a variety of reasons, including creating additional space, converting a building to a new use, updating exterior materials in order to try to reduce maintenance needs, and modernizing buildings to fit with contemporary style trends. Alterations may be acceptable if they were done during a district's period of significance and are representative of larger historic or design trends.

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Alterations after the period of significance should be minor. Eligible resources should retain character-defining features, general appearance, and feeling from within the period of significance.

For farmstead complexes, it should be possible to distinguish the original design or design representative of its use during the period of significance and the relationship between buildings, structures, and other site features. The farmstead should retain buildings representing the key functions of the farmstead. Buildings or structures added to the farmstead within the last 50 years should complement the historic buildings in size and scale and not detract from the farmstead's historic character. A farmstead should retain evidence of its original spatial organization and its historic period of development.

To be eligible as a rural historic landscape district or site, a historic resource must include sufficient acreage and landscape characteristics to illustrate historic land use. Districts or sites should exhibit landscape characteristics that encompass processes—land uses and activities, patterns of spatial organization, response to the natural environment, cultural traditions—and components—circulation networks, boundary demarcations, vegetation related to land use, clusters, buildings, structures, objects, sites, and small-scale elements. Rural historic landscapes are expected to show some evolution over time. Change is part of landscape evolution from both natural processes and human modification for agricultural activities. Under this MPDF, a rural historic landscape should include resources and characteristics that help answer the following questions: How did farmers shape their landscape? How did they adapt their agricultural practices to the landscape and climate? What can the landscape tell us about their agricultural practices, way of life, and cultural heritage? Refer directly the guidance presented in the *National Register Bulletin: Guidelines for Evaluating and Documenting Rural Historic Landscapes* for additional information.

Buildings in a state of ruin may still convey information about local vernacular construction methods and can be a contributing resource to a district. For ruins to retain integrity of design, it should be possible to distinguish the mass, form, plan, and key structural elements of the buildings. The site should also be evaluated by an archaeologist to determine potential significance under Criterion D.

Rural Historic Landscapes

Farmstead resources may also be eligible as rural historic landscapes. These resources should include associated intact landscape features illustrating the relationship between man and the natural landscape. The National Register defines a rural historic landscape as "a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features" (McClelland 1999, 1-2). Eleven landscape characteristics have been developed to examine the evidence of human activity on the land.

Rural Historic Landscape Districts may be composed of a single farmstead or multiple farmsteads. Landscape districts should include farm fields as well as buildings and site features illustrating the relationship between man and the landscape. Districts will convey landscape characteristics that encompass processes—land uses and

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activities, patterns of spatial organization, response to the natural environment, cultural traditions—and components—circulation networks, boundary demarcations, vegetation related to land use, clusters, buildings, structures, objects, sites, and small-scale elements.

Land Uses and Activities: Rural historic landscapes can illustrate the transition from open prairie to intensive agriculture. Prior to settlement, Phillips County's native grasses were home to large herds of buffalo, antelope, and deer. Nomadic Native American tribes utilized the area as a hunting ground. These Native American groups were relocated to reservations in Oklahoma, Wyoming, Montana, and elsewhere the late 1860s and were replaced by cowboys trailing cattle through the region. Homesteaders arrived in Colorado in the mid-1880s, breaking up the sod and converting prairie to farm land. The soils are sandy loams and silt loams. The sandier soils are well-suited to corn and the silt loams to wheat production.

Patterns of Spatial Organization: Spatial patterns range from region-wide settlement patterns to the construction of individual homestead complexes. The Public Land Survey System imposed a uniform grid system across the West, creating rectangular land parcels of 160, 320, or 640 acres. 640-acre sections were divided into 40-acre units used to form land claims of variable sizes and configurations. This grid system remains evident in Phillips County in the property lines, farm fields, and road network. Most farms in the county are close to roads, with the house closest to a road. A driveway leads from the road to the house and then widens into a central work yard. All major buildings are clustered around the work area, with domestic features, such as garages, wash houses, clotheslines, gardens, outhouses, and cellars, clustered around the house and agricultural features, such as granaries, grain bins, corrals and pens, loafing sheds, and milk houses, clustered around a barn. Large windbreaks usually shelter farmstead complexes from the frequent high winds on the plains. Windbreaks are generally situated on the north and west sides, the direction of prevailing winds. The windbreaks often form a partial boundary around a farmstead complex. Due to the flat topography, windbreaks are highly visible from a distance, indicating the location of farm complexes. The dense trees also provide some privacy and excellent wildlife habitat.

Response to the Natural Environment and Vegetation Related to Land Use: Large, dense windbreaks composed predominantly of ponderosa pines surround most farms on the north and west sides. Tree planting was an essential part of farmstead development on the plains. The flat, treeless topography of the plains offered no shade or relief from high winds. Trees made the farmstead much more pleasant, providing shade and blocking winds. They also provide habitat for wildlife and helped define the boundaries of the farmstead complex. During the Dust Bowl of the 1930s, the Soil Conservation Service promoted windbreaks as a method for fighting soil erosion. The design of windbreaks became more formalized, following recommended designs. Landscaping is also often used to define the domestic area of the farm. A grass lawn generally surrounds the house. Trees and shrubs are often planted around the house. A vegetable garden may also be situated near the house.

