



United States Department of the Interior



NATIONAL PARK SERVICE 2280
National Register of Historic Places
1201 "I" (Eye) Street, NW
Washington D.C. 20005

The Director of the National Park Service is pleased to announce actions on the following properties for the National Register of Historic Places. For further information contact Edson Beall at (202) 354-2255 or E-mail: Edson_Beall@nps.gov
Visit our web site at <http://www.cr.nps.gov/nr>

WEEKLY LIST OF ACTIONS TAKEN ON PROPERTIES: 9/08/08 THROUGH 9/12/08

KEY: State, County, Property Name, Address/Boundary, City, Vicinity, Reference Number, NHL, Action, Date, Multiple Name

ARIZONA, MARICOPA COUNTY

Story, F. Q., Neighborhood Historic District (Boundary Increase), Roughly bounded by 17th Ave., Culver St., 15th Ave. and Lynwood St., also lots on Roosevelt St. and McDowell Rd., Phoenix, 92001834, ADDITIONAL DOCUMENTATION APPROVED, 9/10/08

COLORADO, BOULDER COUNTY

Agricultural Resources of Boulder County MPS, 64500987
COVER DOCUMENTATION APPROVED, 8/29/08

COLORADO, CUSTER COUNTY

Wetmore Post Office, 682 Co. Rd. 395, Wetmore, 08000860, LISTED, 9/12/08

IDAHO, BLAINE COUNTY

Hailey Masonic Lodge, 00 S. 2nd Ave., Hailey, 08000869, LISTED, 9/12/08

IDAHO, BONNEVILLE COUNTY

Art Troutner Houses Historic District, 3950, 4012 and 4032 S. 5th W., Idaho Falls, 08000868, LISTED, 9/10/08

IOWA, BLACK HAWK COUNTY

Forrest Milling Company Oatmeal Mill, N. Main St., Cedar Falls, 80001430, REMOVED, 9/10/08

IOWA, MAHASKA COUNTY

Bridge near New Sharon, Co. Rd. G29 over drainage ditch, New Sharon vicinity, 98000505, REMOVED, 9/10/08 (Highway Bridges of Iowa MPS)

IOWA, SCOTT COUNTY

Burtis-Kimball House Hotel, 210 E. 4th St., Davenport, 79003696, REMOVED, 9/10/08

IOWA, VAN BUREN COUNTY, Keosauqua Bridge, IA 1 over Des Moines R., Keosauqua, 98000476, REMOVED, 9/10/08
(Highway Bridges of Iowa MPS)

**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.

New Submission Amended Submission

A. Name of Multiple Property Listing

Agricultural Resources of Boulder County

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

- I. Early Settlement /Pioneer Agriculture: 1859-1896
- II. Growth in Agriculture: 1897-1919
- III. Retrenching and New Directions in Agriculture: 1920-1967

C. Form Prepared by

name/title Deon Wolfenbarger, Preservation Consultant

organization Three Gables Preservation date May 20, 2008

street & number 320 Pine Glade Road telephone 303-258-3136

city or town Nederland state CO zip code 80466

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.
(See continuation sheet for additional comments [].)

Signature and title of certifying official Deputy State Historic Preservation Officer Date _____

State or Federal agency and bureau _____

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper _____ Date of Action _____

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.)	1
F.	Associated Property Types (Provide description, significance, and registration requirements.)	40
G.	Geographical Data	74
H.	Summary of Identification and Evaluation Methods (Discuss the methods used in developing the multiple property listing.)	75
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.)	77

Primary location of additional data:

State Historic Preservation Office

Other State Agency

Federal Agency

Local Government

University

Other

Name of repository:

Carnegie Library Branch, Boulder Public Library; Western History and Genealogy Division, Denver Public Library; Norlin Library, University of Colorado.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 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

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 1

Agricultural Resources of Boulder County

STATEMENT OF HISTORIC CONTEXTS

The multiple property listing *Agricultural Resources of Boulder County* is organized around the built resources and historic landscapes that resulted from agricultural activities in Boulder County, Colorado. This multiple property submission provides a context for understanding the conditions that encouraged, hindered, or changed agriculture in the area, as well as a basis for evaluating the physical resources that resulted from these agricultural activities. It includes information on extant resources dating from 1862 through 1950, based on numerous field surveys conducted in unincorporated Boulder County.

The historic contexts prepared for this Multiple Property Documentation Form (MPDF) cover three major historic periods of agricultural development in Boulder County. The *Early Settlement/Pioneer Agriculture: 1859-1896* period in Boulder County saw many major agricultural developments occurring in a relatively compressed time period. In just a few decades, Boulder County went from a Native American hunting ground covered with prairie grasses to bustling mountain mining camps supported by successful farms on the plains. Settlers arrived shortly after the discovery of gold, broke sod, established farms and ranches, organized and built irrigation systems, founded farming communities, and organized communal agricultural societies and county fairs – all in less than thirty years. The next period of agricultural development in Boulder County, *Growth in Agriculture: 1897-1919*, saw increasing specialization combined with the introduction of crops better suited for the climate. This was also a period of growing national and international markets for Boulder County agricultural products and increased mechanization in farming. The *Retrenching and New Directions in Agriculture: 1920-1967* period extended from the end of the First World War through the mid-1960s. Significant changes in farming continued during this period, brought about in part by severe climatic factors and increasing residential growth in the county. In addition to further specialization and mechanization, new government programs developed for agriculture and soil conservation were introduced. Farms grew in size, but decreased in numbers. This last historic period of agriculture ended when several initiatives, first developed to limit growth in Boulder County, led to open space protection and purchases. In 1967 the Boulder County Commissioners appointed the first Parks and Open Space Advisory Committee (POSAC) and the City of Boulder started their Open Space program. Both of these programs would eventually serve to protect agricultural properties through the purchase and lease of farm and ranch lands throughout the county. Although these programs may not have initially been conceived to protect agricultural land, the end result was the preservation of thousands of acres of farms through easements and outright purchases through the programs initiated in 1967. The three historic contexts are:

- I. Early Settlement /Pioneer Agriculture: 1859-1896***
- II. Growth in Agriculture: 1897-1919***
- III. Retrenching and New Directions in Agriculture: 1920-1967***

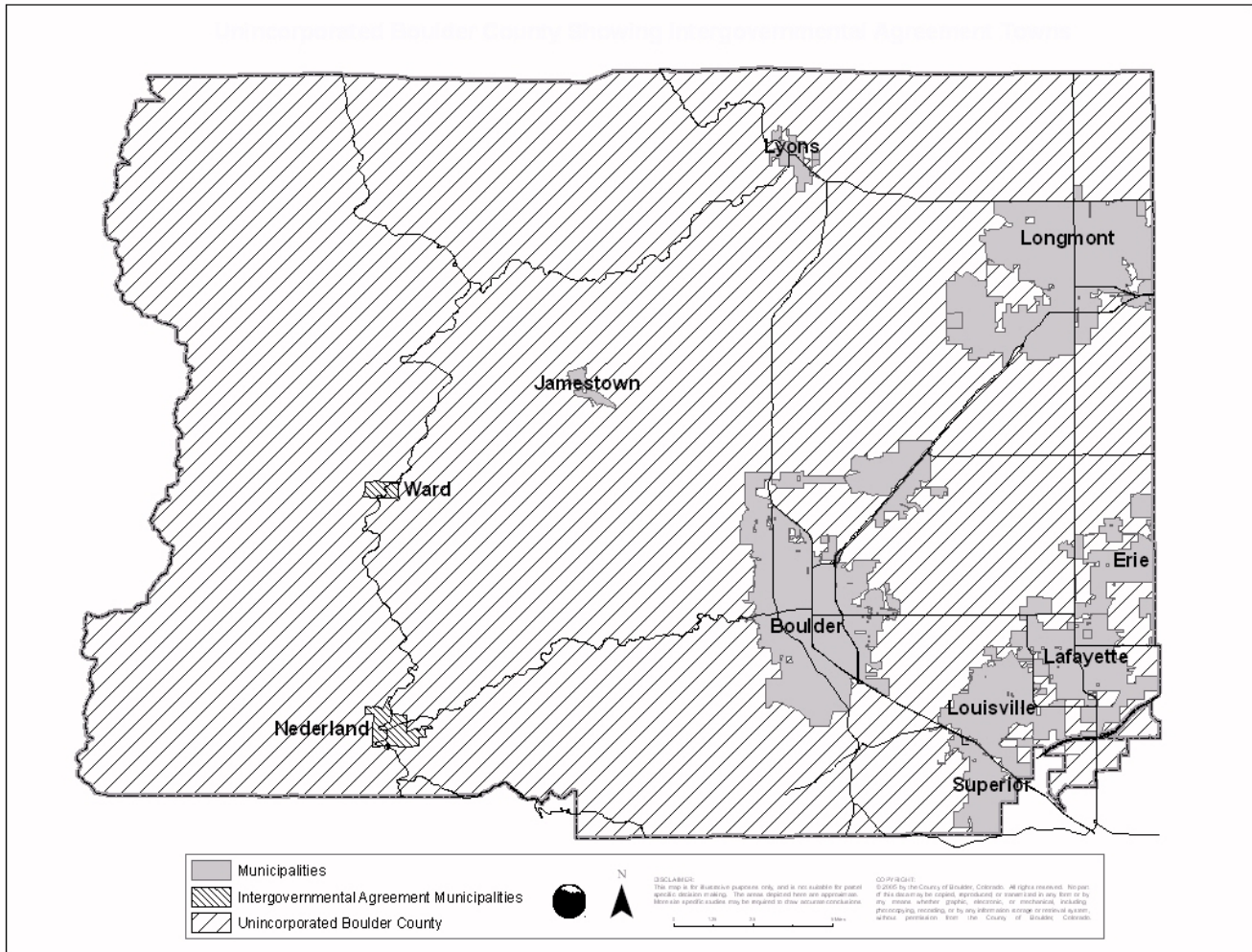
**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number E Page 2

Agricultural Resources of Boulder County

Figure 1: Map of Boulder County, Colorado



**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 3

Agricultural Resources of Boulder County

Boulder County is located northwest of Denver in the north-central part of Colorado. The county sits on the eastern slope of the Rocky Mountains, with the Continental Divide serving as its western border. The western three-fifths of the county is mountainous, while the eastern portion is rolling plains. Elevations within the boundaries of the county range from 14,000 foot peaks in the Rocky Mountains to about 5,000 feet on the plains. The county encompasses 741 square miles and contains diversified settings, both rural and urban. The county population was approximately 214,978 in 2005; about 86,969 of those reside in Boulder, 56,065 in Longmont, 15,995 in Lafayette, 14,356 in Louisville and the remainder in the smaller towns of Lyons, Nederland, Ward, Jamestown, Superior, and Erie and unincorporated areas, which include the communities of Niwot, Gunbarrel and Allenspark. Native Americans were the first to inhabit the area; the Utes were long-time residents of the “Shining Mountains,” followed later by the Cheyenne and Arapaho Indians who hunted in the Boulder and St. Vrain valleys prior to the arrival of the first Euro-American settlers. The discovery of gold led to the first town, Boulder City, being laid out in March 1859. The Colorado Territory was created in 1861, and Boulder was one of the first seventeen counties.

I. Early Settlement/Pioneer Agriculture: 1859-1896

Prior to 1859, the area that would become the Colorado Territory was so sparsely settled that there was little need for agricultural products other than what could be provided by subsistence farming, i.e., the production by residents for their own immediate or seasonal needs. When gold was discovered that year, though, the swarm of prospectors into the area created a demand for green vegetables, flour, beans, and potatoes, as well as pork, beef, mutton, milk, butter and eggs. The first mining districts in Boulder County organized at Gold Hill and Boulder in early 1859 lured thousands of prospectors to the region. The earliest farmers were entrepreneurs who took advantage of the growing markets located in the mountain mining camps. The Wellman brothers, Henry, Luther, and Sylvanus, are credited with being the first farmers of Boulder County. Henry and Luther had searched for gold in California, and like many, did not find their fortunes there. Hearing of a new strike in Colorado, they brought their youngest brother Sylvanus with them. Upon the advice of Horace Greeley while at Fort Laramie, they headed to Gregory and Russell gulches. On August 1, 1859, they reached Boulder valley and “. . . they considered that they had occasion to go no further, either to find gold, or a rich soil, or a beautiful country.”¹ The very next day, they purportedly took up a square mile section of land located two and a half miles east of the mouth of Boulder Creek with Benjamin C. Safford and began to plow an acre

¹Sanford Charles Gladden, Boulder Firsts: A Source-Book of Beginnings in Boulder, Colorado (N.p: pre-publication photocopy of manuscript prepared by Boulder Genealogical Society, 1972) 598.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 4

Agricultural Resources of Boulder County

for a turnip patch. Although grasshoppers would take this first crop, their later agricultural ventures were more successful. By fall of 1859, they had completed corrals for their animals; by early spring of the next year, the entire section was fenced. As a result, their farm became an early boarding center in the county, and anyone who had stock that needed caring used the Wellmans' pastures.

The Wellmans' first triumph in farming was with Mountain June potatoes, which produced nearly 800 bushels per acre in 1861.² Encouraged by this success, that same spring they added garden vegetables and grains to their crops, including wheat, marking them as the first wheat farmers in Boulder County. In addition to aforementioned agricultural "firsts," the Wellmans were also the first in the county to build a framed barn in 1861. Although known as successful farmers, the Wellmans were subjected to the same variable fates as all others who toil in the soil – the climate and the whims of the market. Grasshoppers would remain a recurring scourge for farmers in Boulder County throughout the years. Prices would always fluctuate, but especially so in this early period, with seed potatoes bringing in 15 cents per pound one year, and the next spring only yielding a half cent a pound. In general, though, vegetables were greatly valued in the mining camps, and these markets proved profitable for Boulder County produce growers in the settlement period. In 1865, for example, a single large cabbage brought ten dollars. Thus in the 1860s, large oxen trains taking loads of vegetables from the valleys of the Boulder and St. Vrain creeks up into the mining towns of the Rocky Mountains were common sights. Sometimes large parties of miners would also come down from Gold Hill and other areas to the Wellmans' farm to get a vegetable dinner.³

Most of the early farmers came to Boulder County for the same reason as the Wellmans – gold. Unlike the Wellmans though, who immediately turned to farming, most of the new arrivals tried their hand for a while at gold mining. Unfortunately not all were able to make a living, and fewer still found their fortunes. Many disappointed "go-backers" eventually packed up and went back to the states. Others decided to stay, though, and they returned to the type of life and work that they knew best – farming. Early agrarians who turned from mining to farming included Andrew Douty, who planted wheat and potatoes along South Boulder Creek. Perry White was one of the earliest to plant wheat along the St. Vrain in the northern part of the county, using seed

²Ibid., 601.

³Ibid., 599-602; Anne Dyni, Pioneer Voices of the Boulder Valley: An Oral History (Boulder, CO: Boulder County Parks and Open Space Department, 1999) 1.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 5 Agricultural Resources of Boulder County

brought from Salt Lake City.⁴ A letter from “Boulder City, Colorado Territory” in 1863 illustrates the reasons for the change of heart in favor of farming by many of the emigrants who had first come to the area for mining.

Jesse farming here pays big. You bet wee Can make money other ways but farming is A shore Shot and A fast way to make money here.... Wheat is one main point.... They rased the best wheat here last year I ever see grow. Jesse you would knot know this Country although you was here in 60, you know that wee thought they couldn't be any thing rased here but wee was mistaken.⁵

Vegetables and grain crops were not the only profitable agricultural commodities in demand by the residents of the mining camps; fresh meat was also in short supply during the settlement period. One of the earliest ranchers in Boulder County who profited from the market in the mining towns was Anthony Arnett. Born in Alsace-Lorraine in 1819, Arnett was first drawn to the western United States by the gold rush in California. Striking out there, he moved on to Pike's Peak in 1859. Impressed with the mild winter climate in the area around Boulder City, Arnett decided to winter cattle there. He drove nearly one hundred heifers across the plains in the spring of 1860 and began ranching in the area.⁶ Arnett typified many early cattle ranchers who utilized the open grasslands in the winter, and then drove the cattle to mountain pastures every spring for fattening. Other ranchers operated small feedlots instead and used the abundant prairie grasses for hay. In fact, the harvesting of native prairie grasses as hay for the gold camps in the mountains of western Boulder County was likely one of the earliest agricultural activities in the area. The draft animals working in the mines created a ready market for prairie hay. So in spite of its abundance on the plains, hay generally brought extremely high prices in the mountains. Farmers might receive \$25 a ton for hay in the fields down on the plains, but the freighters who delivered it to the mountains made the most profit, sometimes selling a load for as much as \$300-\$500 a ton.⁷

⁴Phyllis Smith, A Look at Boulder from Settlement to City (Boulder, CO: Pruett Publishing Company, 1981) 25.

⁵“Letter from Boulder City, Colorado Territory,” Small Documents Collection (Boulder, CO: Carnegie Branch Library for Local History, Boulder Public Library System, 1863).

⁶Richard Fetter, Frontier Boulder (Boulder, CO: Johnson Publishing Company, 1983) 151.

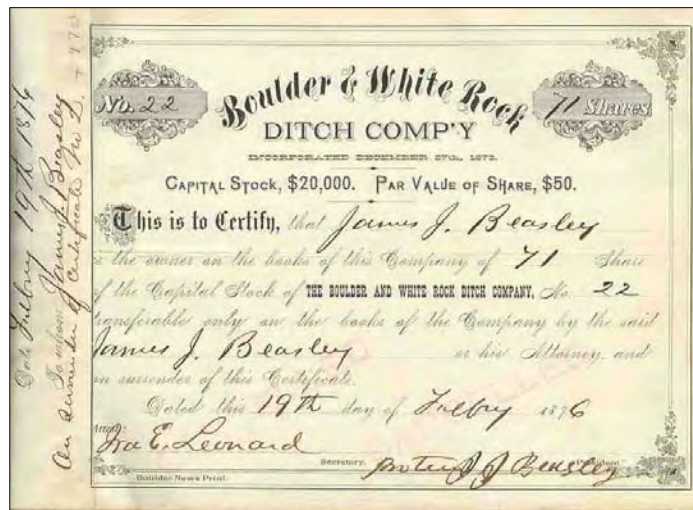
⁷Dyni, 59-60.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 6

Agricultural Resources of Boulder County

Some of the early attempts in farming in the county were unsuccessful. Marinus Smith and Joseph Wolff thought that the slopes along the foothills might be right for growing a wide variety of fruits. They experimented with plots of strawberries, raspberries, and blackberries, as well as groves of apple trees and acres of grapevines. Boulder County fruit growers even considered the possibility of vineyards for table wines. When not plagued by the numerous grasshopper infestations, however, the dry winters in Boulder County proved problematic for growing fruit on the Front Range slopes, and they gave up on this particular agricultural venture.⁸

While not all of Marinus Smith's early ventures were "fruitful," he did realize that water was the key for successful agriculture in Boulder County. Some parts of the county were fortunate to have relatively reliable water sources, through the two Boulder creeks as well as the St. Vrain, Left Hand, and the Little Thompson. The first agricultural settlements were naturally confined to land near these creeks. After all the watered land was taken up in claims, however, it was clear to newly-arrived farmers that the rainfall in semi-arid Colorado was not adequate for most agricultural activities, particularly during the spring planting season. Taking cues from irrigation systems they learned about while at the California gold strikes, farmers developed a network of irrigation canals in order to provide the water necessary for their crops and livestock. Smith and Pell dug one of the first irrigation ditches around Boulder in 1859. Following their lead, farmers dug other ditches throughout the plains to catch the spring runoff from the mountain snows in the Boulder and St. Vrain valleys. In 1860, the Howard and Anderson ditches were dug. By 1862, the Farmers Ditch extended seven miles and had an irrigation capacity of 1,500 acres.



A stock certificate from the Boulder and White Rock Ditch Company, founded in 1873 to deliver water to Boulder and Weld county farmers. From the Boulder & White Rock Ditch & Reserve Co. webpage (<http://www.ditchcompany.com>)

⁸Smith, 27.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 7

Agricultural Resources of Boulder County

Numerous other ditch companies quickly organized in order to provide water for farmers. (A list of Boulder County ditches is found in Appendix A.) Most of the ditches were cooperative developments among neighbouring farmers to insure a steady water supply in Boulder County's dry climate. Abner Goodhue, who had purchased the Miller Tavern Ranch in 1871 with a friend, worked with his neighbors to hand dig the South Boulder and Rock Creek Ditch as well as a ten-acre water reservoir for crop cultivation on his farm. On June 1, 1873, Goodhue filed claims on the South Boulder and Rock Creek Ditch and the Goodhue Reservoir #1. The farm's irrigation system was expanded in 1875 by adapting the existing Rock Creek channel as the original Goodhue Ditch and digging two laterals from Rock Creek through the bottomland of the farm. The irrigation and reservoir system enlarged again in 1883 by the South Boulder and Rock Creek Ditch Company, the same year Goodhue was president of the ditch company. His hard work for a reliable water supply allowed Goodhue to expand the farm so that by 1896 it encompassed 1,440 acres. The prosperous farm, also called the Goodhue Ranch (2005 S. 112th Street, Broomfield), consisted of crop fields and grazing pastures, as well as barns, corrals, a farmhouse, and other buildings including a brick blacksmith shop.⁹

While many of these ditches involved the cooperation of several farmers, some were developed privately. German immigrant George Zweck came from Omaha in 1860 as part of a 300-ox-team wagon train. After viewing the St. Vrain Valley from Burlington, he decided to take up farming in the lush grassland along the creek. He laid out and dug his farm's irrigation system by hand. Reversing the trend of miner turned farmer, Zweck decided later to prospect for gold in the summers and became Jamestown's first settler. He later returned to his first love, agriculture, by investing his mining earnings in land and purebred Hereford cattle.¹⁰

Toward the end of the settlement period, the state Supreme Court formalized Colorado's water policy through a court case settled in 1892. When George Coffin's corn on the St. Vrain Creek died because the Left Hand Ditch Company diverted the upstream water into Left Hand Creek, Coffin took the ditch company to court. The Court ruled in favor of the Left Hand Ditch Company, which had prior water rights, stating that the company's right to divert water was superior to Coffin's claim. More importantly, the Court upheld the ditch company's right to divert water into a different drainage system. This case set a precedent in water law, known as the "first in time, first in right" or "prior appropriation" water doctrine.