A primary crop has been winter wheat, which is well-suited to the region's climate. Planted in the fall and harvested in early summer, winter wheat requires a cold period to produce grain. The development of drought-resistant winter wheat varieties was essential to the agricultural growth of the High Plains.

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The landscape itself did not necessarily inform the siting of a farmstead, in that buildings were placed in the landscape, rather than being incorporated, with the exception of sod buildings. This was due to the largely flat nature of the plains.

Cultural Traditions: Many of Phillips County's farms illustrate the important role of immigrants in the development of Phillips County agriculture. Swedes and Germans were the two primary immigrant groups in the county. Many Phillips County farmers were immigrants who settled in Nebraska before moving westward to Phillips County, or were the children of immigrants who moved from Nebraska to Phillips County in search of move affordable farm land. This trend has created a clear connection between Phillips County and the cultural traditions of Nebraska. Situated on the Nebraska border, Phillips County had more culturally in common with Nebraska than the rest of Colorado including the layout and design of its farmsteads. Nebraskans also seem to have brought their Midwestern values, with historical publications variously describing Phillips County residents as progressive, industrious, civic-minded, moral, and spiritual.

Circulation Networks: The development of the county was shaped by its transportation networks including the railroad, county road system (which closely follows the Public Land Survey System), and state and federal highways. The transportation system was key to the shipment of agricultural products. Farmsteads in Phillips County are generally located directly on a county road with the farmstead facing the road. Except for a driveway leading from the road to the house, barn, and other essential buildings in the farm complex, there are generally no other roads within the farm. Farmers generally maximize the area planted, extending their crop rows up to the farm building complex and the county roads. Farm fields are not fenced and are accessed directly from the farm complex or from anywhere along the county roads.

Boundary Demarcations: The property lines of most farms continue to reflect the Public Land Survey System. Used to subdivide and describe land parcels, the system established a grid across the western U.S. based on 6-mile-square townships, which are then subdivided into 36 one-mile-square sections. Most farms in Phillips County have grown from their original quarter section (160 acres) to cover multiple sections, but the checkerboard pattern created by the system is still evident in the arrangement of fields and pastures and is easily visible in aerial photographs. Most of the county roads in Phillips County follow section lines, reinforcing the grid pattern.

Buildings, structures, and objects: The resources of farmsteads reflect their function, the materials available, and the customs and skills of the people who built them. The surveyed farmsteads demonstrate clear similarities in scale, design, layout, construction methods, and building materials across the county, representing a distinctive regional vernacular. The typical farm includes a house, garage, workshop, barn, Quonset hut, grain storage, and a chicken coop.

Clusters and small-scale elements: Farmsteads tend to include several key functional groups. On a large scale, there is the cluster of buildings, structures, and objects that comprise the farm headquarters. Within the farmstead complex headquarters, features are clustered by function. The domestic or residential area includes

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the house, clothesline, tankhouse, and windmill. Trees, a manicured lawn, and fencing are often used to help define the residential cluster. Agricultural functions on a farm tend to cluster to the rear of the domestic area, separated from it by a driveway and work yard. The agricultural cluster includes work areas, equipment storage, and grain storage with features centered on a barn. There may also be smaller clusters within the agricultural cluster, such as the grouping of grain bins and/or feed storage bins or a livestock area with corrals, pens, and shelters. Numerous small-scale elements may be present within the clusters and help to define their functions. Small-scale elements within a domestic cluster may include concrete walks, clotheslines, and fencing. Small-scale elements in an agricultural cluster may include farm equipment and machinery that are key to understanding a farm as a working landscape. Other key small-scale features may include gas pumps, lighting, gas tanks, farm signage, and utility poles and wiring.

Rural historic landscape districts may be significant under Criterion A for *agriculture* for their ability to convey the agricultural development of the region. If a district includes one or more homesteads, it may also be significant under Criterion A for *politics and government* for its association with federal homestead policies or agricultural programs. In addition, rural historic landscape districts may be eligible under Criterion A for *conservation* for their association with efforts to prevent soil erosion. Rural historic landscape districts may be significant under Criterion C for *architecture* if they contain a good representation of local construction methods or building types. Resources will be eligible at the local level.

Property Type—Farmsteads

For this MPDF, farmsteads are defined as the primary cluster of buildings and structures of a farm. This cluster includes residential, agricultural, and management functions. Farmsteads also include associated landscape features, such as drives, lawns, trees, windbreaks, and fences. The presence of particular elements, such as a hog barn, can indicate what type of livestock a farmer raised. Due to the relatively mild climate, farmsteads generally did not include extensive buildings or structures to house livestock. Livestock could be outside much of the time. Corrals and pens, often with loafing sheds, were situated adjacent to a barn. Areas of the farm were also fenced for livestock grazing.