⁹ "Rock Creek Farm Cultural Landscape," County Resolution 98-113, HP-98-02 (Boulder County, 1998) 5-6.

¹⁰ Betty Ann Newby, The Longmont Album: History and Folklore of the St. Vrain Valley (Virginia Beach, VA: Donning Company Publishers, 1995) 26.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 8

Agricultural Resources of Boulder County

Although the gold camps continued to lure new settlers, two developments made the area around Boulder County even more inviting for agriculture. First, the Territory of Colorado was created on February 28, 1861. A year later, President Lincoln signed the Homestead Act. The latter encouraged new settlers to head west to look for new farm lands instead of gold. The Homestead Act allowed any head of household to claim a 160-acre parcel of land if he (or she) was at least 21 years old. A temporary claim was filed at a land office for a small fee and presentation of survey coordinates. The homesteader was required to live on the land for five years and make improvements. "Proving up" ownership required building a home and farming the land. Emigrants from the East and Midwest looking for farm land of their own took up a majority of the land patents. Occasionally, eastern land developers hired representatives to live on the acreage, later purchasing the land for little cost.

While most of the new emigrants were individuals looking for a chance to settle down to farming or ranching, some came out west in organized groups. Members of the Dunkard Church in Pella, Iowa, were finding that good farm land was becoming too expensive for their congregation in that state. Tales of free, rich bottomland near the Rocky Mountains lured several to emigrate from Iowa to Boulder County's St. Vrain Valley. They formed a community in 1887 which they named for their hometown in Iowa. The new town of Pella stood on the banks of the St. Vrain, about four miles west of Burlington, and was an early agricultural community in northern Boulder County.¹¹

Not only were emigrants from the eastern United States tempted to move to the Colorado Territory, but the Homestead Act was widely promoted abroad as well. Many Europeans were eager to obtain free farmland in Boulder County, and consequently, they founded several small farm communities in this period. Ryssby was the first Swedish settlement in the Colorado Territory. In 1869, Sven Johan Johnson and others from Sweden's Småland province established claims under the Homestead Act, and were soon joined by their families and other Swedish immigrants. Early farming efforts provided a meager living, so to augment their incomes, many of the men hired out or worked as miners and lumberjacks.¹² Although not all immigrants founded communities, many operated very successful agricultural enterprises. Some arrived before the Homestead Act of 1862, but later took advantage of this legislation by filing claims. Swiss immigrants Frederick and Jacob Affolter followed this example, having first arrived in Boulder County in

¹¹Diane Goode Benedict, Refuge in the Valley: 1800s Pella, Colorado (Lyons: CO: Applications Plus, 2004) 17-18.

¹²Dyni, 29.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 9

Agricultural Resources of Boulder County

1860. After a few years, they decided to sell cheese in the mining camps, and in 1862 drove a herd of milk cows all the way from Missouri to their new claim on Left Hand Creek just west of Haystack Mountain. They opened the first cheese factory in Boulder, and their cabin built in the “Swiss style” became a local gathering place.¹³

Regardless of their origins, the new settlers had to build some type of home and plant crops on their homesteads. The first task facing settlers in the new territory was to provide shelter for themselves and their families before winter arrived. The lucky ones were able to move an unused cabin from Boulder City out onto the plains, stake their fields, and begin plowing. If wood could be brought down from the mountains, the settlers built cabins with various methods of log construction. Small wooden “claim shanties” also served as home for many settlers during their first year or two on their homesteads. These were constructed from board-and-batten milled lumber with wood shake roofs. Some dwellings were made of native stone, principally sand-



*Early crude agricultural buildings near the settlement of Altona, including a barn, log outbuilding and fences.
Photo ca. 1942 by Muriel Sibell Wolle. Call number: X-541. Courtesy of Western History/Genealogy Department,
Denver Public Library.*

¹³Newby, 29.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 10 Agricultural Resources of Boulder County

stone. Settlers on the prairies also dug “bricks” of sod and built sod houses. These “soddies” were warm in winter and cool in summer, but were ridden with spiders and bugs. After rainfall, the family also had to bail water out of the house. Another version of a sod house was the dug-out. This type of shelter was made by digging into a hill or bank, then building up the front and side walls with sod. The roofs were made of poles covered with canvas and sod or lumber.

After shelter, water and food were the next concerns. Initially, settlers hauled water from creeks or springs. Muddy runoff, seasonal low flow, drought, or water-borne diseases made these unstable sources. Consequently most early settlers dug water wells as soon as possible. The earliest farmers also had to be relatively self-sufficient for their food. Most brought with them a milk cow, a hog or two, and some chickens or turkeys. These families had milk, butter, eggs, lard, and some fresh meat, although wild game also provided meat. The farm garden later provided potatoes, melons, turnips, and cabbage. Also associated with this settlement period of agriculture were the typical (if rough) agricultural buildings and structures, such as barns, corn cribs, hog houses, poultry houses, granaries, root cellars, and storage buildings, as well as irrigation ditches and canals. Many of the earliest farm buildings from the settlement period in Boulder County have been lost, in part due to their advanced age, crude original construction methods, and changing farm sizes and functions; there is little documentation about the layout or arrangement of the buildings on the farms from this era.

Once shelter and the immediate need for food were settled, homesteaders tackled plowing and getting in their crops. The tough prairie grasses with deep root systems and the generally sub-standard plows caused many to take more than two years to clear their land in the plains. In the mountains, farmers contended with steep topography, rocks and boulders in addition to the shortened growing seasons. These factors led more than a few to conclude that farming in the West was too difficult. In general, though, farmers and ranchers in Boulder County were relatively successful compared to others in Colorado in these early years. By 1870, even though Boulder County was one of the smaller counties in the territory in acreage and had only 1,939 residents, it ranked second in acres of improved farm land, at 14,365 acres; an additional 28,308 acres were considered “unimproved.” Furthermore, the value of its farmlands was the highest in the Territory in 1870 at \$575,650.¹⁴ The total estimated value of all farm production in the county was \$326,313. A total of 232 farms were recorded in the 1870 agricultural census, with only a few of these considered “small” farms. There were 19 farms ranging in size between 3-9 acres, 26 farms with 10-19 acres, 80 farms at 20-49 acres, 58 farms of 50-99 acres, and 49 farms at 100-

¹⁴Although Colorado was not admitted to the union until 1876, the federal government still collected agricultural data for the region. The county figures were gathered for the original seventeen Colorado counties.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 11 Agricultural Resources of Boulder County

499 acres. No farms larger than 500 acres were recorded in the 1870 census. There were also no values listed for orchard or other produce market gardens, but slaughtered animals were valued at \$11,734.¹⁵

A decade later in 1880, Boulder County ranked first in the state with the largest amount of improved land in farm acreage – 82,990 acres. Again, this was in spite of being one of the smaller counties in total acreage, and with much of it mountainous. The amount of improved acreage increased in 1890 to 93,155 acres, although Boulder now ranked fourth behind Arapahoe, Larimer, and El Paso counties.¹⁶

Many successes illustrate the heritage of Boulder County agriculture during this settlement period. Numerous rural agricultural settlements grew into small communities, including Niwot, Pella, Valmont, Ryssby, Altona, and Burlington. Several of these communities grew up around the many flour mills established to process the successful wheat crops of the county. In fact, Boulder County wheat was purportedly responsible for the site selection of the town of Longmont. The Chicago-Colorado Colony, which organized in Chicago in 1870, proposed founding an agricultural community in the Colorado territory. The colony's belief in the ideals and benefits of agriculture was laid out in a constitution written that year.

Agriculture is the basis of wealth, of power, of morality. It is the conservative element of all national and political and social growth; it steadies, preserves, purifies and elevates.¹⁷

The colony sent a committee to look for suitable sites in the land grant area of the Denver Pacific Railway. They happened upon Enoch J. Coffman, who was delivering his Boulder County wheat crop to Denver. Delighted with what they saw, the committee decided to purchase approximately 60,000 acres of land in the county, and subsequently laid out the town of Longmont

¹⁵1870 U.S. census, Boulder County, Colorado, agriculture schedule; cited from: University of Virginia Library, Geospatial and Statistical Data Center, [Historical Census Browser](http://fisher.lib.virginia.edu/collections/stats/histcensus/) <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

¹⁶1880 and 1890 U.S. census, Boulder County, Colorado, agriculture schedule; cited from: University of Virginia Library, Geospatial and Statistical Data Center, [Historical Census Browser](http://fisher.lib.virginia.edu/collections/stats/histcensus/) <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

¹⁷Dan Corson and Tom Noel, [Boulder County: An Illustrated History](#) (Carlsbad, CA: Heritage Media Corp., 1999) 82.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 12

Agricultural Resources of Boulder County

in 1871. About 390 members of the colony moved to Longmont that first year, where they were allowed to purchase two town lots and given access to outlying farm lands. Members of the colony built communal irrigation ditches within the town. Coffman was appointed superintendent of the agricultural operations, where he oversaw 1,000 acres planted in wheat and other crops.¹⁸

With growing numbers of farmers settling in the area and their increasing success, agriculture in Boulder County did not remain at the pioneer or subsistence level very long. Within a decade, county agrarians realized the need to meet for the purpose of sharing information and working for the betterment of the industry. Local farmers organized the Boulder County Agricultural Society on June 12, 1869. Although there was no money in the treasury, the group nonetheless purchased fair grounds and organized a county fair, all within a few months of organizing. A fence was immediately built around the grounds, as well as a temporary round house, judges' stand, stalls, track, and other improvements. The first fair was held for four days commencing October 13, 1869.¹⁹ In spite of numerous attractions, including daily races and even a mining exhibit, the first fair lost money. Perhaps more important than the showcasing of agricultural wares during this first county fair was the farmers' convention held at the same time. Farmers from Larimer, Weld, Jefferson, and Arapahoe counties, as well as Boulder County attended the farmers' convention to discuss "the protection of farmers against depreciating prices of farm products by speculators."²⁰

This local attention to the needs of farmers coincided with a fledgling national organization geared towards the same ideals. Just a few years earlier, the National Grange movement had organized in Washington, D.C. in 1867. Officially known as the National Grange of the Order of Patrons of Husbandry, the organization worked to unite farmers and work for their betterment. It was the first fraternal organization to allow women to hold offices, and soon grew to be as important for its social outlets as for its political activities. In Colorado, though, the statewide Grange movement began after the financial panic of 1873 when farmers felt the effects of the depression. Hoping to influence favorable agricultural legislation in the new territory, the Colorado Territorial Grange was organized in January 1874. When the state Board of Agriculture was created in 1876, seven of the eight members were Grangers. They worked to prevent a plan to divert state funds away from the new agricultural college in Fort Collins. In order to keep

¹⁸Ibid., 82, 86.

¹⁹"Records and Correspondence 1872-1873 of Boulder County Agricultural Society," BHS 328 b043 f01 (Boulder, CO: Carnegie Branch Library for Local History, Boulder Public Library System).

²⁰Dyni, 55.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 13

Agricultural Resources of Boulder County

abreast of legislation affecting farmers, the state Grange officers formed a lobbying committee in 1885. They were particularly concerned about potential control of Colorado's rivers and streams, which would affect the water rights of farmers in the state.²¹

Boulder County was especially active in the earliest Grange efforts in Colorado. Just one month after the territorial group formed in January 1874, a special session convened in Boulder City to further hone the organization.²² Boulder County and its residents continued to play important roles in early Colorado Grange history, with several residents filling officer positions.²³ The county received attention from the national organization as well. John L. Brown of the National Grange was sent to Colorado in 1873, where five of the subordinate Granges he formed were in Boulder County: Valmont Grange #5, Washington Grange #8, Left Hand Grange #9, Harmony Grange #14, and St. Vrain Grange #16. Other Boulder County Granges that formed during this early period were: Longmont Grange #27, South Boulder Grange #28, Lower St. Vrain #29, Coal Creek Grange #30, Burlington Grange #31, Haystack Mountain Grange #36, Pleasant View Grange #94, Altona Grange #127, Rocky Mountain Grange #128, Longmont Grange #130, Boulder Valley Grange #131, and the Hygiene Grange #134.²⁴

Granges were not the only agricultural societies organized during the settlement period. In 1871, farmers around Longmont formed the Northern Colorado Agricultural Society. They purchased an eighty-acre site at Lake Park to serve as their fairgrounds. This fair was so successful that it soon outgrew Boulder's fair. Eventually, the county fair was moved to the Longmont site.²⁵ The Lower Boulder Farmers' Club was formed in 1873, and was considered the first "club" as opposed to a society.²⁶ The Northern Colorado Horticultural Society was active in the 1880s, although their scope went beyond the boundaries of Boulder County. The Boulder Fruit Growers' Association aims were based on collectivism, where the fruit growers worked together to achieve

²¹Anne Dnyi, "The Grange Movement in Boulder County," (prepared for the Boulder Historic Context Project, 1992) 4.

²²Colorado State Grange, Colorado State Grange History: 1874-1975 (n.p.: Colorado State Grange, 1975) 11.

²³Dnyi, "The Grange Movement," 4.

²⁴Ibid., 11.

²⁵Corson and Noel, 121.

²⁶Dnyi, "Pioneer Voices," 55.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 14

Agricultural Resources of Boulder County

success. Their incorporation papers, filed on March 4, 1893, stated that the organization was established:

For the purpose of promoting and encouraging the industry of fruit growing, to secure fair prices for said fruit, establish a better market and secure better shipping facilities, to buy, sell and raise the standard of fruit, and have the same reach the customer in the best possible condition, to promote the general welfare and secure the best interest of the fruit-growers of Boulder and vicinity, and to lease, erect, acquire by purchase or otherwise a suitable building or buildings and all necessary real estate for the same for the use of the Association.²⁷

Many of these organizations were devoted to cooperative marketing of farm products, although other coops provided supplies or services. In addition to the Grange, other farm organizations, including the Farmers Alliance and the Farmers Educational and Cooperative Union of America (known as the National Farmers Union) also began to promote cooperatives. The rise of interest in cooperatives near the end of the nineteenth century coincided with an agricultural recession and drought. This threatened not only the livelihood of farmers, but a great many of the small milling companies in Colorado as well. During this recession, only the larger milling companies, such as those owned by J.K. Mullen and Company, had enough resources to last them through the difficult economic times. In order to remain solvent, some of the less stable companies began to talk of consolidation. Although mill owners attempted a previous alliance of milling companies in 1877, they formed a new milling association in 1885 – the Colorado Milling and Elevator Company (CM&E). This organization included as its charter members the larger, major mills in Ft. Collins, Golden, and Greeley, as well as the two largest Longmont milling outfits.²⁸ By working under one management, the milling enterprises reduced the expense of manufacturing and obtained better railroad rates, leading to the long-term recovery of the milling industry in the next period of Boulder County's agricultural development.

Most agrarians and small milling companies were not pleased about the development of the larger commercial milling associations. While the larger milling entrepreneurs and associations successfully bartered for better transportation rates, they manipulated the system to exclude local farmers from these rates. Furthermore, the CM&E took advantage of regional price variations

²⁷Gladden, 611-612.

²⁸William J. Convery, III, Pride of the Rockies: The Life of Colorado's Premiere Irish Patron, John Kernan Mullen (Boulder, CO: University Press of Colorado, 2000) 100-102.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 15

Agricultural Resources of Boulder County

and inexpensive shipping rates to import cheap grain from other states. With capital to build large elevators, they could also afford to buy wheat when it was cheap and store it for future speculation. Colorado farmers could not afford the higher freight rates offered them, and were forced to sell to local dealers directly from harvest – the time of the year when heavy supply forced down wheat prices.²⁹ As a result, many farmers decided to support a patronage-founded mill in order to show their unhappiness with their treatment by the larger CM&E. Although the Farmers' Alliance mill suffered during the recession of the 1880s, it nonetheless remained profitable for another thirty-five years due to the support of local farmers. A second agrarian-based cooperative was founded in Longmont in 1886 – the Farmer's Milling and Elevator Company. Rival milling mogul J.K. Mullen admitted that this mill was "one of the best—if not the best in northern Colorado."³⁰

A critical factor in the establishment and later success of agriculture in Boulder County, both for farmers and food processors, was the development of reliable methods of transporting agricultural products. For the earliest farmers who sold produce to the miners in the mountains, the task of getting their goods to these profitable markets was extremely daunting. Unlike the plains, where a farmer could take a plow and grade a simple road for his own use, agricultural entrepreneurs alone could not undertake the construction of roads into the mountains. Although in the early 1860s the federal government financed the building of a military road up Sunshine Canyon, most of the early mountain roads were private capital ventures. James P. Maxwell and Clinton M. Tyler capitalized the Boulder Valley and Central City Wagon Road Company at \$50,000, and on March 11, 1864, they received a county building permit for road construction up Boulder Canyon. The Wellman brothers were among the subscribers, as they needed to transport their produce to the miners living in the various camps.³¹ For the most part, however, these roads were financed by parties with mining interests. Farmers on the plains, on the other hand, generally worked on their own roads, following property boundaries based on the federal township and range system. Citizens could later petition the County Commissioners to establish a route as a free county road. The very first county road (now Pearl Street in Boulder) was likely developed to support agriculture, as it led from an intersection in the fledgling town of Boulder City to Valmont, which was the area's major agricultural center at the time. Known then as County

²⁹Ibid., 105.

³⁰Ibid., 109.

³¹Smith, 33-36.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 16 Agricultural Resources of Boulder County

Road #1, it was established on April 10, 1862.³² County Road #9 also appears to have been laid out for the benefit of farmers, as it started at Peter Housel's flour mill in Valmont and extended east to Louisville. Indeed, Valmont's prominence in agriculture made it the center of several of the earliest county roads, including County Road #10, which today is 63rd Street north of Valmont. County Road #8 extended from just north of the town of Valmont to today's Colorado 52 and on to Burlington.³³ This was called the "gunbarrel" route because of its straightness; although this route no longer exists, the area still retains the Gunbarrel name.

For the areas without a county road, travel in the plains often involved a dizzying array of zigzag routes around the boundaries of varying sized farm fields. In 1866, a *New York Tribune* correspondent traveling from Marshall to Valmont wrote:

We were a full two hours in reaching Valmont, on account of the very independent habits of the Colorado farmers. The second bottoms being devoted to grazing purposes, they have found it necessary to fence the outer edge of the farm land; and, in so doing, they cut off the road with the most utter disregard of the public.... In spite of the tedious zigzags we were forced to make, the views of the broad, prosperous, and thickly-settled Boulder region, made our ride very enjoyable.³⁴

Although this report places the blame for the haphazard road system on the farmers of the county, as a *Longmont Press* editorial in 1874 noted:

The farmers are not wholly to blame for fencing up the roads and making people zigzag around two miles, to go a distance of one mile; the most blamable parties are the County Commissioners.

As an example of the culpability of the commissioners, the newspaper recounted the attempt to build a road from Longmont to Boulder. The route was laid out, but when a farmer along the route would have suffered "damages," the commissioners decided to abandon the project rather

³²Silvia Pettem, "Roads of the Mountains and Plains," (Boulder, CO: Boulder Planning Department, 1996) 13-14.

³³*Ibid.*, 18.

³⁴*Ibid.*, 19.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 17 Agricultural Resources of Boulder County

than pay the damages. As a result, it took over eighty years before the “Diagonal” route finally connected the two towns.³⁵

The earliest Boulder County farmers drove their products into Denver via horse-drawn wagons, but many eventually relied on the railroad for the transportation of their goods. Rail service came to the county in 1873 when two lines were built to serve Boulder City and the Erie coal mines: the Colorado Central and the Denver and Boulder Valley. That same year, the Colorado Central completed a branch line across Coal Creek to the coal mines near Marshall. The coal mines here were also served by the Boulder Valley Railroad and the Union Pacific Railroad.³⁶ Indeed, many of the railroads were initially developed for the mining communities, but later transported agricultural commodities. The rail lines between the mountain and plains differed in their construction as well as their original purpose. Narrow gauge tracks with rails three-feet apart better accommodated the sharp turns in the mountains, while the standard gauge of four feet, eight and a half inches was typically found on the plains.³⁷

Although always susceptible to climatic and economic factors, by and large agriculture in the county was very successful up until the 1890s. The settlement period in agriculture provided virtually all the ingredients needed to make farming successful in Boulder County. Water, the most necessary and precious commodity in Colorado, was obtained through the development of irrigation companies. Other important developments in the period included the establishment of several rail lines in the county, which opened up distant markets for Boulder County agricultural products. Farmers organized and worked to influence farm legislation in the young Colorado Territory. Fairs displayed the county’s crops, livestock, and farm implements, and served to encourage others to continue to try their hands at agriculture in Boulder County. Farm communities were settled and growing; while not all would survive through the next period of agricultural development in Boulder County, they provided necessary social, religious, and economic outlets for the agrarian settlers. By 1891, wheat was the most profitable cash crop in Boulder County, although other crops including corn and potatoes were important to the area as well. Farm technology improved slowly through this period, but the impact of these improvements remained relatively minimal. The settlement period came to a close in the hard times of the mid-1890s marked by a severe drought, low market prices, and a national economic recession. This difficult

³⁵Ibid., 20.

³⁶Lara Juliusson, “Boulder County Colorado Major Transportation Routes, Pre 1860 to 1920” (Boulder, CO: Boulder Planning Department, May 1992) 5.