Though most farmsteads began as homesteads (meaning that the land was acquired directly from the federal government under one of the Homestead Acts), very limited evidence of the homestead period remains on most farm complexes. Early sod buildings and temporary shacks were generally replaced by more permanent buildings in the early twentieth century. Most of the farmstead complexes date to the early decades of the twentieth century, built by farmers who purchased land from speculators or initial homesteaders. Farmsteads have evolved to reflect changing agricultural practices, markets, and technology, so the majority of farms contain a variety of buildings constructed over an extended period.

Farmsteads in Phillips County generally tend to be fairly close to a road. Large windbreaks shelter the farmsteads from the frequent high winds on the plains. The windbreaks are generally on the north and west sides of a farmstead. On the farmstead complex, the house is generally closest to the road. Most houses face the road.

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Other buildings generally tend to be to the rear of the house, clustered around a large farm yard area. Driveways lead from the road to the center of the farm yard. Most farmstead complexes include buildings and structures that performed the following functions: domestic, livestock, grain and feed storage, and equipment storage and workshop. Some buildings, such as barns, served multiple functions. The types of features present tell the history of the types of agricultural production on the farm.

As of the 2007 agricultural census, there were 334 operating farms in the county. The survey identified 270 farmsteads with historic features, of these 223 appeared to be in use and 47 appeared to be vacant. This means that roughly sixty seven per cent of operating farms in Phillips County retain historic features. These surviving historic farmsteads, however, represent only about a third of the farmsteads in the county at its peak in the late 1920s; the 1930 census recorded 766 farms in the county. This means that around 500 farmsteads have disappeared over the last 80 years. Many Phillips County farmers still recall the days when a farmstead was present on almost every quarter section. The farmsteads that survive generally represent the most successful, the ones that expanded through the purchase of farms sold by those choosing to leave farming, many who were retiring farmers without children wishing to take over their farms. When farmers increased the acreage of their farms, they generally demolished the remains of any redundant farm buildings on the acquired land in order to have the maximum amount of land available for agricultural use and to avoid paying for upkeep and taxes on unnecessary buildings.

Most farmsteads include all of the following subtypes. However, in exceptional cases, a single building within one of the subtypes may be eligible on its own. If the rest of the farmstead has lost integrity, but one of these subtypes retains its integrity, then it may be eligible on its own if it represents an excellent or rare example of a type, such as a catalog barn or an elevator barn. In order to be eligible as a district, a farm should retain a contributing house, barn, and representative collection of agricultural-related resources.

Subtype: Domestic Resources

Domestic resources include those primarily used by the family for domestic activities, such as farmhouses, washhouses, automobile garages, summer kitchens, cellars, and outhouses. These resources are typically clustered together.

The vast majority of the houses surveyed in the county are of frame construction. Few naturally available building materials were available in the county, leading most of the nineteenth-century settlers to rely on sod construction. But for the waves of early-twentieth-century home seekers establishing farms, lumber was readily available from either local lumber yards or kit houses delivered via the railroad. The compactness of the county and its central railroad line meant that most farms were within 10 miles of a lumber yard or depot. Most of the frame buildings are now covered with synthetic siding. Siding changed within a farm's period of significance does not detract from its integrity. Siding changed after the period of significance should be sympathetic to the design of the building. It should generally match the original siding in profile and should not obscure any original features, such as window surrounds or exposed rafter tails.

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Farm housing in Phillips County tends to be a mix of National Folk types (built primarily for functionality and shelter), as identified in Virginia McAlester's *A Field Guide to American Houses*, combined with popular housing-style trends. Rural houses were found to be similar, but generally simplified versions of housing in Haxtun and Holyoke (refer to the Residential Resources section for more information on common types). Farm houses tend to be practical with minimal decoration. Building additions are common, including bathrooms, enclosed porches, expanded kitchens, and additional bedrooms. No high-style housing types were found.

Common housing types found on Phillips County farms include:

Bungalow: The term bungalow can have many meanings, but is generally used to describe one- or one-and-a-half-story, moderately sized homes from the early twentieth century that feature large porches and an efficient, open-plan interior. Bungalow design was influence by the Arts and Crafts Movement, a reaction against industrialization and the Victorian era that emphasized simplicity, natural materials, and craftsmanship. Popularized in California, the bungalow rapidly spread across the U.S. through pattern books, mail order catalogs, and magazines. The bungalow craze reached its peak in the 1910s, which coincides with a housing boom in Holyoke and Haxtun. During the 1910s, Phillips County's reasonably priced farmland, high crop prices, and growing communities attracted many new residents. Economic prosperity allowed the communities' early residents to replace frontier housing stock with more modern and stylish dwellings. Reflecting an early twentieth-century interest in efficient homemaking, bungalows featured built-in furniture, a combination living/dining room, and a compact floor plan designed to maximize flow and eliminate wasted space. During the survey 59 bungalows were identified in Haxtun, 53 in Holyoke, and 2 in Paoli.