³⁷Smith, 127.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 18

Agricultural Resources of Boulder County

period persisted through much of the decade. By the end of the nineteenth century, the drought broke, wheat yields rebounded, and prices rose, signaling a new era in agriculture.



A farm near Middle Boulder Creek and Barker Meadow in Nederlands. Photo by William Henry Jackson, between 1873 and ca. 1892. Call number: CHS.J2205. Courtesy of Colorado Historical Society, William Henry Jackson Collection.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 19

Agricultural Resources of Boulder County

II. Growth in Agriculture: 1897-1919

Several factors combined to help agriculture rebound after the slump experienced in the mid-1890s. Some of these were evident prior to 1890, but they combined around the turn of the century to result in a spectacular recovery. These factors included increased specialization, mechanization, the introduction of new or improved crops, improved methods of animal husbandry, and innovations in farm building construction.

One of the most significant changes in agriculture in Boulder County and the rest of the country was the improvement of existing and development of new mechanized farm equipment. In the settlement era, most Boulder County farmers relied on the primitive hand tools and equipment they brought with them to the territory. Draft animals were used for the field work. Two-horse walking plows prepared the earth for row crops. Farmers then sowed grain by hand or hand-operated broadcasting seeders. They harvested by hand with a scythe and threshed wheat in a horse-powered separator. By the turn of the century, though, horse drawn mechanical seeders or "drills" were common, as were grain binders for cutting the ripe wheat or oats. By the mid-1890s, steam engines powered threshing machines. These were not self-propelled, however, and had to be pulled from location to location by horses. By 1900 self-propelled steam engines for threshers were introduced, although most Boulder County farmers continued to use stationary steam engines until the later introduction of smaller and more affordable combines. Pull combines powered by horse teams were available by the mid-1910s. The forward motion of the machine operated the combine. These were used mainly in the larger grain fields in the eastern sections of the county.³⁸ Combines with engines to run the threshing mechanism were available by 1920, but the self-propelled combine was not developed until the 1930s and was not commonly used until the 1940s.

In addition to new machines for sowing and threshing, mechanized plows for preparing wheat fields for planting were also introduced during this period. By the mid-1890s, slow-moving steam engines began to replace teams of horses, mules, or oxen. Gasoline-powered tractors then came into general use around 1915, in part due to the loss of farm labor to military service during World War I. The tractor was one of the most important innovations in farm machinery, particularly for the cultivation of grain and hay. It pulled a variety of equipment including plows, discs, drills, and combines. To service all this new farm equipment, the number of implement stores in Boulder County increased dramatically from the 1890s through 1920. While a few Boulder County farmers stubbornly held out and continued to use draft animals, eventually most switched

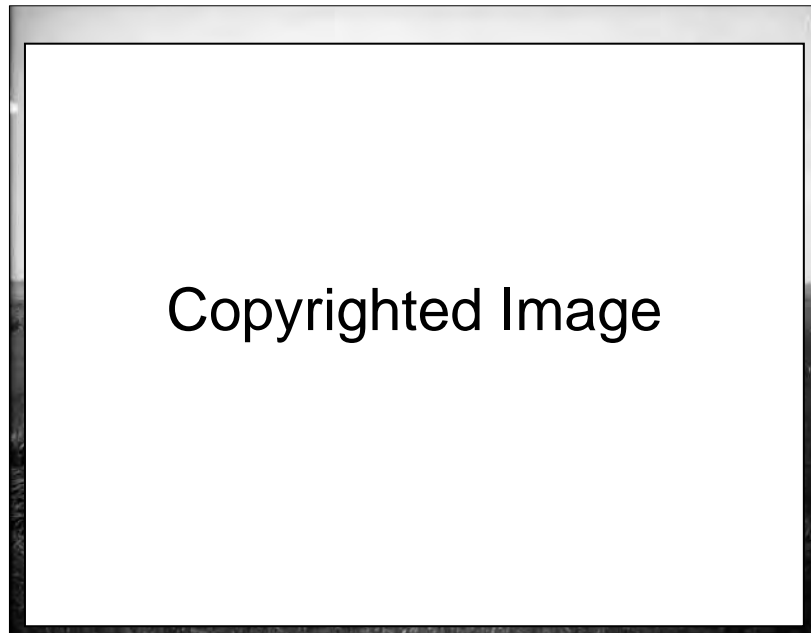
³⁸Dyni, "Pioneer Voices," 71.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 20

Agricultural Resources of Boulder County



Even with increased mechanization, wheat threshing was very labor-intensive. Shown here is a steam-powered threshing machine, three horse/mule drawn wagons loaded with sheaves, and one horse-drawn water tank. Photo by L.C. McClure, ca. 1925-30. Call number: MCC-3045. Courtesy of Western History/Genealogy Department, Denver Public Library.

over to steam and gasoline-powered machinery when they realized that their neighbors were able to operate larger farms, till more acreage, and earn greater profits. Thus in spite of the high percentage of land already under cultivation, the total amount of acreage in farmland continued to increase in Boulder County throughout this period, rising dramatically from 93,155 acres in 1890 to 191,373 acres in 1900 and 221,202 acres in 1920. A far more spectacular increase in the value of farm equipment occurred in the same period, nearly doubling from \$121,670 in 1890 to \$216,340 in 1900 and increasing by 700 percent by 1920 to \$1,517,998.³⁹

In addition to advances in farm machinery in this period, new or improved crops were introduced. At the beginning of the twentieth century, wheat dominated grain production in Boulder

³⁹1890, 1900 and 1920 U.S. census, Boulder County, Colorado, agriculture schedule; cited from: University of Virginia Library, Geospatial and Statistical Data Center, [Historical Census Browser](http://fisher.lib.virginia.edu/collections/stats/histcensus/) <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 21

Agricultural Resources of Boulder County

County. However, before the arrival of the Russian Mennonites, most wheat farmers tilled small acreage planted with varieties of soft wheat. Partly due to the efforts of the Santa Fe Railroad to entice immigrants to the United States, an agricultural “revolution” occurred in the late 1870s and 1880s. Russian-Germans, and in particular the Mennonites, are generally credited with bringing “hard red winter wheat” with them when they immigrated. The promotion and testing of hard wheat varieties were conducted in cooperation with Mark Carleton of the Kansas State Agricultural College and the U. S. Department of Agriculture. Together with some Mennonite millers, they proved the adaptability of the “Russian” hard wheat to the plains states in the early 1880s. This hard wheat better survived the winters on the Great Plains, and because it was harvested earlier in the summer, there were fewer problems with insects and plant disease than the soft wheat varieties.⁴⁰ The new varieties of hard red winter wheat were so hard that millers found them difficult to grind. However, the qualities of this wheat, not the least of which was its high yield, were so superior that it propelled Boulder County to new heights in wheat production. Production grew even more dramatically during the 1910s, when the outbreak of World War I caused a surge in wheat prices from 76 cents a bushel in 1913 to \$4.10 a bushel in 1919. As the grain center of Boulder County, Longmont in particular benefited from the success of surrounding wheat farmers. To keep up with the area’s production, Longmont had six mills after the turn of the century, and was proud to be known as the “Minneapolis of the Rockies.”⁴¹

Longmont was also the center of many other agricultural enterprises and capitalized on the introduction of several crops new to Boulder County; one of the more significant of these new crops was sugar beets. Sugar beets had been grown in northern Colorado since the 1890s, but after the turn of the century they became one of the most predominantly irrigated crops in the region. They were relatively easy to grow, being well suited to the climate, and minimally affected by adverse weather. Sugar companies successfully promoted the crop and persuaded Boulder County farmers to switch from wheat to sugar beets. Soon there were enough beet farmers in the area to justify the 1903 construction of a refinery for the Longmont Sugar Company, which was acquired a year later by the Great Western Sugar Company.

In spite of this crop’s appeal to farmers, beet production required irrigated fields and was very labor intensive. Farmers in Boulder County needed more workers, and immigrant labor answered the call. German-Russian, Mexican, and Japanese immigrants comprised a majority of the sugar beet labor force. Farmers constructed “beet shacks” and camps to house Hispanic la-

⁴⁰Norman E. Saul, “Mill Town Kansas in the Age of Turkey Red,” Kansas History: A Journal of the Central Plains 23 (Spring-Summer 2000): 29.

⁴¹Corson and Noel, 88.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 22 Agricultural Resources of Boulder County

borers who moved to the area during the season and returned home after harvest. Japanese immigrants also worked the beet fields, but several of these families saved money, bought farm land in Boulder County, and began their own agricultural businesses. The Tanaka, Nishida, and Kanemoto families all became successful vegetable and market produce farmers in Boulder County.⁴²

With the growing prominence of the Japanese immigrants' truck farms and other agri-business entrepreneurs, vegetables and market produce crops greatly expanded after the turn of the century in Boulder County. Again, Longmont was the center of this growth, particularly in processing. John H. Empson and his daughter, Lida, were among those responsible for promoting the production of vegetables in Boulder County. They came to Longmont for John's health and opened a fruit and vegetable cannery in 1886. The business was so profitable that they acquired or built canneries in several other locations, and even hired renowned plant breeder Luther Burbank to develop a smaller, sweeter pea suitable for the area's cool, snowy springs. The crop was so successful that by 1905, the Empsons' pea cannery was the largest in the world. The Empsons also specialized in asparagus, green beans, red beets, and pumpkins.⁴³

The increasing specialization in agriculture differed throughout the various regions of the county. In the northeast plains, there were large farms that planted wheat, sugar beets, and vegetables, as well as several truck farms. The southeast portion of the county, around the towns of Marshall, Superior, and Louisville, was better known for its coal mines. However, mining work was often cyclical, and the miners' families turned to agriculture in the summer months. Although these farms may not have been as specialized as their counterparts closer to Longmont, their agricultural heritage is still evident today.

Agriculture also underwent a transformation in this period in the mountain regions of Boulder County. In the early settlement period, miners purchased agricultural products from farmers on the plains. After the mining industry experienced a number of "boom and bust" cycles, some mountain residents decided that it might be easier to homestead than to rely on mining for their income. Thus beginning in the late nineteenth century and continuing on up through the early twentieth century, many areas in the mountains not only had mining, but farming and ranching activities as well. Sometimes the forays into farming were not successful. Charles Pughe turned to farming when his partner was killed in 1892 in the Dinah shaft in Long Gulch. In 1909, he applied for a 160-acre homestead on the land where he had lived for more than twenty-five

⁴²Ibid., 90.

⁴³Ibid., 88-89.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 23

Agricultural Resources of Boulder County

years. This angered the nearby Gold Hill miners, who claimed that the homestead was in the heart of the “richest mining district of the region.” A protest was filed in court, and eventually the federal grand jury found Charles guilty of giving false testimony that the land did not have any mineral deposits.⁴⁴

The conflict between mining and homestead claims made it more difficult to establish large farms in the mountains. Nonetheless, the mountainous regions of the county saw an increase in farming activities during this period. A review of the county directories at the turn of the century reveals several mountain communities whose residents engaged in either farming or ranching in addition to mining, including Altona (farming, stock raising, and fruit growing), Nederland (farming, stock raising), Sugar Loaf (stock raising, mountain farming), and Allenspark. The county directory noted that at Sugar Loaf “Farming is made easier than in the valley, owing to the numerous and gentle rain-falls in necessary seasons,” and that in Allenspark, “Owing to an abundant supply of rain in proper season and the infallible mountain spring, the native grasses fare well, and are consequently very productive. Stock raisers are thus enabled to rear cattle at small cost, with an active demand for their beef.”⁴⁵

Ernie Betasso’s family history typifies the development of agriculture in the mountains. Ernie’s father came from Italy to the Pennsylvania coal mines, then onto the coal fields in Boulder County. In the summer when coal consumption was low and the mines were not operating, Ernie’s father prospected in the mountain gold and silver mines. In 1915, he purchased 160 acres on Sugar Loaf, which had been homesteaded by Larry Blanchard, and the family continued farming and ranching activities until the 1960s.⁴⁶ A more unusual example of the mining/agriculture relationship in the mountains occurred on Sugar Loaf in 1905, when a farmer harvesting potatoes discovered ore later developed as the Livingstone mine. Known as the “potato patch strike of 1905,” it is likely the only instance in Boulder County where farming resulted in an increase in mining activities.

Virtually all aspects of agriculture in the county prospered during the first two decades of the twentieth century. Due to the wide variety of its agricultural products, the Boulder Daily Camera newspaper did not believe it was an exaggeration to call Boulder Valley “The Garden Spot of

⁴⁴M. M. Anderson, The Mining Camps: Salina & Summerville (Boulder, CO: Junction House, 2005) 287.

⁴⁵Boulder County Directory, 1896.

⁴⁶Ernie Betasso, “Oral history interview with Ernie Betasso,” interviewed by John Hess, 15 January 1983. At Carnegie Branch Library for Local History, Boulder Public Library System, OH0225, Boulder, CO.

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number E Page 24 Agricultural Resources of Boulder County

Colorado." The Boulder Commercial Association surely felt the following commentary on Boulder County agriculture was no mere boosterism, but a simple recital of the conditions.⁴⁷

The farmer is like a king in his own realm, nowhere is this more nearly true than on the irrigated farms of Boulder County where a failure of crops is almost unknown and nowhere is the farmer in a position to be more independent. To those who imagine Colorado as sort of semi-desert, whose people depend almost wholly upon the mines for support, it may be somewhat of a revelation to learn that the value of Colorado's agricultural products is greater than her minerals. Boulder County's agricultural and horticultural products in 1906 amounted to \$2,510,839, out of a grand total of \$6,497,786 for her combined products To the farmers of the east and middle west, our untilled soils seems poor and unproductive, but with the magic touch of water and Colorado sunshine, they become the most productive in the world.⁴⁸

Indeed, the statistics of the period seem to support the preceding claims of a Boulder County agricultural paradise. Nearly all facets of agricultural production increased in yield and value, as shown in the table below, which in turn stimulated the cash value of the farms in Boulder County to \$27,649,829 by 1920.

Value of Agricultural Products in Boulder County⁴⁹		
	1910	1920
Produce of market gardens	\$87,985	\$201,952
Other grains & seeds	\$1,246	\$45,464
Hay & forage	\$607,087	\$1,369,686
Fruit & nuts	\$149,044	\$178,603
Cereals	\$926,640	\$1,410,627
Total all crops	\$2,093,365	\$3,834,693

⁴⁷"Boulder Valley, "The Garden Spot of Colorado," The Daily Camera Industrial Number (8 January 1910).

⁴⁸Boulder Commercial Association, "Agricultural Possibilities of Boulder County,"(n.p.: Boulder Commercial Association, n.d. [ca. 1907]. At Carnegie Branch Library for Local History, 300 b01 f12, Boulder, CO.

⁴⁹1910 and 1920 U.S. census, Boulder County, Colorado, agriculture schedule; cited from: University of Virginia Library, Geospatial and Statistical Data Center, Historical Census Browser <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 25

Agricultural Resources of Boulder County

The cattle industry in Boulder County also profited from changes at the turn of the twentieth century. The drought of 1891-93 forced many Boulder County cattle ranchers to reorganize and take a new approach to cattle raising. Ranching was already beginning to evolve from the open range as more individual homesteaders moved into the county. Coupled with the drought, ranchers looked to feed sources beyond the pasture. With the expansion of alfalfa and sugar beets as crops in the 1890s, cattle operators switched over to livestock feeding. Sugar beet tops, beet pulp, and hay cut from alfalfa fields provided a ready source of feed for commercial or "farmer-feeders."⁵⁰ Changes in livestock feeding practices occurred at about the same time the transcontinental railroads opened new markets. In previous decades, ranchers often just focused on raising and feeding the greatest number of cattle for slaughter. Now, however, consumers were demanding a higher grade of beef. This resulted in ranchers turning to more breed specialization in order get superior beef. Ranchers also experimented with different techniques, finding that by spaying cows the animals fattened quicker and as a result, the herds were more quickly culled. The drought and the recession, however, led several ranchers to cut back the size of their herds in the 1890s and slowly make capital improvements to their ranches by building water tanks and fences. By limiting the number of cattle and investing in the land, they created favorable conditions for a gradual expansion in the next few decades. Stock raising in Boulder County definitely moved into the twentieth century as a modern business enterprise. The benefits of modern animal husbandry methods were reflected in the value of livestock, which steadily increased in Boulder County during this period, rising from \$647,860 in 1890 to \$789,626 in 1900. There was an even more dramatic increase by 1920, with livestock values reaching \$2,788,680.⁵¹

By the turn of the twentieth century, the physical character of Boulder County's farms and ranches were changing as farmers moved from their dugouts, soddies and log cabins into more permanent, comfortable homes. Specialization of farm operations required new farm outbuildings as well. Farmers were also investing in better farm machinery and expanding their acreage under cultivation. The new and often expensive machinery needed protection from the elements, and machinery sheds or barn designs that included room for tractors were developed and built. New building materials, such as concrete and hollow clay tiles, were introduced and incorporated into farm buildings. All of this led to significant innovations in the construction of barns and outbuildings. Barn plans became more standardized in the early 1900s, and were designed and

⁵⁰Century in the Saddle: The 100 Year History of the Colorado Cattlemen's Association, (Boulder, CO: Johnson Publishing Co., 1967) 272-273.

⁵¹1890, 1900, and 1920 U.S. census.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 26 Agricultural Resources of Boulder County

distributed by land grant universities. Prefabricated barns and outbuildings were even available through mail-order catalog businesses such as Sears, Roebuck and Co.

One of the most visually distinctive changes in barn construction in this period was the introduction of the gambrel or double-sloped roof. It presented not only a substantially different appearance from barns of the previous era, but it incorporated significant changes in the building system as well. Gambrel roof barns were built with standardized, lightweight, machine-sawn structural members into an advanced truss configuration with nail construction.

Other barn types, auxiliary buildings, and agricultural structures built in this period also show the influence of standardized construction systems, mass-produced building materials, mail-order planning and distribution, and national barn-building traditions. Not only did the types of outbuildings change, but the numbers of buildings increased on Boulder County's farms. The value of farm buildings in the county increased over threefold in two decades, from \$892,875 in 1900 to \$3,578,103 in 1920.⁵²

Granges and farm organizations continued to grow in strength and popularity during this period, and reached their peak in membership and participation. Farmers organized seven more Granges in Boulder County by 1914; only one more Grange would be founded in the county after this period (in 1940).⁵³ Many Granges, which originally held meetings in houses, churches, and commercial buildings, were prosperous enough to be able to construct their own buildings during this period. The marketing and milling cooperatives founded by agrarians flourished through World War I and on up to the start of the Great Depression. These were aided by federal legislation in the early 1900s that provided a favorable environment for cooperative development. Also, a commission established in 1908 by President Theodore Roosevelt noted the lack of adequate credit for the agriculture sector. These findings aided the passage of the Federal Farm Loan Act in 1916, legislation that led to the creation of the Farm Credit System. Colorado agrarians had many sources of support in the early twentieth century, both through cooperatives and new laws supporting agriculture.

Agriculture in Boulder County around the turn of the century was thus marked by increased specialization and improvements in farming techniques, machinery, housing and agricultural buildings, and profits. It reached a zenith during World War I, but then suffered from a combination of disasters from which few individual farmers had the power to recover on their own.

⁵²1900 and 1920 U.S. census.

⁵³Dyni, "The Grange Movement," 11-12.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 27

Agricultural Resources of Boulder County

III. Retrenching and New Directions in Agriculture: 1920-1967

Agriculture in general, and the wheat and beet industries in particular, thrived during the first two decades of the twentieth century in Boulder County, peaking during World War I. Many farmers and ranchers were encouraged to expand production in order to meet the increased demands of the European markets. When the war ended, agricultural price supports were removed and overseas demand declined as European nations rebuilt their agricultural economy. The huge demand for American-grown products ceased; consequently agricultural prices fell dramatically. Wheat prices dropped from the 1919 peak of over \$4.00 a bushel to \$1.42 a bushel in 1920; a year later the price for a bushel dropped to 85 cents. Cattle prices dropped as well, declining from 45 to 60 percent in 1921 and 1922. Throughout the remainder of the 1920s, prices for agricultural products fluctuated and occasionally increased, but all farmers found it increasingly difficult to sustain their cash flow and pay for all the improvements and machinery purchased on credit in the previous decades. In order to increase their income in the face of declining prices, many farmers expanded both their total acreage and their acreage under cultivation. Thus the average size of Boulder County farms increased between 1920 and 1930. Still, in spite of increased farm size, cooperative weather and high crops yields during the 1920s, prices generally stayed too low to make a profit. Although Colorado and Boulder County farmers produced greater quality and quantities of agricultural products, they received less for their efforts than during the boom years of the previous decade. Boulder County's agricultural economy suffered along with the rest of the nation when farm prices took another drop in 1930. Unable to repay loans for land, machinery, and even seed, farm bankruptcies began to rise, and bank closures became common.