Key Features:

- One- or one-and-a-half-story
- Combination living/dining room with a central fireplace
- Typical floor plan has living room, dining room, and kitchen on one side of the house with bedrooms and a bathroom on the other side
- Built-in furniture
- Low pitched roofs with wide eave overhangs, exposed rafter tails, and dormers
- Broad porch, often enclosed by a low wall, supported by battered piers or square columns. A variety of
 materials were used on the porch and columns including stone, clapboard, shingle, brick, concrete block,
 and stucco. Rear porches are also common.
- Often include squared bays on one or more side
- Wood and stone often used to create a rustic appearance
- Can be simple with minimal decoration or may incorporate Craftsman features such as knee braces under gables, decorative exposed rafter tails, and multiple intersecting roof lines

Gable Front/ Gable Front and Wing: The Gable Front house type is a common vernacular form popular throughout the nineteenth century and much of the twentieth century. Rectangular in plan, Gable Front houses

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are oriented with the primary entrance in the gable end. Orienting the gable end to the street created long, skinny dwellings that were ideal for narrower, less expensive town lots. In the first part of the nineteenth century, the Gable Front type was often used for Greek Revival houses with the gable end used to echo the Greek temple form. In the early twentieth century, Craftsman features were often applied to the Gable Front type. A variation of the Gable Front type is the Gable Front and Wing, which consists of a side-gable wing placed at a right angle to a Gable Front section, creating an L-plan. The Gable Front and Wing type was often the result of building expansion, created when an addition was constructed on a Gable Front or Hall and Parlor house, but houses were also built in this form originally. During the survey 58 Gable Front type houses were identified in Haxtun, 84 in Holyoke, and 53 in unincorporated areas. In Haxtun, 20 Gable Front and Wing type houses were identified along with 43 in Holyoke, one in Paoli, and 11 in unincorporated areas.

Key Features:

- Rectangular plan
- Low-pitch gable front roof
- May have a porch

Hipped Box: The Hipped Box (also called a Pyramidal Cottage) is named for its square plan, which generally contained four rooms and was topped by a hipped or pyramidal roof. Popular in the late nineteenth and early twentieth century, this simple and economical form can be found across the Great Plains. It was also common in the mining, lumber, and railroad towns of the West, where it was often built as worker housing. The construction of a pyramidal roof was more complex than a gable roof but required fewer long-spanning rafters, making pyramidal roofs cheaper to construct. In Phillips County, Hipped Boxes were popular both in town and on farms. Many examples survive, but most have been expanded beyond their original four rooms. During the survey, 40 Hipped Box type houses were identified in Haxtun along with 74 in Holyoke and 68 in unincorporated areas.

Key Features:

- Square plan
- Usually constructed of milled lumber
- Often includes a porch, original or as a later addition
- Center chimneys are common
- Roof peak may be flattened

Massed Plan, Side Gable: The Massed Plan, Side Gable house was a common vernacular type during the first half of the twentieth century. It is similar to the Hall and Parlor house but larger with a more flexible floor plan. The Massed Plan, Side Gable house is two rooms deep and features a gabled roof that is oriented parallel to the street. The eaves may be closed or open with exposed rafter tails. During the survey 30 Massed Plan, Side Gable type houses were identified in Haxtun along with 44 in Holyoke and 78 in unincorporated areas.

Key Features:

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- Side-gable roof
- Gable ridge parallel to the street
- Rectangular plan
- May have a small front porch

Minimal Traditional: The Minimal Traditional style was popular following World War II. The term "minimal" refers to the lack of ornamentation whereas "traditional" refers to its cottage form. The Minimal Traditional offered a simplified interpretation of the revival style cottages popular before the war. Builders attempted to meet the enormous demand for post-war housing by reducing building costs and construction time to a minimum. The Minimal Traditional was the result: a small and affordable budget home with an average size around 800 square feet. During the survey, 13 Minimal Traditional type houses were identified in Haxtun and 53 in Holyoke.

Key Features:

- Low- to medium-pitched hipped or side gable roof
- Close eaves
- Small, compact footprint
- 1 or 1-1/2 stories
- Projecting front gable common
- Minimal ornamentation
- Often asymmetrical with the front entrance off center
- A picture window may mark the location of the living room

Ranch: The dominant style of post-World War II suburbs, the Ranch style developed in California. Early Ranch-style homes were inspired by the hacienda ranch homes of nineteenth century California. Cliff May, commonly acknowledged as the father of the Ranch style, began as a custom home designer and later worked as a suburban developer. May emphasized three key concepts of the Ranch style: livability, flexibility, and unpretentious character. The style spread quickly after the war, easily adapted to meet the need for quick and affordable housing for veterans starting new families. The Ranch house was promoted as the ideal home for an easier, more casual, and family-centered lifestyle. An open floor plan maximized space and created flexibility. The kitchen was combined with a living/dining room. Second stories, hallways, and most decorative elements were eliminated to reduce costs. Large windows and patio doors were used to make small houses feel larger. During the 1950s and 1960s, many older homes in Phillips County were updated with Ranch-style features or completely remodeled into Ranch-style houses virtually indistinguishable from original Ranch designs. During the survey 50 Ranch houses were identified in Haxtun, 82 in Holyoke, one in Paoli, and 12 in unincorporated areas.