As if the agricultural depression of the 1920s was not enough, a worldwide economic depression made matters worse. The onset of the Great Depression is often associated with the collapse of the nation's stock market on October 29, 1929, historically referred to as "Black Tuesday." Coinciding with the plummeting stock market was a dramatic increase in unemployment in the United States. In January 1930, almost 4,000,000 Americans were jobless; that number almost doubled by December of that year, rising to 7,000,000. By the early part of 1933, the number of jobless doubled again when more than one in four Americans was out of work. Unemployed families did not have as much money to spend on food, which further hurt farmers and ranchers. As a result, agriculture in Colorado and Boulder County suffered along with the rest of the nation.⁵⁴ Although the average size of farms increased during the 1920s, the total amount of farmland acreage in Boulder County dropped from 221,202 acres in 1920 to 203,313 acres in 1930, a

⁵⁴Stephen J. Leonard, *Trials and Triumphs: A Colorado Portrait of the Great Depression, with FSA Photographs* (Niwot, CO: University Press of Colorado, 1993) 26.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 28

Agricultural Resources of Boulder County

possible indication that a number of agricultural operations had failed even before the onset of the Great Depression. Boulder County did not recover in terms of acres of farmland until 1950, when the number rose to 265,619.⁵⁵

The Goodhue Farm is an example of the changes experienced by family farm operations in Boulder County in the first two decades of the twentieth century. After Abner Goodhue's death in 1912, his widow, Clara, and his sons Hugh, Paul, and Burt incorporated the Goodhue Farm Company in 1916 in order to make the farming operations more efficient and "progressive." The family adopted new scientific methods and technology in order to increase agricultural production for commercial markets. Unfortunately, in order to keep up with progressive agricultural practices, more land, more specialization, and higher capital investments were needed, requiring more cash investment. Furthermore, the higher production levels lowered agricultural prices, a side effect difficult to weather in smaller operations like the Goodhues. The youngest son, Paul, purchased the farming operation in 1922 at the height of the national agricultural crisis. Paul was unable to pay off the debts and two years later, a Lafayette bank foreclosed on the farm.⁵⁶

Although it did not seem possible that the agricultural situation could get any worse, a severe and persistent drought began in 1931 and lasted nearly a decade, serving as a key factor in the collapse of Colorado's agricultural economy during the 1930s. Many fields throughout the state lay barren from the hot sun and lack of water, and the farmers that did have crops often had to leave them rotting in the fields because it cost more to harvest them than they would receive in payment. This drought exacerbated the dust storms that were common in the semi-arid regions of Colorado when the high plains' winds blew. By 1933, the dust storms were so intense on the Great Plains that life became difficult for both the people and livestock of the region. These black blizzards in the 1930s differed from those of previous years, though; they were more intense, lasted for days, and returned nearly every year during the "dirty thirties." During this period of blowing dust, called by some the worst ecological disaster in the history of the United States, an ever-changing area of more than fifty million acres encompassing primarily southeastern Colorado, western Kansas, northeastern New Mexico, and the panhandles of Texas and Oklahoma became known as the Dust Bowl. Boulder County suffered during this period, although not as badly as other areas in Colorado. Rocky Mountain National Park, the western

⁵⁵ 1920, 1930, 1940 & 1950 U.S. census, Boulder County, Colorado, agriculture schedule; cited from: University of Virginia Library, Geospatial and Statistical Data Center, [Historical Census Browser](http://fisher.lib.virginia.edu/collections/stats/histcensus/) <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

⁵⁶ "Rock Creek Farm Cultural Landscape," County Resolution 98-113, HP-98-02 (Boulder County, 1998) 6.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 29

Agricultural Resources of Boulder County

boundary of the county, was considered the western edge of the Dust Bowl region, and often the snow in the park would take on a pink color from the dust that settled there.

Formerly independent farmers and their families looked for assistance in these desperate times and found a response from the federal government in the form of President Franklin Roosevelt's New Deal. During his first one hundred days of office, Roosevelt worked with Congress to enact fifteen major pieces of legislation, more than any other period of American history. This action created an unprecedented number of bureaus, agencies, and programs designed not only to assist victims of the Depression and to stimulate economic recovery, but to also guarantee minimum living standards and prevent future economic crises. At first, Roosevelt's New Deal was chiefly concerned with relief for the millions of Americans out of work, but it later grew to include regulation, relief, and reform in numerous areas of both public and private enterprise. Most importantly for the farmers of Boulder County, agriculture was one of the key areas of focus for the New Deal. President Roosevelt also took a keen personal interest in natural resource conservation, and many of the programs of the New Deal reflected this interest. The Soil Erosion Service (later the Soil Conservation Service, or SCS) was created in 1933 in order to provide federal assistance for soil improvement programs on federal and private lands. Although Boulder County did not have any relief work camps led by the SCS, its new conservation techniques were promoted in the county through extension services by pamphlets, meetings, and extension agents.

The New Deal developed several other programs that aimed to restore prosperity to the agricultural sector and balance to the natural environment. One of these programs became the Agricultural Adjustment Act of 1933 (AAA). This act was based on the premise that overproduction was a major contributor to the problems facing the nation's farmers. Many commodities, such as cotton, corn, and wheat, had built up tremendous surpluses over the years, which in turn contributed to the collapse of crop prices in the early 1930s. Although aspects of this plan were later declared unconstitutional, the program was modified several times and continues in some form through the present. The AAA implemented a program of production limitations called the domestic allotment plan. The program did not apply only to crops; AAA administrators also believed that most livestock operations had exceeded the optimal capacity of the land. Initially, cattlemen successfully lobbied to exclude cattle from production limitations in 1933. They did not oppose government aid, however, and in fact sought it out in the form of tariff restrictions on beef imports, livestock loans, and the purchases of beef by the Federal Surplus Relief Corporation. As the Depression and drought worsened in 1934, the AAA added cattle to the list of basic commodities and also planned for a surplus reduction program. The government implemented a drought purchase program, which resulted in cattlemen receiving money, reducing the surplus, raising prices, and protecting the land from overgrazing. The federal government further assisted cattle ranchers by negotiating reduced shipping rates with the railroads for livestock coming

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 30 Agricultural Resources of Boulder County

from drought areas, relaxing crop reduction contracts to allow planting of forage crops, and using relief funds to provide stock feed and seed to needy families.

The Dodd family near Niwot were examples of cattle ranchers that were able to successfully navigate the difficult years of economic uncertainty and drought in the 1920s and '30s. Part of a pioneer farming family that came to the area in the early 1880s, three of the ten living Dodd children (four others died in infancy) – Hugh, John, and Alva II – became partners in the Dodd Brothers Enterprises. Over the years, they expanded their quarter section family farm and established one of the region's most successful cattle breeding operations. By 1950, the family controlled over 800 acres in the Niwot Valley. Located at 7016 N. 73rd Street, the diversified farming operations also raised such crops as sugar beets, wheat, barley, and corn. More significantly, the Dodds were also among the area's earliest farmers to adopt water conservation efforts such as lining irrigation laterals and leveling crop fields.⁵⁷

For some Boulder County farmers, the New Deal programs did not solve their problems. With the severe drought and the continued economic depression of the 1930s, even with federal assistance the small wheat farmers could not survive. Nonetheless, for many in agriculture, the New Deal helped them through this difficult decade and set them up for the growth years that would come in World War II and beyond. One of the New Deal agencies that profoundly affected rural life was the Rural Electrification Administration (REA). In the early 1930s, the United States could almost be characterized as two nations: urban dwellers and rural residents. The latter group toiled in nineteenth-century conditions. Farm wives in particular suffered from the lack of electricity, handling all their farm chores and housework with no refrigerators, vacuum cleaners, or washing machines. In 1935, only one out of nine farm homes in Colorado had electricity. Private companies had no intention of expanding into rural areas due to the cost of extending lines, and in fact, often fought attempts by the REA to establish power in those areas. The REA was established on May 11, 1935, with a goal to provide farms and rural areas with inexpensive electric power. In addition to providing electricity, it was also conceived as a work relief program, and provided much needed jobs during the Depression. A lack of sufficient funds to actually undertake this program, however, resulted in the REA becoming an independent agency that provided loans to rural residents who organized electric cooperatives. It was reorganized in 1939 as a division of the Department of Agriculture. Nonetheless, through the REA's long-term, self-liquidating loans to state and local governments, to farmers' cooperatives, and to nonprofit or-

⁵⁷ Carl McWilliams, "Site 5BL617, Dodd Farm," Boulder County Historic Sites Survey (Boulder County, 14 October 1996) 4.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 31 Agricultural Resources of Boulder County

ganizations, by 1940 one in four Colorado farm homes had power. By 1950, that ratio increased to nine out of ten.⁵⁸

Due to the lack of funding, the REA started out slowly in Boulder County. By 1938, committees organized in the non-electrified sections of the county in order to conduct surveys and study the problems of electrification.⁵⁹ It would not be until the late 1940s and early 1950s that electricity became available to a majority of the county's rural residents.

Not all of the assistance to farmers during the difficult decades of the 1920s and 1930s came directly from federal aid. Agricultural cooperatives were at their height during this period, as agrarians banded together to provide material support during this period of crisis. Cooperatives were greatly encouraged by state and federal governments, as evidenced by a flourish of legislation supporting the cooperative movement. Most state legislatures established agricultural cooperative acts during this time, and Presidents Harding, Coolidge, and Hoover all strongly endorsed the use of agricultural cooperatives. The Capper-Volstead Act of 1922 provided limited antitrust immunity for farmers and ranchers who joined together in cooperative marketing associations, and the Agricultural Marketing Act of 1929 included the establishment of a fund for cooperative loans. According to the United States Department of Agriculture (USDA), the largest number of agricultural cooperatives was recorded during 1929-30. At that time, the USDA listed 12,000 farmer cooperatives nationally with an estimated 3.1 million memberships.⁶⁰

Relatively few agrarians in Boulder County prospered during the 1930s, although many managed to hang on. A few were able to take advantage of others' misfortunes by purchasing foreclosed farms. Ernie Betasso and his brother Dick acquired additional mountain ranches during the Depression. They ran about 100 head of cattle at this time, but kept the farm going by also working in Boulder. Since truck hauling was well established, they used mountain meadows for pasture, which were not suffering as badly from the drought as the fields on the plains. The Betassos also

⁵⁸James F. Wickens, Colorado in the Great Depression (New York: Garland Publishing, Inc, 1979) 270-271.

⁵⁹Colorado Agricultural College, Extension Service, "Cooperative Extension Work in Agricultural and Home Economics," (n.p.: Colorado Agricultural College, U.S. Department of Agriculture, and Boulder County Co-operating Extension Service, 29 December 1928) 3.

⁶⁰U.S. Department of Agriculture, Rural Development, "Farm Marketing, Supply, and Service Cooperative Historical Statistics," Cooperative Information Report 1, Section 26, revised August 2004, cited from <<http://www.rurdev.usda.gov/rbs/pub/cir1s26.pdf> > cited 20 March 2006.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 32 Agricultural Resources of Boulder County

utilized Forest Service range in the summer, including Mammoth Basin. In order to be eligible for a permit, a rancher had to own a certain amount of private land, which gave them an advantage over speculators.⁶¹

In spite of the difficult times for agriculture during the 1930s, a few new enterprises in Boulder County were actually created in this period. Raising turkeys was one example; this venture was possibly started as a sideline to tide a farm family over while waiting out the drought and Depression. There was also less risk in starting a flock than in putting a crop in the ground, and the initial capital investment was small. Victor Twiggs and W.F. McQuigg got their start at turkey breeding in the county in the 1930s. At that time, flocks of 440 to 500 were considered large operations. Some of the breeders kept a small processing and refrigeration plant on-site, and sold most of their flocks to local markets. Mass production with flocks numbering in the several thousands began during World War II. The introduction of antibiotics, sulfa drugs, and other medications, combined with increased automation such as self-feeders and waterers, made these larger flocks possible. By 1960, there were more than twenty-five growers in the county, with flocks ranging in size from 2,000 to 75,000 and the average running from 8,000 to 15,000 turkeys. That year, Boulder County turkey growers raised almost 300,000 of the two million turkeys in Colorado – nearly 15 percent.⁶² The county was not only one of the leading centers in the number of turkeys raised, but two out of the three processing plants in the state were located here, in Longmont and Broomfield.⁶³ The Longmont Foods plant was founded in 1951 and went on to become Colorado's largest turkey processor. Con-Agra purchased the company in 1987, but still sells the products under the Longmont Foods name.⁶⁴

Both the drought and the economic depression lessened at the start of World War II, and demand for agricultural products grew tremendously during the war. After the war, most agricultural ventures in Boulder County continued to benefit from good markets, prices, and at least a few good years of weather. In 1945, wheat acreage in the county was approximately 15,000. There were 19,000 acres of alfalfa, 16,500 acres of barley, 12,300 acres of corn, and 4,000 acres of oats. Other crop acreage included 1,200 acres in truck crops, 1,000 acres of field peas for can-

⁶¹Betasso.

⁶²“Boulder County Remains a Major Turkey Center, But Raiser Hit by Low Prices,” Daily Camera (29 September 1961). In folder 328 B132 F03, Carnegie Branch Library for Local History, Boulder, CO.

⁶³Broomfield became a separate county in 2001.

⁶⁴Corson and Noel, 91.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number E Page 33

Agricultural Resources of Boulder County

ning, and 6,000 acres of sugar beets. Added to this total were 8,000 Victory Gardens planted throughout the county, which supplied farm families with 98 percent of their vegetables and 85 percent of the needs of city and town residents.⁶⁵

Although there were good market and climate conditions during the war years, there was also a critical shortage of farm labor, both experienced and inexperienced. The Boulder County Farm Improvement Association worked with farmers in 1945 to arrange for the importation of “outside labor” when they brought in 268 Mexican migrant workers to the county. The Association also arranged for 130 Jamaicans to be brought into the county, “but they were of little use to the beet industry and were shipped out in a very short time.” The group that seemed to help the beet industry the most in Boulder County was German prisoners of war. In June 1945, 403 prisoners were brought into the Longmont area and were put to work in the beet fields. In August of that year, the Longmont company Kuner Empson contracted for another 150 prisoners to pick beans and tomatoes, and perform other field work. The prisoners also weeded 1,500 acres of beets and put 3,000 acres of corn into silage. Another 419 “effectives,” as prisoners of war were called, arrived in the Longmont area in October 1945. Many were housed in the county garage and the Great Western Hotel. In spite of the imported labor, farmers in Boulder County put in longer hours than before to keep up with the demands of farming during the war years.⁶⁶

The cattle industry also profited from the boom period of World War II and postwar years. The county was part of a nationwide trend where the number of cattle sold live increased as did the value of those cattle. In 1946, there were 1,600 head of cattle fed within the county, netting a return of slightly over three million dollars. This was a record in number and gross income for the beef cattle production industry in Boulder County.⁶⁷ There were changes in cattle marketing practices in the postwar years as well. Most Boulder County cattle were now shipped to terminal markets such as Denver, although other major terminal markets included Los Angeles, Kansas City and Omaha. Except for the Depression and war years, the general trend for slaughter on the farm was downward, as there was a price disadvantage to sell directly to local or “country” markets. Cattle raising also began to appeal to non-traditional agricultural sectors of society. Some wealthy individuals entered the industry to use ranches as tax shelters.

⁶⁵“Boulder County Farmers Had Successful Year During 1945,” Boulder Daily Camera (31 December 1945).

⁶⁶Ibid.

⁶⁷“County Agent Surveys 1946 Yield of Farms and Dairying Business,” Boulder Daily Camera (1 January 1947).

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 34

Agricultural Resources of Boulder County

Other areas of livestock production also grew during the war and postwar boom years. The number of hogs more than doubled in 1946 from the previous five years, up to 12,500. Producing dairy cows in the county that same year totaled 5,600. Sheep were the only area of livestock production that declined slightly during the 1940s.⁶⁸ Another factor in the increase in agricultural activities was the decrease in mining profits during the postwar years. Coal mining in the southeast portion of the county became less profitable after World War II; when Superior's Industrial Mine closed in 1945 and the last mine in Louisville closed in 1952, many of the remaining locals turned to farming and ranching full time.

As is typical for agricultural production that relies on climate, good years were followed by times of hardship. Historians have characterized farming in the dry lands of Colorado as "a serialized adventure in which the same disaster occurred at the end of each episode."⁶⁹ Thus the 1930s were not the only decade when drought threatened or ruined crops. Many felt the "filthy fifties" were as bad as the "dirty thirties," but with conservation efforts in place, soil losses were significantly reduced from that of the earlier decade. Drought struck Boulder County again in the early 1960s, which was promptly dubbed the "worst since the 1930s."⁷⁰ For three years beginning in 1961, Boulder County wheat farmers suffered from some of the poorest yields on records. In 1963, one farmer harvested only eight bushels per acre, followed by fourteen the next summer. This contrasts with the yields recorded in 1958 of forty-three bushels an acre for irrigated fields, and thirty-seven bushels for non-irrigated winter wheat. It was estimated that a poor performance in wheat alone for a year would result in the loss of several hundred thousand dollars for the county, an indication that agriculture still played an important role in the county's economy.⁷¹ Although these losses were significant, federal subsidy programs conceived during the 1930s were in place and ready to assist Boulder County farmers through the difficult times. As about eighty percent of the county's 11,000 wheat acres were dryland (not irrigated) in the 1960s, these farmers were eligible for relief through the government's wheat diversion program.

⁶⁸Ibid.

⁶⁹Carl Abbott, Stephen J. Leonard, and David McComb, Colorado: A History of the Centennial State, 3rd ed. (Niwot: University Press of Colorado, 1994) 173.

⁷⁰"Without Water, Winter Wheat Withers," Boulder Daily Camera (15 November 1964). In folder 328 B132 F03, Carnegie Branch Library for Local History, Boulder, CO.

⁷¹Ibid.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 35

Agricultural Resources of Boulder County

While farming methods changed, the built environment of farms and ranches in Boulder County experienced changes after World War II as well. When Quonset huts were first introduced as military housing, a few farmers looked to this building type as a replacement for traditional barns. They were faster, easier, and less expensive to build, and came at a time when agricultural practices were changing. Tractors had virtually supplanted horses, so stalls and feed storage were no longer needed. However, tractors required more storage space, which Quonset barns could provide. The use of Quonset huts as barns was short-lived and they were soon supplanted by "Morton" buildings (a generic term applied to many structures regardless of their actual manufacture by Morton Buildings, Inc., of Morton, Illinois). They were based on the same construction principle – metal sheets covering a wood frame – except that their shapes were different. Morton buildings reverted back to the traditional “boxy” shape. These were followed by pole barns, which were even cheaper to construct. Pole barns met the needs of changes in hay baler technology. With their metal roof supported by poles, pole barns could store massive quantities of bales easily moved with machines. They have since become common sights in farms across the plains, including Boulder County. These buildings constructed in the latter part of the twentieth century generally have a concrete floor, pre-manufactured truss roof, and a metal roof and walls.

Another change to the cultural landscape of farms and ranches in Boulder County was the promotion and development of recreational opportunities on farm land. After World War II and continuing up through the 1960s, the Soil Conservation Service offered advice and planning for changing gravel pits to fishing lakes and for increasing cover for wild game. The farmers could then rent their land to private fishing or hunting clubs or use the ponds for raising fish.⁷² Some of these also served to water stock. Federal assistance was often available for their construction.

Not only were the physical appearance and types of buildings and structures on farms and ranches changing during this period, but the amount of farmland and size of farms were changing as well. By 1950, 55.1 percent of the area of Boulder County, 216,619 acres, was in farms and ranches. The average size of farms and ranches at this time was 201 acres. The county had 328 farms under five acres; 166 from 10 to 20 acres; 195 from 50 to 99 acres; 229 from 100-179 acres; 107 from 180 to 259 acres; 124 from 260-499 acres; 52 from 500-999 acres; and 41 with 1,000 acres or more. Of these 1,320 farms, 96 were cash grain; 13 other field crops; 18 vegeta-

⁷²“Rural Recreation: New Opportunities on Private Land,” Soil Conservation Service of Boulder Valley Soil Conservation District Newsletter (Boulder, CO: July 1964) 2.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number E Page 36

Agricultural Resources of Boulder County

ble; 13 fruit; 255 dairy farms; 143 poultry farms; 239 livestock farms; 156 general farms; and 387 miscellaneous and unclassified farms.⁷³

With the federal government providing payments, loans, and assistance for farmers, and the increase in diversification of agricultural production, it seemed that Boulder County agriculture was in good shape for the latter half of the twentieth century. However, tremendous population growth in the county and the larger Denver metropolitan area soon threatened the future of agriculture in the county. By the end of the 1950s, the number of farms and ranches in the county dropped from 1,320 to 990, down to 48.1 percent of the county's land area. The average farm size grew slightly to 234 acres.⁷⁴ Nonetheless, alarmed at the increasing loss of farm land and open space to new development, citizens and politicians in Boulder County initiated a series of policies, plans and programs aimed to halt, or at least slow, the loss of open space. Beginning in 1960, with the report *Preserving Open Space* prepared by Trafton Bean & Associates for the Boulder County Regional Planning Commission, the county began taking a hard look at the growth and development changes taking place in the county. In 1967, the Boulder County Commissioners appointed the first Parks and Open Space Advisory Committee (POSAC), and the City of Boulder started their Open Space program. The next year, POSAC recommended the establishment of a Parks and Open Space District to acquire and preserve parkland, and the county began work on the "St. Vrain River" study.

Agricultural lands and farming lifestyles continued to be threatened throughout the remainder of the twentieth century, but 1967 may be viewed as a turning point in the opinions of Boulder County citizens. Through the programs established that year, several thousand acres of agricultural properties in the county would later be protected through the purchase and lease of farm and ranch lands. These purchases have also changed farm and ranching operations in Boulder County, as family-owned farms continue to decrease in numbers and lease arrangements or natural resource conservation activities take their place. Nonetheless, farmers and ranchers are no longer the only segment of the population worried about the future of agriculture in Boulder County; it remains a matter of concern for all citizens.

⁷³"22,794,588 Value of Farm-Ranch Products of Boulder County in 1950," Boulder Daily Camera (23 October 1952).

⁷⁴"Corn, Hay, Winter Wheat Among County's Top Value Farm Products," Boulder Daily Camera (1 June 1960).

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 37

Agricultural Resources of Boulder County

Appendix A

Early Ditch Decrees for Division 1, District No. 6. Taken from Anne Dyni, Pioneer Voices of Boulder County, published by Boulder County Parks & Open Space Department.