Key Features:

- Single story with a low, horizontal profile
- Asymmetrical

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- Rectangular or irregular plan arranged parallel to the street
- Low-pitched gable or hipped roof with wide overhanging eaves
- Large picture window facing the street
- Early ranch houses often feature a prominent brick or stone chimney
- Designed to accommodate automobiles with car ports or attached garages common
- Feature patios with sliding glass doors rather than porches
- Minimal ornamentation
- Open and casual interior layout with wood paneling instead of wallpaper and room dividers instead of interior walls

Other common features of domestic resource clusters include:

Outhouse: Most farmhouses did not get indoor plumbing until the 1940s or 1950s, making the outhouse an essential resource. In the 1930s, many farmsteads in Phillips County received improved modern outhouses from the WPA that were designed to be more sanitary than traditional outhouses (for more information see History Colorado's resource guide WPA Privy at http://www.historycolorado.org/oahp/wpa-privy-1935-1943).

Wash house: Various domestic functions, such as laundry, meat processing, lard rendering, and cream separating, were often completed in a small building adjacent to the main house. These buildings were simple in plan and design and easily adaptable. Wash houses were generally rectangular-plan, frame buildings, no more than 10' x 20' in size.

Subtype: Animal Care and Crop Storage Resources

Animal care and crop storage resources include buildings and structures built primarily to store grain and shelter or contain livestock. Resources include general purpose barns, hog barns, sheep barns, loafing sheds, grain elevators, granaries, grain bins, silos, corrals, and chicken coops.

Barns: Historically, barns were the central component of the farmstead and served a variety of functions. The first floor generally included some horse stalls, an area with stanchions for dairy cattle, a tack room, and some equipment storage. The loft above was for hay storage. As horses and dairy cows disappeared from the farmstead by the mid-twentieth century, the barn was adapted to other uses including machine or grain storage, hog farrowing, or calf sheds. Today, most farm machinery is too large to fit in a barn and few farmers keep livestock besides, possibly, some horses for recreation. As a result, many barns are now underutilized, serving primarily as miscellaneous storage. Barns were an essential farm feature and farmsteads will generally be ineligible if the barn is missing.

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Barn Type (based on roof form)	# Identified in the survey
Gable	88
English Gambrel	44
Dutch Gambrel	31
Gambrel with sheds	25
Gable with sheds	15
Broken gable	13
Salt Box	13
Dutch	10
Elevator Barn	5
Gothic	3
Monitor	3
Pyramidal	1

Surveyed barns were categorized by roof type, because this is the most obvious character-defining feature. The primary difference on the interior was the size of the loft space. The most common type have gabled roofs. This is the simplest and earliest barn roof type. The dual-pitch gambrel roof barn replaced the gable roof barn because it allowed much more loft storage space. Because a the gambrel roof is more complex to construct than a gable roof, it was more expensive to construct. The predominance of the gable-roofed barns seems to suggest that many farmers did not need the extra storage space and thus went with the simpler form. These farmers were likely only keeping a handful of horses and dairy cows and the gable loft was sufficient for the amount of hay they needed to store. The majority of barns surveyed were sheathed in horizontal siding (174 barns). Metal sheeting was also common (55 barns).

Chicken coops: Eggs were an important source of additional income for farmers throughout the first half of the twentieth century. Chicken coops generally featured shed roofs and a long band of windows to allow light into the interior. They are rectangular in plan and feature frame construction. During the survey 87 chicken coops were identified.

Dairy: Dairy cows were an important source of additional income for farmers, with cream sold to local creameries. Because dairy cows were generally just a supplemental source of income (as well as a source of milk for the family), most farmers had only a handful of cows and milking was done in a general purpose barn. The presence of stanchions in a barn indicates that it was used for dairy cows. Farmers with more cows might have specialized resources, such as the dairy barn on the Crowder Farm (5PL.147) or the milk house on 5PL.316.

Hog barns: The primary function of a hog barn was to provide protection from the cold; thus, a wide range of farm buildings or general barns could be adapted for use by hogs, especially by farmers keeping a small number of animals. For those focused on pure breed or larger-scale hog production, specialized hog barns featured sky lights to allow light into the interior and small doors at the base of the walls to allow hogs to move between indoor and outdoor pens.