Irrigation Ditch Decrees, District No.6, Boulder Creek

Name of Ditch	Date of Fee Appropriation
Lower Boulder Ditch	Oct. 1, 1859
Smith & Goss Ditch	Nov. 15, 1859
Howel Ditch	Dec. 1, 1859
Anderson Ditch	Oct. 1, 1860
Godding, Dailey, Plumb	Mar. 1, 1861
Houck #2 Ditch	Apr. 1, 1861
Martha H. Mathews Ditch	June 1, 1861
N.K. Smith & Tyler Ditch (Reduced by decree)	June 1, 1861 May 16, 1913
Plumb Ditch	Apr. 1, 1862
David H. Nichol Ditch	
Dry Creek Ditch	June 1, 1862
M.G. Smith	June 1, 1862
G. Berkley Ditch	June 1, 1862
Wellman, Nichols, Hahn	June 1, 1862
Harden Ditch, heirs of Eliz. Harden & S. Wellman	June 1, 1862
McCarty Ditch	June 1, 1862
William Breach Ditch	June 1, 1862
North Boulder Farmers Ditch	June 1, 1862
Rural Ditch	May 10, 1862
Green Ditch	Sep. 15, 1862
Farmers Ditch	Oct. 1, 1862
Rural Ditch 1st enlg.	Mar. 10, 1863
Houck #1 Ditch (Reduced by decree)	Apr. 1, 1863 Dec. 8, 1910
Smith & Emmons Ditch	June 1, 1863
North Boulder Farmers Ditch: 1st enlg.	June 1, 1863

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number E Page 38

Agricultural Resources of Boulder County

Carr & Tyler Ditch	June 1,1864
North Boulder Farmers Ditch, 2nd enlg.	June 1, 1864
Butte Mill Ditch	Mar. 1, 1865
Howell & Beasley Ditch	Mar. 1, 1865
Delehant Ditch	May 1, 1865
Godding, Dailey & Plumb 1st enlg.	Apr. 1, 1865
Highland Ditch South side	June 1, 1865
Leggett Ditch	May 1, 1868
Highland Ditch South side, 1st enlg.	June 1, 1868
Taylor Ditch	Apr. 1, 1870
Lower Boulder, 1st Enlg.	June 1, 1870
Idaho Ditch (Idaho Creek)	Oct. 30,1870
Como #1 (Fisher Creek)	Jan. 2, 1871
Como #2 (Como Creek)	Jan. 3, 1871
Como #3 (Como Creek)	Jan. 4, 1871
Young Ditch (Rothrock Slough)	Apr. 1, 1871
Boulder & Weld County	May 1, 1871
Como #4 (North Boulder Creek)	Apr. 1, 1873
Boulder & White Rock	Nov. 1, 1873
Boulder & Left Hand Ditch Sec. #38 enlg.	Dec. 1, 1873
Town of Boulder Ditch & Reservoir #1	June 17,1875
Boulder & Left Hand 1st enlg.	Apr. 1, 1876
Wellman Ditch	May 1, 1878
Mathews Ditch	Feb. 13,1879
Revolution Ditch	Dec. 7, 1881
Silver Lake Ditch	Feb. 28,1888
Silver Lake, 1st enlg.	Nov. 1, 1900

Irrigation Ditch Decrees, District No.6, South Boulder Creek

Name of Ditch	Date of Fee Appropriation
Howard Ditch	Apr. 1, 1860
McGinn Ditch #2	May 1, 1860
Jones & Donnelly Ditch	May 1, 1860
Schearer Ditch	June 1, 1860

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number E Page 39

Agricultural Resources of Boulder County

East Boulder	Apr. 1, 1862
S. Boulder & Bear Creek	May 25, 1862
Cottonwood Ditch #2	Apr. 15, 1863
Dry Creek Ditch (Davidson)	May 1, 1863
Dry Creek Ditch #2	May 1, 1864
McGinn Ditch, 1st enlg.	May 1, 1864
Andrews & Farwell Ditch	June 1, 1864
Enterprise Ditch	Feb. 1, 1865
Leyner Ditch Reduced by decree in	Apr. 1, 1865
S. Boulder & Bear Creek 1st enlg.	May 9, 1865
Marshalville Ditch	June 1, 1865
McGinn Ditch, 2nd enlg.	June 1, 1865
Cottonwood Ditch #1	Apr. 1, 1866
Enterprise Ditch 1st enlg.	May 1, 1866
Central Ditch Reduced to 2 2/3ft. at Lower Boulder cutoff	May 15, 1866
South Ditch Reduced to 1 ft. at Lower Boulder cutoff	June 1, 1866
S. Boulder & Bear Creek 2nd enlg.	May 15, 1868
South Boulder Canon	May 15, 1870
Cottonwood Ditch #1 1st enlg.	Oct. 1, 1870
Andrew & Farwell Ditch 1st enlg.	Apr. 1, 1871
S. Boulder & Bear Creek 3rd enlg.	May 15, 1871
South Boulder Canon 1st enlg.	May 15, 1871
Davidson Ditch	Apr. 15, 1872
East Boulder, 1st Enlg.	June 1, 1872
South Boulder and Coal Creek	June 1, 1872
Hower Ditch (Slack Creek)	Nov. 1, 1872
Goodhue Ditch & Reservoir	June 1, 1873
S. Boulder & Rock Creek	June 1, 1873
Davidson Ditch, 1st enlg.	May 10, 1875
Marshalville, 1st enlg.	June 30, 1878
Enterprise, 2nd enlg.	June 1, 1881
Community Ditch	June 6, 1885
Cottonwood Ditch	Apr. 19, 1904

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 40

Agricultural Resources of Boulder County

ASSOCIATED PROPERTY TYPES

The property types covered in this submission of the “Agricultural Resources of Boulder County” include buildings, structures, objects, sites or districts associated with agricultural activities that occurred mostly in unincorporated Boulder County from 1859 through 1967. This project was based in part on previous surveys of rural properties in order to determine other typical agricultural resources that might be expected to be found in future surveys. As such, information about some property types not yet inventoried was limited. Future surveys in Boulder County may add to or alter the knowledge about the property types that follow, or may reveal information about new property types.

While this multiple property document primarily focuses on the historically unincorporated areas of the county, some of the identified property types that were once in formerly rural areas are now found within the cities and towns of Boulder County. Excluded from examination were agricultural-related property types generally found only in urban areas. These property types include large agricultural storage and processing facilities such as major grain elevators and mills, canneries, livestock processing plants, and sugar factories. This submission may be amended in the future to cover these and other agricultural property types within the county’s towns and cities. Also excluded from consideration were rural school buildings. While the primary function of a school building is the education of children, in many rural areas, school buildings also historically served a secondary role as community meeting places for social and recreational functions, political activities, and adult education. The latter often included programs by county extension agents and others designed to improve farming and ranching practices. Rural schools are addressed in a separate statewide MPDF, *Rural School Buildings in Colorado*.

The property types are primarily based on the historic function of the individual resource, although the first property type, “*Farms, Ranches, Agricultural Districts and Rural Cultural Landscapes*,” is comprised of numerous resources that may have varied functions. When evaluating agricultural resources in Boulder County, it is preferable to first evaluate farms and ranches as integrated agricultural complexes. The individual resources may historically have had very specific and limited functions, but all of buildings and structures worked together as a whole to produce the agricultural products of the complex. This all-encompassing property type is followed by property types defining specific buildings, structures or landscape features classified by the historic use of the resource, even if that use has changed throughout the years.

Some examples of property types may not be individually significant, but may be eligible if they are part of a larger concentration of resources that convey significant aspects of Boulder County agricultural history. While representatives of each separate property type may vary widely in

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 41 Agricultural Resources of Boulder County

physical appearance from another property type, all of the agricultural resources share at least a few common attributes, particularly in the areas of significance and, in some instances, registration requirements. In the interest of preventing repetition, the common attributes are discussed first.

Significance – General

These property types are significant under Criterion A in the area of *agriculture* for their association with historic agricultural activities, including farming, ranching, and agricultural processing, as well as the cooperative activities of agricultural societies. In some instances, there are very few extant representatives of these property types left in the county. Just as Boulder County's economy has always been diversified, from the initial emphasis on mining through the development of the state university and up to its present prominence in scientific research and high-tech industry, historic agricultural activities in Boulder County have also been diversified. Unlike some other Colorado counties, no one type of agriculture dominated throughout the entire historic period. For example, even though the county experienced a brief period of open cattle ranges, this later evolved into the use of feedlots as well as mountain pastures for fattening. Sheep, hogs, breeding stock, and poultry also were raised in Boulder County. Grain crops such as wheat and oats, as well as hay, fruits, market produce, and dairy products also played a part in Boulder County's agricultural heritage. Farms located in the mountains had a very different physical appearance than those located on the plains. This variety, coupled with subsequent residential growth and destruction of agricultural land, has unfortunately led to few remaining examples of some of these various types of agricultural activities in the county. The relative scarcity of a particular property type should be taken into account that when evaluating its significance in agriculture.

The agricultural resources may also be significant in other areas, such as *exploration/settlement, commerce, conservation, ethnic heritage, transportation* or *social history*. Many of these latter associations will generally have to be evaluated on an individual basis, although some of these are discussed in the individual property types. They may also be eligible under Criterion C in the areas of *architecture, community planning and development, or engineering*. In the areas of *architecture* or *engineering*, agricultural resources are significant for the distinctive design, form, or construction characteristics that are associated with their use for agricultural production or processing. The residences associated with the farms or ranches may possess high artistic values or may be good examples of typical types or styles of popular architecture of the period. The resources' craftsmanship, materials, construction methods and sometimes designs plans are reflective of their historic function in agriculture, sometimes highly specialized.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 42

Agricultural Resources of Boulder County

Agricultural resources may also be eligible under Criterion B if associated with significant individuals. As some of the earliest settlers in the county, many of the pioneer farmers and ranchers in particular played an instrumental role in community as well as agricultural development by encouraging others to follow their lead in agriculture. Furthermore, those involved in establishing irrigation companies, like Abner Goodhue and many others, insured not only their own ability to grow crops in Colorado's semi-arid climate, but that other farmers settling later would be able to continue this pursuit. Some would introduce new crops that were better suited to Colorado, or used new agricultural techniques or machinery which helped revolutionize the way farmers ran their operations, such as the introduction of water conservation methods used by the Dodd brothers – Hugh, John, and Alva II - near Niwot. These farmers and ranchers were often leaders in important economic or social institutions in their local community as well, including granges and other agricultural organizations. Criterion B may be applied to families or partners if their influence and success as a group can be documented. For several generations of farmers or ranchers over time, however, the specific contributions of each family member should be documented.

An example of a property eligible under Criterion B in agriculture would be the Steele Farm, located near the Altona area in Boulder County. Emigrating from Wisconsin in 1865, Edward Steele died of typhoid only eleven days after arriving in Colorado, leaving behind his widow, Phoebe and three young children. The family settled in what would later be the Altona area of Boulder County, with only one neighbor between them and Longmont. Phoebe purchased a claim and homesteaded 160 acres for her family farm, which eventually grew to 1500 acres through the purchases of her son John Steele. The Steeles worked on the organization of the Table Mountain Ditch Company in order to procure water rights for farmers in the area. John Steele ran a diversified farming operation, selling meat and melons to farmers in the mining community of Jamestown, and later operating a custom threshing outfit, doing most of the threshing between Left Hand Canyon and St. Vrain for decades.⁷⁵ As the owner of one of the earliest wheat threshers in the county, he also gave discounts to any member of the Altona Grange, which he helped establish. Phoebe Steele is significant as a pioneer farming woman, who ran the family farm and helped establish the Altona agricultural community as well as the ditch company, in addition to maintaining the family farm on her own. Her son John, however, was also significant for adding to the family farm, operating a well known and successful diversified operation, and for his innovations in agricultural practices.

⁷⁵ Jewell Maret Jenkins, *Boulder Daily Camera* "John D. Steele, 91, Was Six Weeks Old When His Parents Arrived In Boulder County; The Father Died Of Typhoid" 31 January 1956.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 43

Agricultural Resources of Boulder County

Successful nominations under Criterion B should include evaluations of the individuals in the context of Boulder County agriculture. In some instances, explaining the types of contributions that the person has made to the context of Boulder County agriculture as established in this MPDF would qualify the person within agriculture. Recognition of their contributions should be compared to others, and be shown to have a distinctively significant role. Sources which indicate that they have been defined as leaders in agricultural are also helpful, such as these comments on John Steele in the *History of Colorado*, Volume 4, published by S. J. Clarke in 1919:

A representative of the successful agriculturists of the west is John D. Steele, a successful farmer and livestock man...His ranch represents a life of industry, perseverance and careful application to local farming conditions. Mr. Steele has ever followed progressive methods and through the development of his farm has largely contributed toward the improvement of his section of the state.

A few properties may also be significant under Criterion D if they have the potential to yield important information that contributes to the understanding of agricultural history in Boulder County. While Criterion D is often applied to archeological sites, it can also be applied to buildings or structures if they are the principal source of the important information which is being sought, such as dating of certain property types, construction expertise which affected the evolution of a local building technique, local availability of materials, use or ethnic associations. The areas of association might be *exploration/settlement, agriculture, architecture, engineering, ethnic heritage, or social history*.

For agricultural resources that are significant under Criterion C, the period of significance is the date of construction and/or the dates of any significant alterations. Under Criterion A, the period of significance for either individual resources or historic agricultural districts is the span of time that the property contributed to the theme of agriculture in Boulder County. If a specific date can be identified for the end of its association with agriculture, then the period of significance may extend past the closing date of the historic contexts defined within the MPDF and into the past 50 years.

For resources where the agricultural activities began in the historic period and continued into the past 50 years, a historic district may include some resources that are less than 50 years old as *contributing* resources if the following conditions are met: the majority of other resources in the district are over 50 years old, the district's resources are related to agriculture in Boulder County, the district's period of significance – both beginning and end – has been justified, and the resources within the district date from this period of significance and are associated with the district's area of significance. Since farms and ranches typically operated over a number of years, it is not uncommon to see buildings and structures span several decades. If the majority of re-

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 44

Agricultural Resources of Boulder County

sources on the farm were built more than 50 years ago, but a few structures were built or altered past the 50 year limit, a case for exceptional significance is not required. For example, a dairy farm that has operated since the early 1900s up through 1974 would have required updating through the years in order to meet modern health standards for production. This might result in new milking barns or alterations to a historic barn. These resources that were built or altered within the past 50 years represent a continuation of the historic agricultural functions. If these later buildings or alterations make up a small part of the district and share the same historical and/or architectural significance as the remainder of the district, they can be considered contributing resources. In these instances, the district as a whole or the resources within a district that are less than 50 years old do not have to demonstrate exceptional significance.

However, if the majority of resources within a district are less than 50 years old, or if an individually nominated resource is less than 50 years old, then the properties must demonstrate exceptional significance under National Register Criteria Consideration G.

Registration Requirements – General

To be eligible under Criterion A in the area of *agriculture*, the resources must have been used as part of a farm, ranch, orchard or other agricultural operation, or as a processing or sales property associated with agricultural products. They may also have been used to house agricultural societies or organizations. The general period of significance begins in 1859 (although it is unlikely that many resources remain from this date) when the first known agricultural activities associated with Euro-American settlers occurred, through 1967. This latter date coincides with the initial open space purchases by the City of Boulder within unincorporated Boulder County and the creation of the Parks and Open Space Advisory Committee (POSAC), both of which affected the future of agricultural properties in Boulder County.

All resources with a strong association to agriculture in Boulder County will be eligible under Criterion A if they retain sufficient integrity. Integrity in the areas of location, setting, feeling and association are most critical. Original location is important, especially with resources that are tied to particular functions in the landscape or to certain sites. Setting is also critical, yet is one that is most likely to be altered in some respect due to the loss of agricultural land and surrounding development. Therefore, some degree of integrity loss in this area is acceptable, as long as the feeling and association with agriculture and the period of significance can be ascertained. While integrity of feeling and association are more intangible and difficult to measure, they are generally present when other areas of integrity are high. Design is also an important aspect of integrity, as the form of the resource nearly always indicates the historic function. On the other hand, workmanship may not necessarily be critical, at least for those resources eligible un-

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 45

Agricultural Resources of Boulder County

der Criterion A. For those eligible under Criterion C, however, workmanship would likely reveal important aspects of construction.

To be eligible under Criterion B in the area of *agriculture*, the resources must have a close association with individuals who made significant contributions in farming, ranching or related agricultural activities in Boulder County. Furthermore, the resources must be associated with the area in which the person achieved their significance. The Clark Farm at 9511 Vermillion Road is an example of an agricultural resource that represents the particular specialty that was associated with John Clark. Clark came to Colorado from England with his parents in 1880 at the age of four. He married in 1899 and acquired this property around 1918, where he made his home for over thirty-five years. Although he started with just one horse and a rented farm, by 1944 he was one of the top beet producers in the state by 1944. His progressive farming methods and sound agricultural practices not only led to consecutively high yields of sugar beets year after year but to his well known reputation in this field. An active member of the Mountain States Beet Growers Association and president of the local association, Clark attended all of the yearly meetings throughout the U.S., and also represented the association in Washington, D.C. several times. He wrote a short history of the beet industry, published in the Mountain States Beet Grower in 1948. Clark also served as president of the Rough and Ready Ditch Company in 1935. He remained active in farming until his death in 1953 at the age of 76.⁷⁶ His farm was the property associated with his successful sugar beet crops resulting from his progressive farming methods.

Although there are a variety of property types that served agricultural purposes in Boulder County, all eligible resources must retain integrity of key character-defining elements in order to convey integrity of design. Typical key elements include: mass, form, plan and structural elements. Mass and form may be affected by additions to a building or changes to the roof shape. The latter would significantly reduce integrity of original design, but other additions may not seriously lessen integrity if they are not on the primary elevation, set back from the primary elevation on a side or are located to the rear. Furthermore, some resources, such as farmhouses, typically underwent alterations. These are generally considered to have achieved “significance over time” as they represent phases of a property’s history. Later additions outside the period of significance should not overwhelm the resource’s massing from the period of significance. This is generally interpreted as the additions being smaller in mass and height, or being situated in such a manner as not to be noticeable from the public right-of-way. Wall cladding materials also reflect the historic design intent, although these too have often changed over time, particularly on

⁷⁶ Carl McWilliams & Mary Dearhammer, Site 5BL6791, Clark Farm, (Boulder County, 3 October 1995, amended 14 April 1997) 3.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 46

Agricultural Resources of Boulder County

the main residence. Any other features that are considered character-defining or that indicate the building's historic function should be reasonably intact. The design elements that distinguish the building's historic use are especially critical, even if the function no longer exists. As farm operations changed drastically over the years, it is not at all uncommon to find the uses for various outbuildings to become outdated or altered, or for new structures to be added, such as metal grain structures. Nonetheless, the historic function of the district or building should still be distinguishable to those knowledgeable about agriculture.

Moved buildings are generally not considered eligible for the National Register because their significance is embodied in their locations and settings in addition to the buildings themselves. However, it was not unheard of to move smaller agricultural buildings within a farm or ranch, or even between properties as an economical alternative to new construction. If an individual agricultural resource was moved before its period of significance, or a resource within a district was moved to that district during the span of its period of significance, then the special requirements of Criteria Consideration B do not need to be met. An example of the latter would be if a small agricultural outbuilding was moved into a larger agricultural district, and the moved outbuilding was less significant than the remaining agricultural buildings. However, artificially created groupings of historic agricultural buildings, such as a farmhouse on its original site and a grouping of outbuildings and barns moved onto the property, are not eligible. Criteria Consideration B could be applied to moved agricultural resources significant under Criterion C if they were the only examples of their property type or method of construction, and if the new setting is similar to the original location. Also, moved properties significant under Criteria A or B may be eligible under Criteria Consideration B if they are the only surviving property associated with a particular historic event or an important aspect of a historically significant person's life. For example, a moved farmhouse occupied by a person responsible for introducing and promoting a new crop better suited for Boulder County's dry weather would be eligible if the house was the only extant property associated with this person during their period of historic significance.

Under Criterion D, the assessment of integrity (and therefore, the registration requirements) will depend upon the data that is required for the information sought. Thus a property eligible under D does not need to visually represent the historic period, but must sufficiently contain the information in a manner that can yield the expected information. For example, an irrigation ditch or canal can be filled in, but it may still yield information on early engineering practices. A log building that has been covered with siding may provide important information on log construction techniques in Boulder County.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 47

Agricultural Resources of Boulder County

NAME OF PROPERTY TYPE: *Farms, ranches, agricultural districts and rural cultural landscapes*

Description

A farm or ranch includes a grouping of individual buildings, structures and objects, as well as associated cultural landscape features including roads, drives, trees and fences. A collection of related farm or ranch resources may be considered agricultural districts. Rural cultural landscapes might consist of a single large farm or ranch, but more generally consist of several agricultural properties set within a larger rural context.

As noted, farms or ranches historically included a number of individual buildings, structures, objects and associated cultural landscape features. This grouping generally sited the buildings far enough apart to avoid objectionable odors in the house, reduce fire risk, and improve sanitary conditions. However, they were located closely enough to reduce the required labor to a minimum. Most farms arranged the outbuildings somewhat to the rear of the house and/or to one side. The main residence was generally the most prominent building within the group, followed by the main barn. The farm or ranch house was generally visible from and oriented to the public road, with a lawn in front. The main house was set back some distance in order to avoid dust from the road. Mountain farms, however, were arranged as the topography allowed, which sometimes caused buildings to be situated more closely than would typically be desired.

The grouping of outbuildings on a farm or ranch was optimally planned in such a manner that all could be entered without passing through gates. Any feed lots were located to the rear of the barns and away from the house. Other outbuildings were often grouped according to their uses. The tool shed, machine shed, and garage shared similar uses and were therefore situated near each other. Grain and hay storage were most likely adjacent to the animal enclosures and shelters for convenience in feeding. Larger stock barns were set to form a protective sheltered enclosure, and if possible, were located in the direction away from the prevailing summer winds. Hog barns in particular were located the greatest distance from the house, but still near cribs for feeding. Privies or outhouses were also separated from the main house away from prevailing winds to protect against odor, yet were still close enough for convenience. Poultry houses were located nearer to the main house than most other outbuildings, since most farm wives' duties included care of the chickens; this also provided quick access for fresh eggs and meat for meals. Most generally faced south to take advantage of solar gain for warming the building.