Feedlots: Around the mid-twentieth century, many farmers added feedlots for beef cattle to their farmstead complexes. The primary feature of the feedlot was corrals, usually situated to the rear or side of a farm complex. Corral fencing was generally wood. A track scale and scale house were often installed adjacent to the corrals. Other feedlot features include loading chutes, cattle feeders, and cattle squeeze chutes. During the survey 97 farmsteads with corrals were identified.

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Grain storage: Grain storage was an essential function on most farms, increasing in significance after the introduction of the Ever Normal Granary program in 1939. These stored feed for livestock and grain for market, enabling the farmer to wait for improved prices. Many farmers created additional storage on their farms in the mid-twentieth century, constructing elevators or converting barns to elevators. The government regulated these granaries as official storage. However, as government storage regulations became more stringent and grain trucks became too large to conveniently fit in farm elevators, most farmers stopped using personal elevators and stored their crops at commercial elevators in Amherst, Haxtun, and Holyoke. Grain was also stored in wood or metal bins. Often farm buildings, such as garages or barns, were converted to grain storage. Evidence of conversions are roof openings used to pour grain into a building and internal or external reinforcement of buildings with bracing. During the survey 123 metal grain bins, 32 wood granaries, and 15 grain elevators were identified on farmsteads.

Silos: Silos were used to store green corn, which was then fermented, creating silage that was commonly fed to dairy cows. During the survey 12 silos were identified.

Subtype: Machinery and Maintenance Resources

Machinery and maintenance facilities provide for the storage and repair of the equipment used on the farm. Resources include workshops and machine sheds. The storage and maintenance of farm vehicles and equipment are important farm functions. In the early twentieth century, these functions were fulfilled by a small garage for an automobile or farm truck and a central barn driveway for tractor storage. As the size and variety of farm equipment increased, larger storage buildings were needed. Quonset huts were added to many farms in the mid-twentieth century as a place to store and maintain equipment. The Quonset hut was developed during World War II. A lightweight, prefabricated structure, it could be easily shipped and erected without skilled labor. The open plan interior space formed by the semi-circular arched walls was easily adaptable to a wide range of uses. After the war, the Quonset hut type was quickly adopted by farmers as all-purpose farm buildings. Quonset huts were most often used as machine storage and workshop buildings, though they could also be adapted to grain storage.

During the survey 79 Quonset huts were recorded; none were identified as military surplus. The Quonset huts in Phillips County were produced after the war, adapting the type to local needs. Quonset huts identified in Phillips County included both those produced by major manufacturers such as Stran-Steel, Rilco, and Big Chief as well as locally produced examples. The surveyed Quonset huts varied greatly in size and height. The true Quonset hut with a completely semi-circular form was most common. Pointed-arch Quonset huts with a point at the apex of the building arch were also found in Phillips County. Exterior materials included standing seam metal siding and corrugated metal siding (horizontal and vertical). Interior arched support structures included laminated wood as well as steel framing. Unlike the multi-purpose military Quonset huts, which generally included windows on the sides of the building, those used for machinery and equipment storage generally had no side windows, though some included windows on the façade. As the size of machinery continued to increase throughout the second half of the twentieth century, door openings became too small for most machinery. They were replaced with

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larger, gable-roofed, metal buildings with wider openings and higher clearance produced by manufacturers such as Butler.

For farmsteads, the period of significance generally begins with the earliest construction date of the extant farmstead complex. Many sites were occupied earlier, but no architectural remains from this period may be extant. Rural historic landscape districts encompass the evolution of the landscape and the built environment and may have broader periods of significance.

Most of the farmsteads surveyed are still in operation today, thus remaining significant for agriculture. The period of significance for architecture is represented by the construction date(s) of the building(s) and other key features. For districts with more than one building (especially farmsteads with multiple buildings), the period of significance begins with the construction of the first building and extends to construction of the last retaining integrity.

Exact construction dates were not available for most farmstead buildings and thus periods of significance may begin or end with an estimated date. Estimated dates can be based on a farmstead's history as well as analysis of building types and materials.

Integrity

Farmsteads should be evaluated as districts. Buildings and structures should be evaluated for their ability to convey significance of the farmstead as a whole. Some alterations are acceptable. The addition of metal roofing or metal or synthetic siding is common on farm buildings to reduce maintenance. Alterations, such as changes in the use of buildings and the addition of new buildings, are part of the evolution of farmsteads as working landscapes. Farmsteads should be expected to show evolution over time, and all buildings and structures constructed during the period of significance may be contributing as long as they retain sufficient integrity. The integrity of a farmstead district may be impacted by the addition of modern buildings, the removal of historic buildings, and alterations to buildings (additions, new siding, new windows). Buildings may have changed use during the period of significance or original function may still be apparent, despite minor physical alterations. Remodeling, building improvements, changes in materials, windows, etc. may impact integrity, but may be acceptable if the changes are sympathetic to the original design. Original design needs to remain evident. The impact of alterations depends on the scale and number of changes. Alterations must not overwhelm individual buildings. In addition, for a district to be eligible, a viewer needs to be able to "read" the historic farmstead layout and understand the relationship between buildings.

Working farmsteads that have been in the same family for decades retain a high degree of integrity of association. With limited new development in Phillips County, the survey found farmsteads to generally retain intact viewsheds and a high degree of integrity of setting.

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Geographical Data

This MPDF encompasses the entire area of Phillips County. Located in northeastern Colorado, Phillips County borders Sedgwick, Logan, and Yuma counties in Colorado and Chase and Perkins counties in Nebraska (see Fig. 11). Part of the high plains, the climate of Phillips County is semi-arid with an average annual rainfall of around 18". The elevation is 3,750'. The primary industry of the county is agriculture. Though a relatively small county (688 square miles), the land is intensively used with 432,154 acres in agriculture as of the last agricultural census in 2007. The average farm size is roughly 1300 acres.

There is very little surface water in the county. The only waterway through the county is Frenchman Creek. Frenchman Creek runs across the county and forms a rough border between the farmland to the north and the grazing land to the southeast. The northern part of the county is dominated by farming whereas most livestock operations are in the southern portion of the county. This includes cattle grazing as well as commercial hog farms. The southern portion of the county in located in the Sand Hills region, which is comprised of prairie grass-stabilized sand dunes. The fragility of the soil and rolling hills makes the Sand Hills unsuitable for crops, but successful as rangeland for cattle.

Phillips County agriculture is devoted to a mix of dry land and irrigated farming. The Ogallala Aquifer lays beneath the county and in the early 1960s technological advances in pumps and the development of center pivot irrigation systems enabled farmers to utilize the aquifer for irrigation. About 70% of the county's agricultural lands are devoted to dry land farming, 16% to irrigated farming and 13% to grazing. Irrigation, as well as the increased popularity of corn for ethanol and other food products, has led to increasing corn acreage in the county.

Agriculture has been an essential part of the economies of Haxtun, Holyoke, and Paoli since their establishment. The communities began as railroad shipping points (see Fig. 12). The communities were established on the route of the Burlington and Missouri Railroad in 1887. Coming from Nebraska, the railroad reached Holyoke first. Paoli was established approximately 9 miles northwest of Holyoke and Haxtun was established approximately 9 miles northwest of Paoli. Holyoke was incorporated in 1888, Haxtun was incorporated in 1908, and Paoli was incorporated in 1930.

The three communities are also connected by U.S. Highway 6, which runs roughly parallel to the railroad most of the way across the county (at Holyoke the railroad turn northeast to Amherst, while the highway continues directly east to Nebraska). There has been additional commercial development along the highway. This was once the Omaha-Lincoln-Denver Highway, a major route to the Rockies bringing many automobile travelers through the Phillips County. However, after Interstate-76 was constructed to the north, routing through Sedgwick County, traffic on Highway 6 dropped off, with the highway primarily serving local traffic now. There is also a north-south U.S. Highway running through the county: U.S. Highway 385. It runs through Holyoke, leading to

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Julesburg to the north and Wray to the south. State Highway 59 runs north-south through Haxtun, leading to the town of Sedgwick to the north and the town of Yuma to the south.

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Summary of Identification and Evaluation Methods

This MPDF was developed to provide a broad context for evaluating the historic agricultural resources of Phillips County. The MPDF is based on the results of two survey projects funded by the Colorado State Historical Fund (SHF). The Phase 1 survey was conducted by Colorado Preservation, Inc. and focused on the rural resources (unincorporated areas) of Phillips County. The Phase 2 survey was conducted by the Center of Preservation Research at the University of Colorado Denver and focused on the town resources (incorporated areas) of Phillips County. Abbey Christman, an architectural historian, directed both survey projects. The two survey projects focused on architectural and landscape survey; no archaeological survey was included in the scope of these projects. Thus, archaeological resources are also outside of the scope of this MPDF. It is recommended that future archaeological survey be conducted in Phillips County in order to identify and evaluate potential archaeological resources.

The Phase 1 survey included a reconnaissance-level survey of all resources at least 50 years old in unincorporated areas of Phillips County. The field survey was conducted from May 2010 to July 2010. Following the completion of the reconnaissance-level survey, 20 properties, representing the range of resources identified, were documented at the intensive level. Intensive-level survey began in August 2010 and was completed in March 2011. It included 15 farmsteads, a school gymnasium, a parochial school, a cemetery, a grain elevator, and a church.

A total of 349 resources was inventoried during the reconnaissance-level survey. The vast majority of sites surveyed were farmstead complexes, defined as a house and various associated agricultural outbuildings. Resources associated with rural communities included cemeteries and school buildings. One unincorporated town, Amherst, was also surveyed. Because most sites were composed of multiple buildings, a total of more than 1,000 buildings were surveyed. Historic resources were most dense in the northern portion of the county. The highest concentrations were near Haxtun, Holyoke, Paoli, Fairfield, and Amherst.