Windbreaks to the north and west of the buildings were also typical features, although many of these may today be nearing the end of their natural life. Fruit trees and shade trees may also be present, in addition to flowering plants and shrubs. Family gardens were located near the house. In addition to a lawn, a show pasture or field may be located in front of the main residence or to

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 48

Agricultural Resources of Boulder County

the side of the farm, in order to display the best animals and provide a clean, permanent pasture visible from the house. Mountain pastures or fields may be marked by piles of stones or even stone walls to one side or the edge, and serve as evidence of fields having been cleared for agricultural use.

Because of the once large size of many historic farms or ranches, agricultural districts create challenges in applying the National Register criteria. A historic farm or ranch may have encompassed eighty acres, or even several hundred or thousands of acres, and some individual buildings and structures may have been isolated. Development and growth in Boulder County, particularly after World War II, have severely impacted the size and nature of agricultural operations. Many properties have since been redeveloped, resulting in the loss of fields, pastures, orchards and “unimproved” farm land. In many instances, only a small proportion of the farm or ranch remains. However, this is often the most intensely developed section that contained the majority of buildings and structures. Other isolated agricultural landscapes give the appearance of being undeveloped, with only stock tanks, fences and cattle guards to provide evidence that the land had agricultural associations. Although this land may have a natural appearance, virtually none is in a natural state. Grazing or other agricultural activities for over a century have altered the landscape in fundamental ways; therefore, many of these fields or pastures may be classified as rural historic or cultural landscapes. A *rural cultural landscape* is a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) that is associated with a historic event, activity or person or exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive; the one that is more typically associated with rural historic districts and agricultural landscapes in Boulder County is a *historic vernacular landscape*, which is a landscape that evolved through use by the people whose activities or occupancy shaped it. Through social or cultural attitudes of an individual, a family or a community, the landscape reflects the physical, biological and cultural character of everyday



In addition to a significant collection of log farm buildings and structures, Scates Ranch on Magnolia Road contains pastures shaped by the natural rock outcroppings and topography.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 49

Agricultural Resources of Boulder County

lives. In this instance, an agricultural function played a significant role in vernacular landscapes. An agricultural cultural landscape may be significant as the site of an important event or activity, reflect cultural traditions, or demonstrate other patterns of settlement or land use.

Significance

Under Criterion A in the area of *agriculture*, districts which represent farms or ranches may be the best examples to represent the wide varieties of activities that were associated with agriculture in Boulder County. Even for specialized agricultural properties, a single building would rarely provide a full understanding of the entire operation. Farm or ranch districts may also be eligible under Criterion B if associated with significant individuals. Many of the early farmers and ranchers in particular played a significant role in community development, sometimes through the development of irrigation companies, or in the introduction of new crops, agricultural techniques or machinery. They were often involved in important economic or social institutions in their local community as well.

Registration Requirements

As noted in the general registration requirements, integrity of setting, feeling and association are especially necessary for agricultural districts. However, losses to outlying acreage or of some of the outbuildings will likely have occurred. Nonetheless, the district must still be able to convey the area of significance – *agriculture* – as well as the historic period of significance. It is not necessary for contributing resource to possess individual significance or retain enough integrity or significance to be individually eligible. Furthermore, some historic buildings or structures might be missing, including the main residence. However, enough other buildings and structures must be extant so that the district continues to convey the functions of the historic farm or ranch. A district that continues to operate in the present is also likely to include a number of modern features or historic features that have been modified, including a new or updated home or modern metal sheds. The presence of non-historic features will not make a district ineligible as long as the district as a whole retains its historic sense of time and place — that is, it retains sufficient integrity to convey its significance. Agricultural resources located within a district will most likely have been built over a number of years. It is therefore critical to properly define the period of significance so that contributing properties reflect this evolution of the farm or ranch over time.

For rural cultural landscapes, it is critical to identify its historic period(s) of ownership, occupancy and development, not only to better understand the associations that make them significant, but to aid in evaluating integrity. Understanding that a landscape is a continuum through history and analyzing the landscape's change is particularly important to determining its integrity. Change is inherent in cultural landscapes, resulting from both natural processes and human activities. Sometimes that change is subtle; at other times, it is obvious. Vegetation is frequently

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 50

Agricultural Resources of Boulder County

different, either through cyclical growth or the progressive changes of plant competition and succession. In spite of the dynamic quality of all cultural landscapes, in order to retain historic associations with agriculture, this change should be balanced by the continuity of distinctive characteristics retained over time. A rural cultural landscape should therefore still exhibit continuity of form, order, use, features or materials. However, in evaluating cultural landscape integrity, it is important to understand the difference between integrity and existing conditions. While integrity is the authenticity of a cultural landscape's historic identity, existing conditions can be defined as the current physical state of the landscape's features. For example, the integrity of an abandoned garden or orchard may be clear based on its extant form, features, and materials, but existing conditions may be poor, due to neglect or deferred maintenance.

NAME OF PROPERTY TYPE: *Farm houses, ranch houses, and worker housing***Description**

A farm or ranch house typically served as the primary residence of the owner or operator, although smaller residences may also have been present for hired hands. The primary residence not only functioned as the family house, it also typically served as the business office. These dual functions made it the focal point of the farm or ranch. These houses were often the most substantial building on the property in terms of workmanship and style, although the early settlement dugouts, sod houses, or log cabins were quite crude. Migrant or worker housing were simple buildings constructed with a minimum of expense and time. A wide variety of forms and styles characterize this property type, most of



Walker Ranch log house, with squared log construction.

which generally reflect the popular or vernacular trends of the period in which they were constructed. Those constructed in the late nineteenth and the first decade of the twentieth century were generally examples of so-called *National Folk* forms.⁷⁷ These often employed local mate-

⁷⁷A term popularized by Virginia & Lee McAlester in *A Field Guide to American Houses* (New York: Alfred A. Knopf, 1984) 89.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 51

Agricultural Resources of Boulder County

rials and simple workmanship, with occasional details or architectural influences from the Late Victorian styles. An example of a “gable-front-and-wing” house is the one-and-a-half story wood-frame, clapboard farm house located at 3285 N. 95th Street. A few examples are relatively ostentatious displays of wealth, as is indicated by brick or stone construction. Farm or ranch houses built in the early to mid-twentieth century were typical of those constructed from plan or pattern books, and were examples of American movements, such as the Craftsman or Prairie styles, or revival styles, such as variants of the Colonial Revival. Housing for agricultural workers, such as sugar beet laborers, was generally less substantial in terms of the quality of materials and workmanship, and lacked stylistic details and ornamentation.

Significance

In addition to the significance in *agriculture* under Criterion A noted in the general requirements, farm or ranch houses are often eligible under Criterion C in the area of *architecture*. Early settlement residences could be good examples of a type or method of construction that reflect the conditions of the period, or may be typical representatives of popular residential architecture. For the majority of houses built in rural Boulder County, the design fell not to a commissioned architect, but from cheaper and ready-made sources. Many of the late nineteenth-century houses were examples of locally popular residential types. These were sometimes the “first-generation” houses or were built by the less affluent, and are typical of others built across the country. They are linked by common methods of construction, and within each subtype, by plan and form. In many instances, the buildings lack architectural detailing.



A gable-front-and-wing farm house with Late Victorian details at 3285 N. 95th Street.

The railroad was responsible for changing the nature of simple, vernacular dwellings across the country.⁷⁸ By the time the majority of extant residential agriculture buildings were constructed in Boulder County, modest dwellings were no longer restricted to local building materials; milled lumber, as well as ready-built stylistic details, could be shipped virtually anywhere across the country. Residences no longer reflected regional or ethnic trends as much as nationwide trends. As a result, American domestic architecture became more homogenous, and Boulder

⁷⁸Ibid., 89.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 52 Agricultural Resources of Boulder County

County has several typical examples of these widespread vernacular residences. While some of the earlier vernacular residential forms continued to be utilized for many decades, the railroad made it easier to adorn houses with architectural detailing popular nationwide. Those built before the beginning of the twentieth century, for example, utilized the turned and jig-sawn decorative features also found on more elaborate Queen Anne homes. In plan and form, however, many of these early working class residences still exhibit earlier vernacular traditions.

A few farm or ranch residences in Boulder County are physical manifestations of the success of their owners. Symbolic of their owners' financial wealth and social standing, these houses represent stability of not only the individual residents, but of their agricultural operations as well. These were the houses that replaced the early rough settlement or first-generation houses, and reflected the owner's desire to appear modern and sophisticated. These houses are typical of the architectural styles from the *Late Victorian era*.

After the beginning of the twentieth century, farm and ranch owners replicated and adapted building plans from a variety of sources, such as books, catalogues, and trade literature, all readily available because of rural free mail delivery. The *Ladies' Home Journal* was a major arbiter of residential taste, and supplied plans for a nominal fee. Entire books of plans, such as the Radford catalogues, offered blueprints through the mail. Ordering plans for houses through the mail evolved into ordering entire houses. While the idea of ordering parts of a building was not new, mail-order building firms advertised that by ordering an entire ready-made house, an owner could eliminate the mistakes and misinterpretations of local carpenters. The Alladin Company, Sears, Roebuck & Co., and Montgomery Ward were among the major suppliers of ready-built homes.

Twentieth-Century Revival and American Movement Houses were part of a nationwide trend that occurred after the Victorian era, when the country as a whole was rejecting the old-fashioned exuberant styles from the previous decades. Tastes in residential architecture were turning either in favor of revival styles, which harkened back to an even earlier era, or to the simpler lines of the Prairie and Craftsman styles. The level of detailing on a few of these residences reveals the direction of a professionally trained designer. Nationwide, architects were beginning to enjoy higher status and profiles, and were certainly prominent within the university town of Boulder. Whether or not the building was professionally designed, if it is a typical or good representation of a particular style or type, farm and ranch residences could be significant under Criterion C.

It was common for owners to update the appearance of their agricultural residences in the mid-twentieth century. In fact, after World War II the United States Department of Agriculture (USDA) published pamphlets and developed a financing program instructing farmers to do so.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 53

Agricultural Resources of Boulder County

Title I of the National Housing Act encouraged the use of private money to “recondition and preserve and renew the Nation’s buildings.”

For several years past, farm homes and farm buildings all over America have been steadily “going down hill” for lack of normal care and attention. Many farmers and farm owners have not provided for necessary alterations, repairs and improvements to their buildings, because of hesitation to spend their own funds, or because the sources of farm credit were “frozen.” The National Housing Act was designed to “thaw out” frozen credit.⁷⁹

Some of the suggestions from the FHA were strictly maintenance, such as repairing the foundation and roof. Other examples shown in one pamphlet significantly changed the architectural character of the building, such as residing a Victorian era house, removing jig-sawn features and enclosing a porch. These alterations, if present during the historic period of significance, are representative of the myriad federal programs developed in the 1930s and beyond. Designed to aid farmers and agriculture, many of these programs originated in the New Deal programs of president Franklin Roosevelt.

Individual housing for agricultural workers, such as migrant sugar beet laborers, was generally less substantial in terms of size, quality of materials and workmanship, and lacked stylistic details and ornamentation. There were also buildings that housed either multiple workers or their families. These were built economically and therefore lack the quality of materials and architectural features found on other types of housing. The majority of migrant worker housing was frame construction. Although these buildings may not always be significant in the area of architecture, many will be significant under Criterion A in the area of *ethnic heritage*, as representing the first housing available to ethnic workers brought in to tend the fields of Boulder County.

Registration Requirements

In addition to the previously noted general registration requirements for associations with agriculture, a farm or ranch house may also be eligible under Criterion C in the area of *architecture*. In these instances, the building must retain integrity in the areas of design, materials and often workmanship. For those originally modest buildings, facade alterations or loss of key character-defining features would have a negative impact on integrity. The historic floor plan should be evident, although small additions to the rear do not seriously lessen integrity. Historic fenestra-

⁷⁹U. S. Federal Housing Authority, “Open this Door to Farm Property Improvement,” FHA 136, 1st Edition, (Washington, D.C.: Federal Housing Administration, Washington D.C., n.d.) p. 5.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 54

Agricultural Resources of Boulder County

tion, facade symmetry (or asymmetry) and exterior finishes should also be evident. The historic plan and mass of the front porch should also be intact. However, with eclectic vernacular houses, it may be difficult to determine if the porch detailing is original. Therefore porch columns and balustrades may not be historic, but should display patterns that are complementary in size and detailing to the residence. The building should still be identifiable to the time it was constructed, however, and should not contain details that falsely correspond with an earlier period.

In spite of the above discussion on integrity, it is rare for a farm or ranch house to have survived to the present time without alteration. Replacement of window or roof materials is common. It is also common to find houses with additions made over the years, particularly additions for indoor bathrooms. In some instances, alterations and additions may have drastically altered the historic appearance of the house, rendering it incapable of conveying its original architectural significance. However, it may still be eligible under Criterion C if the changes are typical or characteristic of a later period of architectural significance. An example would be the addition of a Craftsman style porch onto a simple vernacular farm residence, possibly in an attempt to update the appearance of the house. However, examples of vernacular log construction eligible under Criterion C may not be clad in materials that hide the logs, although they may be eligible under Criterion D for having potential to yield important information about early construction methods and materials even if covered with non-historic siding. Other alterations or additions may also be significant under Criterion A in the areas of *social history* or *agriculture* if they reflect the changing economic conditions of the owner or the influence of various federal programs originating in the New Deal administration of the 1930s, which continued after World War II.

High-style homes must be good examples of their period and type of construction in order to be eligible under Criterion C. Integrity of design, materials, and workmanship are of particular importance, especially those features that are identifiable to a specific style. In Late Victorian homes, for example, the steeply pitched and multiple roof lines and textural wall decorations are typical identifying features. Roof shapes, window and door openings, exterior wall materials and porches are areas that should retain their integrity from the time of construction. Integrity of association and feeling should also be retained in well-preserved examples of a particular type or style.

If located within an agricultural district, examples of this property type should still be recognizable to the period in which they were constructed, and should contribute to the overall sense of time and place of the district if they are to be considered contributing elements. Integrity of location and association are critical, but design and materials remain important as well. They should retain the most important character-defining features for their period of significance.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 55

Agricultural Resources of Boulder County

NAME OF PROPERTY TYPE: *Barns and secondary outbuildings***Description**

A working farm or ranch required a number of auxiliary buildings and structures, such as barns, corrals and sheds. They provided shelter for livestock, storage space for equipment and machinery, and specialized structures for the management of livestock feeding. Few of these buildings or structures were likely to exhibit elements of style or even necessarily of quality workmanship or materials. They were typically buildings of simple materials with a minimum of decoration, with utility or function clearly dictating the form. Some, particularly those built in the late nineteenth



General purpose barn at Monteau Geer Farm.

century, may show local vernacular characteristics, such as use of local materials and methods of construction. These resources tended to be concentrated around the main house so that the owner or operator could maintain control over the primary agricultural operations with minimum effort. Examples of subtypes of this property type include barns, both general purpose and dairy, animal structures (hog and poultry houses), implement and machine sheds, garages, storm cellars, privies and wood or coal sheds.

General purpose barns are sometimes the largest and most prominent building on an agricultural property. They may be classified by form, roof shape, number of stories and size, all of which reflect their historic purpose. Some are classified by their location and construction method, such as bank barns; several reflect the ethnic heritage of their owners. Most have concrete or stone foundations and are of frame construction with horizontal or vertical wood siding. The roofs, most commonly gable or gambrel, are steeply pitched in order to provide storage for hay in the upper loft. Consequently, many barns also have gable end hay hoods and doors on the upper levels. The majority of extant barns are rectangular and feature a central passage with sliding or swinging doors.

Allen G. Noble summarized past studies of historic barns in his book *Wood, Brick and Stone: The North American Settlement Landscape, Volume 2: Barns and Farms Structures* (1984). While most of the studies have been focused on the eastern portion of the United States, this book nonetheless provides a background for understanding the evolution of barns and method for

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 56

Agricultural Resources of Boulder County

categorizing basic barn forms. The simplest and often earliest barns were single-crib barns.⁸⁰ Lean-to sheds were often added to either side in order to expand the usefulness of the barn. Double-crib and drive-in crib barns were later evolutions and featured a central passage. A four-crib barn has cross aisles or passages, with doors on all four sides. This later evolved into a transverse-frame barn, which saw the side aisle openings boarded over and frame cribs constructed on the sides between the four corner cribs. The gable to gable aisle remained open for passage. A Midwest three-portal barn is a transverse-frame barn with the addition of a row of cribs on either side, as well as two more interior aisles. Some of these barns were planned with three aisles from the outset, while others were originally transverse-frame barns with later shed-roof additions on either side.

Additional barn classifications are based on the ethnic origins of their plan. An English barn, for example, is a small rectangular barn with a central floor runway flanked by two roughly equal sized spaces on either side, with a loft above for hay. The passage doors are on the side, rather than the gable ends. Originally brought to New England, it moved westward to the grasslands with relatively little change. Bank barns were introduced by



The Henning Farm barn—a Midwest three-portal barn formed by shed additions to the sides.



Hall Ranch bank barn.

⁸⁰The term *crib* can be confusing because it is applied to agricultural buildings in two ways. Here it refers to a pen composed of logs used for crop, equipment storage or animal shelter. Crib is also used for a more specialized structure used to store corn (see page 57).

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 57

Agricultural Resources of Boulder County

the Germans in Pennsylvania. The design of a bank barn allowed it to combine the functions of crop storage, threshing, and animal shelter into one building. The barn was built with its long side parallel and into the side of a hill, providing entry on two different levels. The lower level housed animals, while the upper levels served for threshing and storage. The upper hillside entrance was used by wheat or hay wagons, and fodder could be dropped through openings in the floor to the stable below. Where a hill was lacking, a "bank" was created by building up an earthen ramp to the second level.



Dairy barn in Hygiene with concrete block construction on the lower portion for ease in cleaning.

Barns can also be categorized by their use, particularly if it was specialized. Dairy barns, for example, usually required greater care in design and construction than most other farm outbuildings. The location and size of stalls, mangers, gutters, alleys, pens and milk rooms all posed specific design requirements, yet also had to be individualized for the size of the owner's operations. After about 1910, hollow concrete tiles were popular construction materials for dairy barns due to the ease of sanitizing the material. For the same reason, most dairy barn floors were concrete.

In addition to general purpose barns, there were several other outbuildings that served to house and protect livestock. Hog houses, chicken coops or poultry houses, feeding barns and loafing sheds are examples of this subtype. Hog houses could be moveable or community, and are generally rare in Boulder County. Poultry houses can also be divided into two categories – the colony (small) or community (permanent) house. Colony houses are usually built on sills, which serve as runners so that the house can be moved. They typically have shed or gable roofs. Community poultry houses may have shed,



Chicken house on the Barrett Farm.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 58

Agricultural Resources of Boulder County

gable, combination or half-monitor roofs. The buildings generally face south and are most typically simple wood-frame buildings.

Loafing sheds are long, rectangular buildings with siding on three elevations to provide some protection from the elements, and a long opening on one elevation to provide access for shelter and feed. They typically have shed roofs, wood post supports and vertical wood siding, although the small loafing shed at 10145 Oxford Road has a monitor roof and the long shed at 11896 Oxford Road has a gable roof. They generally are set at one end of a corral or fenced lot. In Boulder County, poultry houses are the most common extant livestock outbuilding sub-type, followed by loafing sheds.⁸¹



Harney Lastoka loafing shed.

Implement and machine sheds were necessary storage facilities to protect equipment. This was particularly true in the twentieth century when machinery became larger and more expensive. If left constantly exposed to the weather, the equipment lost value rapidly. According to a USDA report in 1922, the annual loss in depreciation of farm equipment due to lack of shelter was more than 100 million dollars. A cheaply built shelter was estimated to increase the life of farm implements by five years or more – a savings that paid for the cost of the shelter in a short time. These buildings were designed to afford protection and convenience in storage and provide plenty of work space. Therefore, most were tightly enclosed on all sides as well as the roof. If a wide opening was necessary, continuous doors along one side were preferable to an open shed building, which although cheaper to construct, did not provide as much protection. Windows were included to provide light by which to work. Prior to the 1920s, ten feet was generally the maximum height required to meet the needs of most farm machinery; after World War II, larger metal ready-made buildings were developed to house the increased size of machinery. Wood-frame construction was typical prior to WWII, with some buildings featuring hollow clay tile or concrete wall construction. Roofs were shed, gable, gambrel or a combination.

⁸¹Carl McWilliams, "Unincorporated Boulder County: Historic Sites Survey Report," prepared for Boulder County Parks and Open Space Department (February 2003) 37-39.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number F Page 59

Agricultural Resources of Boulder County

Garages associated with agricultural properties in Boulder County are generally simple, rectangular buildings with gable or hip roofs, wood siding and (originally) wood doors, although a few examples of other forms exist. They are located near the main residence off of the drive leading from the road.

Storm cellars were designed for protection from severe weather, and were often mounded up from level ground. In Boulder County, it is likely that these were incorporated into root and fruit cellars, serving dual purposes.

Privies or outhouses were once common features on farms and ranches, and are still found in relatively high numbers in unincorporated Boulder County.⁸² Most were small, wood frame with a shed roof. These were located away from the house to protect the latter from objectionable odors, yet were still close enough for convenience.

Significance

Under Criterion A, in the area of *agriculture*, barns and other outbuildings are significant as the physical representations of the varied activities and operations that occurred historically on Boulder County's farms and ranches. General purpose barns are significant agricultural resources because of their diversified use. They often served a variety of functions, from housing one or more types of livestock, to providing a place for feeding and sometimes protecting smaller equipment and tools as well. Structures associated with the care and feeding of animals were also critical to the success of a farm or ranching operation. Implement and machine sheds were important because farm equipment needed care and housing. In addition to the significance in *agriculture* under Criterion A, barns and outbuildings may be eligible under Criterion C in the areas of *architecture* or *engineering* if they feature distinctive characteristics of a type, period or method of construction, or because they possess high artistic values.