The reconnaissance-level survey covered approximately 668 square miles. For the reconnaissance-level survey, the survey team drove every county road (CR 2 to CR 44 and CR 1 to CR 65) and documented features visible from the public-right-of-way. It was possible to view the majority of the county's resources with this method due to the mostly flat topography of the county and a grid of roads aligned with the Public Land Survey System (PLSS). Roads follow section lines through most of the county, creating a grid of roads at one-mile intervals. Thus, for most of the project, the survey team sought resources within a half-mile range to either side of a road. The flat topography of most of the county made finding resources easy, because most farmsteads are fairly close to roadways. The primary problem with the survey method is the dense windbreaks of trees surrounding many farmsteads. This often made it difficult to identify all the features on a property. Generally, enough of the farmstead seemed to be visible to determine whether or not the farmstead contained historic elements. But the extent and type of these resources was often more challenging to determine. As a result, it is certain that the building counts conducted during the reconnaissance survey are an underestimate. The road grid does not cover

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part of the southern and southeastern parts of the county in the Sand Hills. As a result, roughly 20 square miles in this area were not included in the survey. Additionally, due to the hilly topography of that area, it was more difficult to identify resources set back from the road. However, the density of resources in the southern and southeastern portions of the county was generally much lower than other areas of the county, so the survey team does not believe that many resources were missed.

The majority of historic rural resources inventoried date to the 1910s through the 1950s. Settlement of Phillips County began in the mid 1880s, but very few physical remnants of from 1885-1909 survive. Many farm buildings and rural schools built during this period were constructed of sod. These buildings were not intended as permanent construction. They were generally expected to have a lifetime of ten to 15 years. Information was collected on previously identified sod buildings in Phillips County. No surviving sod buildings were identified during the survey, likely because the survey was conducted from a distance and sod buildings blend into the landscape.

The vast majority of rural resources identified during the survey were farmstead complexes. A total of 270 farmsteads with historic features was recorded in the survey, with reconnaissance-level survey forms completed for each farmstead. Farmsteads were recorded if any of the primary features appeared to be more than 50 years old. The lack of other rural resource types appears to be due to two primary factors. First, is the relatively small size of the county. As a result, rural residents traveled to Amherst, Haxtun, Holyoke, and Paoli to purchase groceries and supplies, store their grain, go to the post office or attend church. There were rural communities in the county, primarily focused around rural schools. But these generally lacked commercial or other community structures. Second, is that one-room schools, historically, the primary rural resource type besides farmsteads, have either been removed and reused elsewhere or demolished. There were once more than 30 rural school districts in the county, but only two buildings associated with these districts survive in their original location.

The Phase 2 survey included a reconnaissance-level survey of Haxtun, Holyoke, and Paoli. Two key research questions were identified for this project based on the previous survey work:

- What is the relationship between Phillips County's farmland and its small towns (i.e. how has the
 development of Haxtun, Holyoke, and Paoli been tied to the surrounding agricultural landscape? How is
 the larger agricultural economy tied to the economy of these towns)?
- How are Phillips County and its communities distinct from the rest of Colorado (i.e., does northeastern Colorado have more in common with Nebraska than with Colorado)?

A total of 1057 properties was inventoried: 394 in Haxtun, 642 in Holyoke, and 21 in Paoli. Residential buildings made up the vast majority of the survey with 325 houses surveyed in Haxtun, 537 in Holyoke, and 12 in Paoli. Each community also has a central commercial district: 42 commercial properties were surveyed in Haxtun, 63 in Holyoke, and 4 in Paoli.

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Few buildings remain from the frontier period. No buildings from the 1890s were identified and only five from the 1890s. During the first decade of the twentieth century, the temporary structures of the frontier period began to be replaced with more permanent buildings: 53 buildings from the 1900s were surveyed in Haxtun and 91 buildings in Holyoke. The survey demonstrated rapid growth in the county during the 1910s with 147 properties from this decade in Haxtun, 219 in Holyoke, and 12 in Paoli. This expansion coincided with an agricultural boom period in the county. During the 1920s, new construction continued, but at a reduced rate with 83 buildings from this decade represented in Haxtun, 88 in Holyoke, and five in Paoli. During the 1930s a sharp decline in construction due to the Great Depression with only six buildings from this decade inventoried in Haxtun, 19 in Holyoke, and one in Paoli. Construction began to pick up again after World War II, with 21 buildings from the 1940s identified in Haxtun and 72 in Holyoke. New construction continued during the 1950s along with extensive modernizing of many older buildings: 43 buildings from this decade were present in Haxtun, 78 in Holyoke, and three in Paoli. Construction remained relatively steady during the 1960s with 37 buildings from this decade identified in Haxtun and 71 in Holyoke.

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