Registration Requirements

To be individually eligible, these resources must retain integrity as noted in the general registration requirements section. However, all except the largest barns are unlikely to be individually eligible. The purpose of these resources was to house or facilitate a specialized function; their significance usually lies in the combination of all such resources to convey how a historic farm or ranch functioned. Therefore, they are more likely to be eligible as contributing resources to an agricultural district. In these instances, integrity of association, feeling, setting and location are critical to conveying the significance of a complex. Design, particularly the elements of form and massing, is important for indicating historic function.

⁸²Ibid.

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number F Page 60

Agricultural Resources of Boulder County

NAME OF PROPERTY TYPE: *Farm and ranch feed storage and processing resources*

Description

Nearly as critical as buildings associated with the care and feeding of livestock on a farm or ranch are the buildings and structures devoted to the processing or storage of field crops (including small grains, corn, or hay) for the purpose of feeding livestock. Granaries, cribs, silos, hay derricks, barracks or stacker and elevators and other feed sales buildings were built to preserve and store crops until they could be sold or used.



An early log crib at Scates Ranch on Magnolia.

Corn cribs were among the earliest of the crop storage structures built in Boulder County, but were later supplanted by metal storage bins in



An evolution of grain storage structures can be found at 7016 N. 73rd Street, including a granary, concrete stave silo, and prefabricated metal bins.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 61

Agricultural Resources of Boulder County

the twentieth century. Consequently, there are few extant examples in the county, and the remaining are in poor condition, such as the ruins recorded in 2003 at 1021 N. 111th Street. Corn cribs were designed to allow newly harvested ears of corn to dry slowly in order to reduce losses. Some had widely-spaced slats to provide air circulation, while others had a central passage. Cribs were also comparatively narrow buildings, although here in the arid West cribs could be constructed wider than their counterparts in the East.



The Keyes granary at 9748 N. 119th Street—a rare studs-out granary with dormers. The dormers are used for filling the structure with grain.



Stacked plank granary on Ute Road

Farmers used granaries for the storage of small grains. The structures were tightly constructed with strong walls and heavy floors. Granaries were generally wood frame, often with the outside framing, or studs-out construction, in order to provide a smooth interior wall. This method of construction provided ease in emptying out the grain, as well as prevented the weight of the grain from pushing out the boards of the exterior wall. An example of a studs-out granary is the wood-frame structure at 9748 N. 119th Street. Stacked plank granaries also exist, although these are rarer in Boulder County and in general throughout Colorado. Also called “plank-on-plank,” they were built of milled planks stacked flat and nailed on top of each other. This is another sturdy method of construction that provides a solid wall. Granaries are also characterized by a raised foundation and a lack of windows. All of these features serve to make the structure as animal-proof as possible. The interior of the granary is usually divided into a series of bins or compartments for ease of grain holding and to permit storage of more than one grain if necessary.

Grain bins are also used to house crops prior to sale. Farmers first built these small, easily erected structures with wood frame and siding. To encourage storage on farms in case of short-

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 62

Agricultural Resources of Boulder County

ages, federal aid became available for granary construction after the 1930s. Manufactures developed prefabricated metal bins to meet the huge demand from farmers applying for the aid. These bins were low cost and easy to assemble on-site. Improved designs have made these popular up through the present time. Most are circular and have conical roofs, such as the one located at 7016 N. 73rd Street.

Silos preserve green forage, most often chopped corn, and are a critical farm structure. The earliest silos are most often associated with dairy farms. Construction materials were either wood or masonry; wood silos are rare in Boulder County, although a stacked plank octagon silo is located at 8556 Arapahoe Road. Masonry silos could be constructed of brick, hollow tile or concrete. Concrete construction varied from concrete block, cement staves or monolithic concrete. There is even a silo constructed of ornamental concrete block at 11229 N. 75th Street. Brick silos relied on paving brick, but required proper horizontal reinforcing and narrow mortar joints. The interior was plastered with a cement mortar to insure a smooth, tight wall. Hollow tile or clay blocks were first used in silos around 1908, but were more typically used from the 1920s through the 1950s.⁸³ The blocks were between 4-6" thick. Some blocks were grooved to receive reinforcing, and were curved to the form of the silo wall. Reinforcing was steel wire embedded in mortar joints. Reinforcing concrete jambs were also used, and were tied across at intervals to prevent spreading. A variety of patented blocks were used for concrete block silos; some were curved. Reinforcing was either embedded in the block or placed in the mortar joint. Stucco was sometimes applied to the exterior surface for appearances and to fill up the pores, while a cement wash was applied to the interior. Cement-stave silos first appeared around 1906.⁸⁴ There were various patented staves that differed, among other things, in their end joints. Steel hoops bound the staves special door spreaders were required. Stave silo interiors were also given a cement wash. Monolithic silos are solid concrete and were constructed with standard forms on-site. The reinforcing was embedded in the wall. Doors for silos were individual or continuous. Chutes cover the doors and allow silage to be thrown down without trouble from the wind. Based on field observation, roofs were rare on Boulder County silos. The few extant roofs are low conical and round gambrel. Instead of roofs, many silos in the county had wire extensions on the top to allow for settling after the initial loading.

⁸³ Allen G. Noble and Richard K. Cleek, The Old Barn Book: A Field Guide to North American Barns and Other Farm Structures (New Brunswick, NJ: Rutgers University Press, 1995) 161.

⁸⁴ Ibid.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 63

Agricultural Resources of Boulder County

Most silos are located immediately adjacent to barns for convenience, such as the one located at the Lohr/McIntosh Farm, but a few are located in feed lots. Trench or pit (below grade) silos were dug into the ground and geared to grass ensilage. Bunker silos, such as the one found at 12076 Baseline Road, were built after World War II. Similar to trench silos, concrete bunker silos were built above ground, and featured three walls with an open top. The open end was designed for easy access by mechanical harvesters of grass ensilage, and sometimes for self-feeding of the livestock. The top was sealed when necessary by plastic sheets, often held in place with old tires. Harvestore silos are rare in Boulder County due to their original costs, although a few still remain. They were used for large herds of dairy cows. These easily recognized blue silos were invented by the A.O. Smith Company of Wisconsin after World War II, and are made of fiberglass and metal panels. These silos empty automatically from the bottom.⁸⁵



*Concrete stave silo adjacent to barn at
Lohr/McIntosh Farm.*



Hollow glazed clay tile silo.

⁸⁵Ibid.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 64

Agricultural Resources of Boulder County

Hay barracks, stackers and derricks are very rare in Boulder County, although a few have been identified in previous surveys. Hay barracks were used for storage, and were simply four poles with a roof above. Hay derricks and stackers were also of wood pole construction, but were used to stack hay in a manner to reduce spoilage. Baskets or racks on stackers were sometimes at angles, and cables and pulleys raised the hay basket.

Significance

Crop and feed storage facilities, including granaries, cribs and silos were critical elements of farms and some ranches, and are significant in the area of *agriculture* for their association with the varied activities and operations that occurred with crop and livestock activities in Boulder County. They were present on both specialized farms and diversified operations. However, for the farms that specialized in single crops, this subtype is often the outbuilding that is most associated with the function of the property. In addition to the significance in *agriculture* under Criterion A noted in the general requirements, feed storage and processing resources may be eligible under Criterion C in the areas of *architecture* or *engineering* if they feature distinctive characteristics of a type, period or method of construction, or because they possess high artistic values (unlikely is such utilitarian structures).

Registration Requirements

To be individually eligible, these resources must retain integrity noted in the general registration requirements section. Some loss of integrity in materials or design is expected as these structures deteriorate through lack of use over the years. However, integrity of location and wall materials is still necessary. All except the largest or extremely rare are unlikely to be individually eligible. The purpose of these resources was to house or facilitate a specialized function; their significance usually lies in the combination of all such resources to convey how a historic farm or ranch operations functioned. Therefore, they are more likely to be eligible as contributing resources to an agricultural district. In these instances, integrity of association, feeling, setting and location are critical to conveying the significance of a complex. Design, particularly the elements of form and massing, are important for indicating historic function.

NAME OF PROPERTY TYPE: *Farm and ranch food storage, processing and sales resources***Description**

Whereas “feed” storage and processing resources are concerned with the feeding of livestock, “food” storage and processing resources are those buildings and structures associated with the storage, production and/or sales of agricultural products for human consumption. Examples include beet shacks, milk houses, produce processing buildings, root and fruit cellars, icehouses, smokehouses, summer kitchens and produce sales stands.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 65

Agricultural Resources of Boulder County

Milk was originally stored in spring houses on early homesteads. Later government regulations required specific cooling methods to prevent bacterial growth; milk now had to be cooled to 50 degrees or lower within a few hours of milking. Regulations required milk houses to be separated from barns for sanitary reasons, but for convenience they were often located as close to the barn as possible. Some milk houses were even attached to the barn.⁸⁶ They were usually small buildings with gable roofs, and were often constructed of concrete or concrete block for ease of sanitation. There are a number of extant examples in Boulder County.

Summer kitchens were detached buildings used for the cooking of meals at farm or ranch houses. They were sometimes converted from an early crude residential building once a larger house was constructed. If built separately, summer kitchens were generally simple rectangular buildings located near the main house's kitchen. Extant examples of summer kitchens are rare in Boulder County. Also rare are extant examples of smokehouses, small outbuildings used to smoke meat for preservation. There was a small door, but no windows; instead small flue openings under the eaves or in the gable ends provided ventilation.

Root and fruit cellars were rooms excavated below ground in order to provide insulation for the storage of root crops, fruits, and other food items. The walls are usually constructed of concrete or stone, such as the one at 10167 Arapahoe Road. The doors generally sloped, with steps leading down to the cellar and a ventilation pipe extending through the ceiling/roof. Sometimes these structures also served as storm cellars. Over thirty extant root and fruit cellars have been recorded to date in Boulder County.⁸⁷



Root cellar at the Montgomery Farm, 5486 Ute Road.

Ice houses, although technically used for frozen water storage, are categorized with this sub-type due to their associative function with food storage. Ice houses were barn-like wood structures, generally unpainted, with smooth interior wood wall construction (like granaries) in order to maximize storage space. They often had a large, full-height door. As the ice was cut from ponds

⁸⁶Ibid., p. 140.

⁸⁷Carl McWilliams, "Unincorporated Boulder County: Historic Sites Survey Report," prepared for Boulder County Parks and Open Space Department (February 2003) p. 39.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 66

Agricultural Resources of Boulder County

and stacked inside, the lower portion of the door was closed down with boards. There are less than ten extant examples documented to date through the county survey projects.

Roadside stands allowed farm families to sell produce directly to the public. Such stands operated only during the harvest season and were generally staffed by family members. Construction was usually simple wood frame with a flat or gable roof, often of fiberglass panels. The front of the stand was usually open to allow easy access and to accommodate additional produce display. Produce stands were located close to the road to catch the eye of passing motorists.



Typical produce stand architecture.

Significance

Food storage, processing and sales resources are significant in the area of *agriculture* for their association with the operations required for food production on farms and ranches in Boulder County. They were also present on both specialized farms and diversified operations. In addition to the significance in *agriculture* under Criterion A noted in the general requirements, food storage and processing resources may be eligible under Criterion C in the areas of *architecture* or *engineering* if they feature distinctive characteristics of a type, period or method of construction, or because they possess high artistic values.

Registration Requirements

To be individually eligible, these resources must retain integrity noted in the general registration requirements section. Some loss of integrity in materials or design is expected as these structures deteriorate through lack of use over the years. However, integrity of form is still necessary in order to determine the historic use of the structure. Small resources, such as root cellars, are unlikely to be individually eligible. The purpose of these resources was to house or facilitate a specialized function; their significance usually lies in the combination of all such resources to convey how a historic farm or ranch operations functioned. Therefore, they are more likely to be eligible as contributing resources to an agricultural district. In these instances, integrity of association, feeling, setting and location are critical to conveying the significance of a complex. For individually eligible resources, integrity of design, particularly form, and materials are critical in order to convey the historic function.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 67

Agricultural Resources of Boulder County

NAME OF PROPERTY TYPE: *Watering facilities, windmills, and irrigation resources***Description**

Watering facilities include those structures and sites where water is taken from the ground for use by livestock or people. At natural springs, water comes to the surface without the aid of pumps. In the early settlement of Boulder County, the location of springs often determined the location of farms and ranches. It was not unusual to make improvements around a spring in order to minimize water loss and protect the water quality, such as a spring house, or to transfer water to tanks or concrete channels. A well is a dug or drilled hole where water is drawn up from the ground for use. Most wells have some sort of pump to draw up the water. Originally hand pumps or windmills, these were sometimes changed to electric or gas-powered pumps in the twentieth century. Windmills are common devices for pumping water out of the ground, especially in isolated areas. They are structures with large fan blades turned by the wind. This rotational energy is transmitted through gears and shafts to the pump that in turn draws up the water. Ponds in Boulder County were usually man-made for storage purposes.

*Windmill at the Lohr/McIntosh Farm.*

Spring houses were small buildings designed to protect the spring water source, as well as to provide a cool storage space for perishable farm products. Constructed of masonry (at least the foundation), they were sometimes built into slopes to provide additional insulation. External water openings often channel water to other areas of the farm.

*Concrete block springhouse with wood addition built into the hillside at Scates Ranch on Magnolia Road, with a pipe leading to a stock tank.*

Well houses are structures built over a well to protect it from the elements; they sometimes also function as a storage shed. Water tanks are structures that hold water drawn from wells or other

sources for livestock to drink. These tanks may be of concrete, metal, wood or other materials.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 68

Agricultural Resources of Boulder County

An irrigation system may have several components including dams, headgates, drop structures, division boxes, pumphouses, ditches, canals, laterals, pipelines, ponds or reservoirs. An irrigation system is used to distribute water to fields, pastures and orchards. A ditch or canal is an open, built waterway for carrying water from a water source. Pipelines are another system for moving water from a source to a tank or field. Many Boulder County agricultural operations developed extensive irrigation systems in order to support their crops and livestock.

Significance

The development of a reliable water source was a critical factor in the success of agriculture in Boulder County. Many of the ditches and canals are part of a larger system that extends beyond the boundaries of an individual property. As such, it would be rare that a single irrigation system resource would be individually eligible for the National Register. It is more likely that these water-related resources, as critical as they were historically, would be eligible as part of a district or landscape. A few might be eligible under Criterion C as an important example of a particular kind of technology. Irrigation related resources are significant for their association with the heritage of water use in the West, which has evolved into a complex system of water rights involving not only agriculture and private individuals, but the ditch companies, industry, and federal, state, and local governments as well. Without these resources, agriculture in Boulder County would have developed in a very different manner. These resources may also be significant for the associations listed in the statewide MPDF on irrigation ditches.

Registration Requirements

In addition to the registration requirements noted in the general section, integrity of location is important to water-related resources. Most will be only eligible as contributing elements of a district; in these cases, integrity of association, location and design is important. A high degree of integrity in materials may not be required. For example, canals or ditches eligible under Criterion A may have non-historic concrete channels if the location is still intact. A natural spring would be classified as a site, and to be individually listed, it must retain integrity of association, location, setting and feeling. However, natural geological or man-made processes may shift the path of water underground, but the ground-level site may still be eligible.

NAME OF PROPERTY TYPE: *Agricultural landscape features***Description**

This property type includes crop fields, orchards, irrigated and dry pastures, fences, corrals, loading chutes, wind breaks and hedgerows and cemeteries or burial plots. Crop fields may represent the main function of a specialized farm, or they might have been used in a diversified operation

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 69

Agricultural Resources of Boulder County

to raise feed for the livestock, such as alfalfa. This was particularly important for the early settlement farms or for smaller family-owned operations, where self-sufficiency was more typical than economic specialization. In the semi-arid climate of Boulder County, there may have been limited irrigated fields for horses, cattle, or other animals, and more extensive fields for dryland grazing. Orchards and other agricultural fields may also represent a diversification of the farm's production. Some of these resources may cover many acres, although the irrigated land was more likely to be in relatively close proximity to the main farm or ranch complex.

A fence is a structure built to demarcate a boundary and to limit movement from one area to another. Fences define grazing areas, limit livestock access to other agricultural properties, such as fields and homes, or mark boundaries to other land jurisdictions. The most common fencing associated with livestock is the four-strand barbed wire fence, which features barbed wire strung between metal or wooden poles. Closer to the main residence, fences may be wood, stone, wire mesh or other materials. Such fences are usually more costly and are limited to the domestic area; they also serve a decorative purpose. Cattle guards are structures that prevent passage by cattle, yet allow vehicles and people access to fenced areas. Since cattle are afraid of pits, cattle guards were designed with pits of varying depths covered by a grill or lattice of wood, piping, rails, or concrete. They are integral parts of fencing and are effective in preventing cattle from leaving the fenced area, making gates unnecessary.

Corrals are fenced enclosures that congregate livestock for the purpose of feeding, working or preparation for loading. Pens are extensions of corrals that allow the rancher to perform duties such as routine health functions. Holding pens are used to keep cattle contained while waiting for other functions. A subcategory of a holding pen is a crowding area, which is a specialized pen used to funnel cattle into loading chutes. Loading chutes are ramped structures used to load cattle, one at a time, into a truck or rail car. They are narrow and have a ramp and enclosed sides (historically fenced).

*Corrals at the Walker Ranch.**Loading chute at Lohr/McIntosh Farm.*

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 70

Agricultural Resources of Boulder County

Other landscape features of a farm or ranch in Boulder County may include crop fields, pastures, and orchards. Most crop land was irrigated; pasture land was also sometimes irrigated in order to supplement the natural grass ranges. Crop fields may be small, typically representing a diversification of the farm's output, or large for specialized production. Dryland range or pastures were large areas, with fencing generally representative of ownership boundaries. Fields in the plains were usually rectangular or square, while those located in the mountains of Boulder County were often irregular in shape, conforming to the steeper topography and rock outcroppings. These fields may also have stone piles or fences on one side as evidence of clearing for agricultural use. Orchards in Boulder County were comparatively small, with the fruit trees planted in straight rows at set intervals, allowing for ease in mowing and spraying.



Wagon wheels mark the Scates family plot on Magnolia Road.

Cemeteries, burial grounds and grave sites are other examples of agricultural landscape features. It was not uncommon for rural families to bury deceased on their home property. Especially from the settlement period, formal cemeteries are rare and are more likely graves, sometimes lacking even markers. These may occur as small family plots located a short distance from the main house, but not as close as gardens, or in an unused, but picturesque setting on the farm.

Significance

Although perhaps the broadest category of property types, agricultural landscapes are clearly among the most significant. Without the land, the "industry" of agriculture would not exist. There is sometimes a misconception that beyond the farm or ranch headquarters and plowed fields that all of the remainder was natural landscape, but agriculture in Boulder County has significantly altered the land in many ways. Furthermore, the land itself is most often the unifying feature of the overall farm or ranch. The presence of fencing is one of the primary features distinguishing agricultural activities since the 1870s from the earlier open range/pioneer era. Before the invention of barbed wire, fences were expensive to build and were limited to the areas around the house where cattle were not wanted, such as the house or garden.

United States Department of the Interior
National Park Service**NATIONAL REGISTER OF HISTORIC PLACES**
CONTINUATION SHEETSection number F Page 71 Agricultural Resources of Boulder County

As noted previously, these resources are significant under Criterion A in the area of *agriculture*. Some may be eligible in the area of *conservation* as well, if they are associated with innovative methods of conserving water, soil or other natural resources. Particularly after the drought and Dust Bowl era of the 1930s, farmers and ranchers began to participate in soil conservation and grazing districts in order to manage and protect the precious natural resources.

Registration Requirements

Agricultural landscape features are most likely to be eligible as contributing resources within a larger agricultural district. Without any other associated property types, it would be difficult for landscape features by themselves to convey the historic contexts. To be eligible as part of a district, these resources must retain integrity of location, setting, association, and feeling. It is not necessary that the fields presently retain their historic use as long as the vegetation and contours from the period of significance are evident. However, full retention of materials in vegetation is not necessary as long as the historic agricultural use is apparent.

Since fences are by their nature boundary markers, location is a crucial aspect of integrity. This would imply that the boundary itself is historic. However, the construction of roads, highways, and the growth of towns and cities in recent time have required the construction of hundreds of miles of fences. Only those fences that are associated with the historic period may be eligible as contributing elements in a district. After location, integrity of materials is also important. Unfortunately, because they are constantly exposed to the elements or subject to intentional or unintentional burning, barbed wire and wooden poles usually have to be replaced to remain functional.

Burial places may be contributing elements of a historic agricultural district if they are integral to the district, not its focal point. Otherwise, the National Register generally restricts the individual listing of such places unless they are associated with persons of transcendent importance, have distinctive design or have special associations with historic events.

NAME OF PROPERTY TYPE: *Granges and agricultural society buildings***Description**

Most granges in Boulder County were simple rectangular buildings constructed specifically to house the organization. They were frame or brick construction, with flat, hip, or gable roofs. A few were located in buildings constructed for additional uses, such as the upstairs of a commercial block building or in former residential buildings.

**United States Department of the Interior
National Park Service****NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**Section number F Page 72

Agricultural Resources of Boulder County

Significance

Although their extant numbers are few, Granges and other agricultural societies played a key role in the transition from a simple agrarian society to modern agribusiness. The National Grange of the Order of Patrons of Husbandry, founded in Washington D.C. in December 1867, was a fraternal organization that provided a political voice for farmers after the Civil War. The first five Granges in Boulder County were organized in 1873. In addition to their being significant in *agriculture* under Criterion A noted in the general requirements, these buildings may also be significant under Criterion A in the area of *politics/government* and *social history*. Some may also be eligible under Criterion C because they feature distinctive characteristics of a type, period, or method of construction. Some of these characteristics might include the form, massing, and floor plan.

Registration Requirements

In addition to the registration requirements noted in the general section, a Grange or agricultural society building eligible under Criterion C should retain its character-defining features that distinguish it as a specific type, period, or method of construction. Examples of character-defining features include the form, mass, floor plan, organization of space, fenestration patterns, style and materials.

NAME OF PROPERTY TYPE: *Transportation resources***Description**

Transportation resources that also have a direct association to agriculture are rare in Boulder County; only eight have been identified to date through field survey, and three of those have been preliminarily determined eligible for the National Register. Future survey may identify additional resources, or supplementary research in this area may uncover previously undocumented agricultural associations. Potential resources include: roads, bridges, railroad tracks/spurs and roadbed, depots, garages, drainage and separation structures, and miscellaneous right-of-way structures.

Significance

Many historic transportation resources have associations with multiple areas of significance; i.e., they were constructed to deliver or transport people, mineral resources, manufactured goods and products in addition to serving the farmers and ranchers of the county. The construction of an early mining roadway, for example, was supported financially by the Wellman brothers in order to reduce their transportation costs, time and effort for the agricultural produce they sold in the mining camps. Other roads or railroads developed to serve the coal-producing communities of

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number F Page 73

Agricultural Resources of Boulder County

Marshall, Superior and Erie also accommodated area farmers. A few historic transportation resources, however, were constructed solely for agricultural purposes, such as the railroad spur leading to the sugar beet factory in Longmont.

Registration Requirements

To be eligible under Criterion A, transportation resources must have a direct association with agriculture, or the agricultural development, of Boulder County; in other words, they cannot be significant solely in the area of *transportation* alone. Research must prove that the resource was constructed for agricultural purposes, such as delivering agricultural goods to a processing, storage, sales or distribution site. Integrity requirements are similar to those in the previously submitted MPDFs related to transportation, including *Railroads in Colorado, 1858-1948* and *Highway Bridges in Colorado*. Location, design, and materials are some of the key character-defining features for transportation resources.

**United States Department of the Interior
National Park Service**

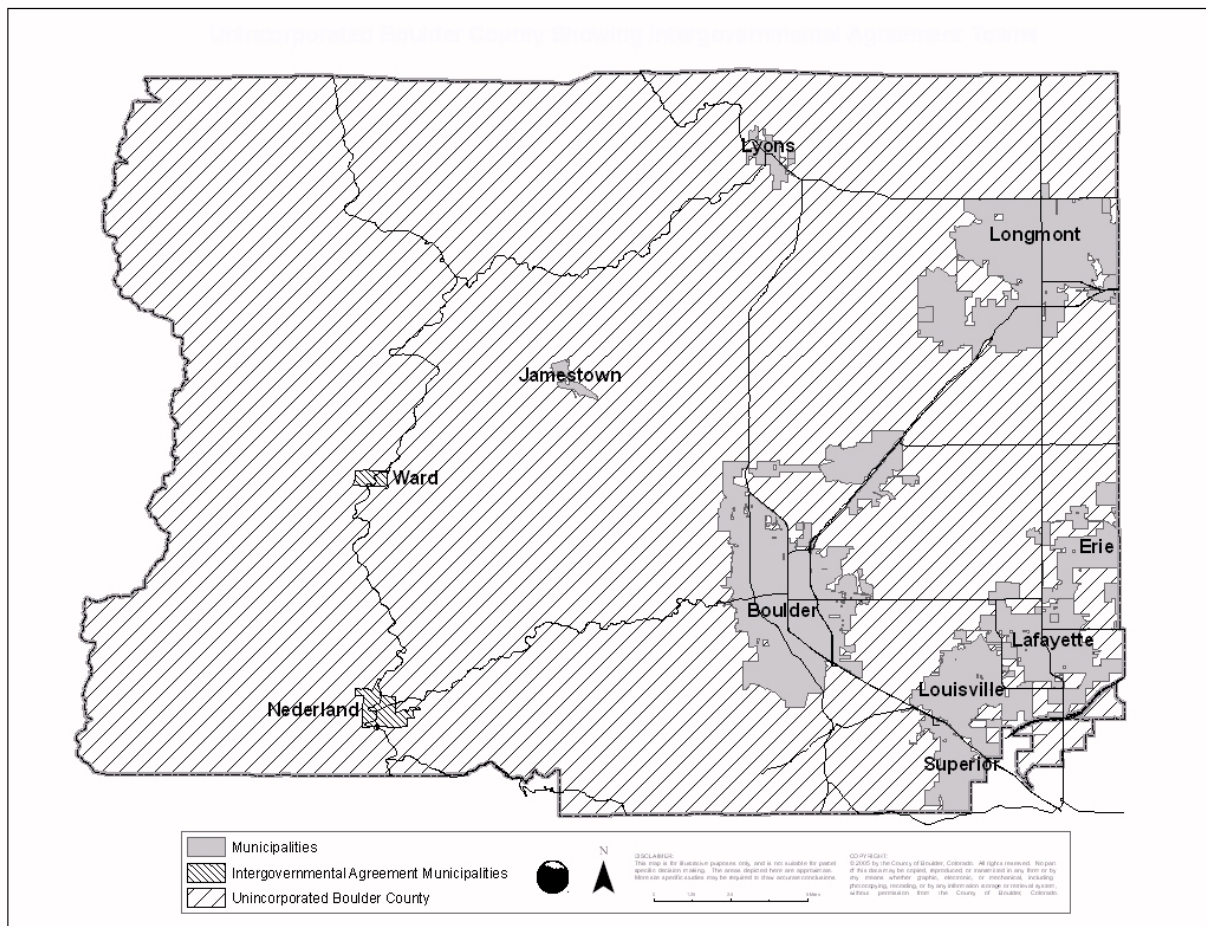
**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number G Page 74

Agricultural Resources of Boulder County

GEOGRAPHICAL DATA

The geographical area encompasses all of Boulder County, Colorado.



United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number H Page 75 Agricultural Resources of Boulder County

SUMMARY OF IDENTIFICATION AND EVALUATION METHODS

The Multiple Property Documentation Form (MPDF) for *Agricultural Resources of Boulder County* was developed to provide a broad context for evaluating the extant cultural landscape and built resources resulting from more than a hundred years of agricultural activities in Boulder County, Colorado. As the project is funded in part by the Boulder County Parks & Open Space and Land Use Departments, the geographic area of particular interest includes all the unincorporated areas of the county, as well as the two towns with inter-governmental agreements – Nederland and Ward.

The project began by gathering background historical information about agriculture in Boulder County and Colorado. This information, used to develop the historic contexts and property types, was based on a study of both primary and secondary sources. These sources include previous surveys and nominations, city and county histories (both published and unpublished), historic newspapers, county government records, historic photographs and federal and state government reports and publications. These sources were found at local libraries (primarily the Carnegie Branch Library for Local History in the Boulder Public Library system), local museums or historical societies, local governments, Norlin Library at the University of Colorado, and the Western History and Genealogical Division of the Denver Public Library. After preliminary background research, individual historic sites surveys were reviewed. Past Boulder County-funded surveys have evaluated 820 properties in Boulder County, of which 494 were identified to have associations with agriculture.⁸⁸ Boulder County landmark nominations provided additional information on a few of the individual properties within the study area.

Based on the background information gathered through both archival and field research, the historic contexts represent the major periods of agricultural development in Boulder County. This thematic-based approach for preparing historic contexts in the MPDF is predicated on the forces related to agricultural activities that shaped the built environment in unincorporated Boulder County. In part, the contexts are also geographically-based, in that the MPDF focuses on those properties located within Boulder County, as well as chronologically-based, in that each period of agricultural development in the county is studied separately. Property types are based on categories of resources sharing similar original functions. As more examples of these property types are surveyed in the future, it is possible that additional information may be revealed, which in turn may warrant amendments to this document.

⁸⁸A surveyed “property” may contain more than one resource.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number H Page 76

Agricultural Resources of Boulder County

The MPDF and historic context report were partially funded by Federal funds from the Historic Preservation Fund administered by the National Park Service, U.S. Department of the Interior and for the Colorado Historical Society. Deon Wolfenbarger, historic preservation consultant for Three Gables Preservation, prepared the document. Project coordinator for Boulder County was Carol Beam, Historic Preservation Specialist. Certified Local Government coordinator for Colorado was Dan Corson, and project reviewer for the State Historic Preservation Office was Dale Heckendorn, Preservation Planning Coordinator and State and National Register Coordinator. All meet federal standards 36 CFR-61 for historic preservation consultants, with the areas of landscape architecture, history, and historic preservation represented.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 77

Agricultural Resources of Boulder County

BIBLIOGRAPHY

Abbott, Carl, Stephen J. Leonard, and David McComb. Colorado: A History of the Centennial State 3rd ed. Niwot: University Press of Colorado, 1994.

Anderson, M. M. The Mining Camps: Salina & Summerville. Boulder, CO: Junction House, 2005.

Benedict, Diane Goode. Refuge in the Valley: 1800s Pella, Colorado. Lyons: CO: Applications Plus, 2004.

Betasso, Ernie. "Oral history interview with Ernie Betasso." Interviewed by John Hess, 15 January 1983. At Carnegie Branch Library for Local History, Boulder Public Library System, OH0225, Boulder, CO.

Boulder Commercial Association. "Agricultural Possibilities of Boulder County." N.p.: Boulder Commercial Association, n.d. [ca. 1907]. At Carnegie Branch Library for Local History, Boulder Public Library System, folder 300 b01 f12, Boulder, CO.

"Boulder County Farmers Had Successful Year During 1945." Boulder Daily Camera, 31 December 1945.

"Boulder County Remains a Major Turkey Center, But Raiser Hit by Low Prices." Daily Camera, 29 September 1961. In folder 328 B132 F03, Carnegie Branch Library for Local History, Boulder, CO.

Century in the Saddle: The 100 Year History of the Colorado Cattlemen's Association, (Boulder, CO: Johnson Publishing Co., 1967) 272-273.

"Boulder Valley, 'The Garden Spot of Colorado.'" The Daily Camera Industrial Number, 8 January 1910.

Colorado Agricultural College, Extension Service, "Cooperative Extension Work in Agricultural and Home Economics," (n.p.: Colorado Agricultural College, U.S. Department of Agriculture, and Boulder County Cooperating Extension Service, 29 December 1928).

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 78 Agricultural Resources of Boulder County

Colorado. Boulder County. 1870 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1890 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1900 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1920 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1930 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1940 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado. Boulder County. 1950 U.S. Census, agriculture schedule. Cited from: University of Virginia Library, Geospatial and Statistical Data Center. Historical Census Browser. <<http://fisher.lib.virginia.edu/collections/stats/histcensus/>> cited 10 October 2005.

Colorado Agricultural College, Extension Service. "Cooperative Extension Work in Agricultural and Home Economics." N.p.: Colorado Agricultural College, U.S. Department of Agriculture, and Boulder County Cooperating Extension Service, 29 December 1928.

Colorado State Grange. Colorado State Grange History: 1874-1975. N.p.: Colorado State Grange, 1975.

Convery, William J. III. Pride of the Rockies: The Life of Colorado's Premiere Irish Patron, John Kernan Mullen. Boulder, CO: University Press of Colorado, 2000.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 79 Agricultural Resources of Boulder County

“Corn, Hay, Winter Wheat Among County’s Top Value Farm Products.” Boulder Daily Camera, 1 June 1960.

Corson, Dan, and Thomas J. Noel. Boulder County: An Illustrated History. Carlsbad, CA: Heritage Media Corp., 1999.

“County Agent Surveys 1946 Yield of Farms and Dairying Business.” Boulder Daily Camera, 1 January 1947.

Dyni, Anne. “The Grange Movement in Boulder County.” Prepared for the Boulder Historic Context Project, 1992.

Dyni, Anne. Pioneer Voices of the Boulder Valley: An Oral History. Boulder, CO: Boulder County Parks and Open Space Department, 1999.

Fetter, Richard. Frontier Boulder. Boulder, CO: Johnson Publishing Company, 1983.

Gladden, Sanford Charles. Boulder Firsts: A Source-Book of Beginnings in Boulder, Colorado. N.p: pre-publication photocopy of manuscript prepared by Boulder Genealogical Society, 1972.

Jenkins , Jewell Maret. “John D. Steele, 91, Was Six Weeks Old When His Parents Arrived In Boulder County; The Father Died Of Typhoid.” Boulder Daily Camera, 31 January 1956.

Julusson, Lara. “Boulder County Colorado Major Transportation Routes, Pre 1860 to 1920.” Boulder, CO: Boulder Planning Department, May 1992.

Large, Dorothy. Old Burlington: First Town on the St. Vrain 1860-1871. Longmont, CO: St. Vrain Publishing Co., 1984.

Leonard, Stephen J. Trials and Triumphs: A Colorado Portrait of the Great Depression, with FSA Photographs. Niwot, CO: University Press of Colorado, 1993.

“Letter from Boulder City, Colorado Territory,” Small Documents Collection (Boulder, CO: Carnegie Branch Library for Local History, Boulder Public Library System, 1863).

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 80 Agricultural Resources of Boulder County

McAlester, Virginia and Lee. A Field Guide to American Houses. New York: Alfred A. Knopf, 1984.

McWilliams, Carl. "Dodd Farm, Site 5BL617," Boulder County Historic Sites Survey prepared for Boulder County, 14 October 1996.

McWilliams, Carl. "Unincorporated Boulder County Historic Sites Survey Report." Prepared for Boulder County Parks and Open Space Department. February 2000.

McWilliams, Carl. "Unincorporated Boulder County Historic Sites Survey Report." Prepared for Boulder County Parks and Open Space Department. February 2003.

McWilliams, Carl and Mary Dearhammer, "Clark Farm, Site 5BL6791," Boulder County Historic Sites Survey prepared for Boulder County, 3 October 1995, amended 14 April 1997.

Native Cultural Services and Paragon Archaeological Consultants, Inc. "Results of an Archaeological and Historical Inventory of Southern Rabbit Mountain & North Foothills Open Space. Boulder County, Colorado." Prepared for Boulder County Parks and Open Space Department. 16 December 1996.

Newby, Betty Ann. The Longmont Album: History and Folklore of the St. Vrain Valley. Virginia Beach, VA: Donning Company Publishers, 1995.

Noble, Allen G. Wood, Brick and Stone: The North American Settlement Landscape, Volume 2: Barns and Farms Structures. Amherst, MA: University of Massachusetts Press, 1984.

Noble, Allen G., and Richard K. Cleek. The Old Barn Book: A Field Guide to North American Barns and Other Farm Structures. New Brunswick, NJ: Rutgers University Press, 1995.

Pettem, Silvia. "Roads of the Mountains and Plains." Boulder, CO: Boulder Planning Department, 1996.

"Records and Correspondence 1872-1873 of Boulder County Agricultural Society." Folder BHS 328 b043 f01. Boulder, CO: Carnegie Branch Library for Local History, Boulder Public Library System.

"Rock Creek Farm Cultural Landscape," Boulder County Resolution 98-113, HP-98-02 (Boulder County, 1998).

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 81 Agricultural Resources of Boulder County

Saul, Norman E. "Mill Town Kansas in the Age of Turkey Red," Kansas History: A Journal of the Central Plains 23 (Spring-Summer 2000).

Schooland, J.B. Boulder, Then and Now: Picturesque Boulder and Gems of Boulder County. Boulder, CO: Pruett Press, Inc., 1967.

Smith, Phyllis. A Look at Boulder from Settlement to City. Boulder, CO: Pruett Publishing Company, 1981.

Soil Conservation Service of Boulder Valley Soil Conservation District . "Rural Recreation: New Opportunities on Private Land." Soil Conservation Service of Boulder Valley Soil Conservation District Newsletter. Boulder, CO: July 1964.

"22,794,588 Value of Farm-Ranch Products of Boulder County in 1950." Boulder Daily Camera, 23 October 1952.

U.S. Department of Agriculture, Rural Development. "Farm Marketing, Supply, and Service Cooperative Historical Statistics." Cooperative Information Report 1, Section 26. Revised August 2004. Cited from <<http://www.rurdev.usda.gov/rbs/pub/cir1s26.pdf> > cited 20 March 2006.

U. S. Federal Housing Authority. "Open this Door to Farm Property Improvement." FHA 136, 1st Edition. Washington, D.C.: Federal Housing Administration, n.d.

Wickens, James F. Colorado in the Great Depression. New York: Garland Publishing, 1979.

"Without Water, Winter Wheat Withers." Boulder Daily Camera, 15 November 1964. At Carnegie Branch Library for Local History, Boulder Public Library System, folder 328 B132 F03, Boulder, CO.

Additional information about specific property types and their listing in the National Register can be found in relevant National Register bulletins, or National Register Multiple Property Documentation Forms relating to their history in Colorado.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 82 Agricultural Resources of Boulder County

National Register Bulletins

U.S. Department of the Interior, National Park Service, National Register, History and Education. Guidelines for Evaluating and Documenting Rural Historic Landscapes (#30). Washington, D.C.: U.S. Department of the Interior, 1989; Revised 1999.

U.S. Department of the Interior, National Park Service, National Register, History and Education. Guidelines for Evaluating and Registering Cemeteries and Burial Places (#41). Washington, D.C.: U.S. Department of the Interior, 1992.

U.S. Department of the Interior, National Park Service, National Register, History and Education. How to Apply the National Register Criteria for Evaluation (#15). Washington, D.C.: U.S. Department of the Interior, 1990; Revised 1991, 1995, 1997; Revised for Internet 1995, 2001, 2002.

*Colorado National Register of Historic Places Multiple Property Documentation Forms*⁸⁹

Autobee, Robert and Deborah Dobson-Brown. "Colorado State Roads and Highways." January 10, 2003.

Doggett, Suzanne and Holly Wilson. "Rural School Buildings in Colorado." March 1999.

Fraser, Clayton B. "Highway Bridges of Colorado." March 30, 2000.

Fraser, Clayton B. and Jennifer H. Strand. "Railroads in Colorado, 1858-1948." August 31, 1997.

Holleran, Michael. "Irrigation and Water Supply Ditches and Canals in Colorado." October 10, 2005.

Photography credits:

Photographs of extant agricultural resources taken by Carol Beam, Historic Preservation Specialist, Boulder County Parks and Open Space, and Deon Wolfenbarger, Three Gables Preservation.

⁸⁹Copies of the MPDFs are available at the Colorado Historical Society, Office of Archaeology and Historic Preservation.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 83

Agricultural Resources of Boulder County

The following Boulder County properties currently listed on the National Register of Historic Places meet the registration requirements under this MDPF, *Agricultural Resources of Boulder County*.

Farms, ranches, agricultural districts and rural cultural landscapes

BOULDER COUNTY POOR FARM

Boulder vicinity (address restricted)

National Register 9/13/2001, 5BL.378, NRIS 01000969

While use of the property as a private farm dates from 1897, it served as a home for the county's less fortunate citizens during a period from 1902 through 1918. The farm complex as a whole survives as a reasonably intact collection of agricultural buildings reflecting the typical design, materials, and construction techniques found in Boulder County during the late 19th and early 20th centuries. The main house remains a good local example of Queen Anne style architecture.

HOVERHOME AND HOVER FARMSTEAD

1303-1309 Hover Rd., Longmont, Boulder County

National Register 1/15/1999, 5BL.555, NRIS 98001555

Constructed of brick in 1913, the terra cotta trimmed Tudor Revival style residence was designed by the acclaimed architectural firm of Roeschlaub & Son for the locally prominent family of Charles Lewis Hover. The exterior includes Jacobethan detailing, while the interior's extensive cabinetry reflects the influence of the Arts & Crafts Movement. The farmstead portion of the site includes several well-preserved, primarily wood-frame, buildings and structures typical of those associated with early 20th-century farming in the St. Vrain Valley. The property is now owned and maintained by the St. Vrain Historical Society.

SHANNON FARM

1341 N. 95th Street, Lafayette vicinity, Boulder County

National Register 10/17/2003, 5BL.7260, NRIS 03001047

One of the last remaining examples of farm operations in Boulder County, the Shannon Farm is representative of the shift in agriculture from crop cultivation to dairy and egg production. It was operated for many years by the Shannon brothers who were innovative in their use of a concrete-floored milk room within the barn, meeting sanitary standards twenty-five years before the passage of pasteurization laws in Colorado. Additionally, the Shannon Farm is an intact example of agricultural-related buildings, some of which display excellent craftsmanship, design, and materials in their construction.

United States Department of the Interior
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section number I Page 84

Agricultural Resources of Boulder County

WALKER RANCH HISTORIC DISTRICT

West of Boulder, Boulder County

National Register 6/14/1984, boundary increase 6/29/1988, 5BL.235, NRIS 84000798/88000756
Established in 1869, when considered as a whole, the cultural manifestations and the land represent a chapter in the history of the settlement and expansion of Boulder County and the eastern foothills of the Rocky Mountains.

Barns and secondary outbuildings

FOX STONE BARN

S. Cherryvale Rd., one-half mile south of US 36, Marshall vicinity, Boulder County

National Register 2/16/1996, 5BL.4125, NRIS 96000070

The circa 1900 Fox Stone Barn is a good example of a method of construction once common in the foothills area of Boulder County. The ready availability of locally quarried sandstone allowed property owners to construct simple stone barns at a time when wood-frame barn designs were much more common throughout the state. It is one of the best surviving examples of this barn type in Boulder County.

Granges and agricultural society buildings

BOULDER VALLEY GRANGE NO. 131

3400 N. 95th St., Lafayette, Boulder County

National Register 12/7/1987, 5BL.408, NRIS 87002009

Built in 1900, the hipped roof, clapboard sided hall includes several subsequent additions that maintain consistency of materials and workmanship. The building has enjoyed a long history of service as a community center in the rural portion of eastern Boulder County.