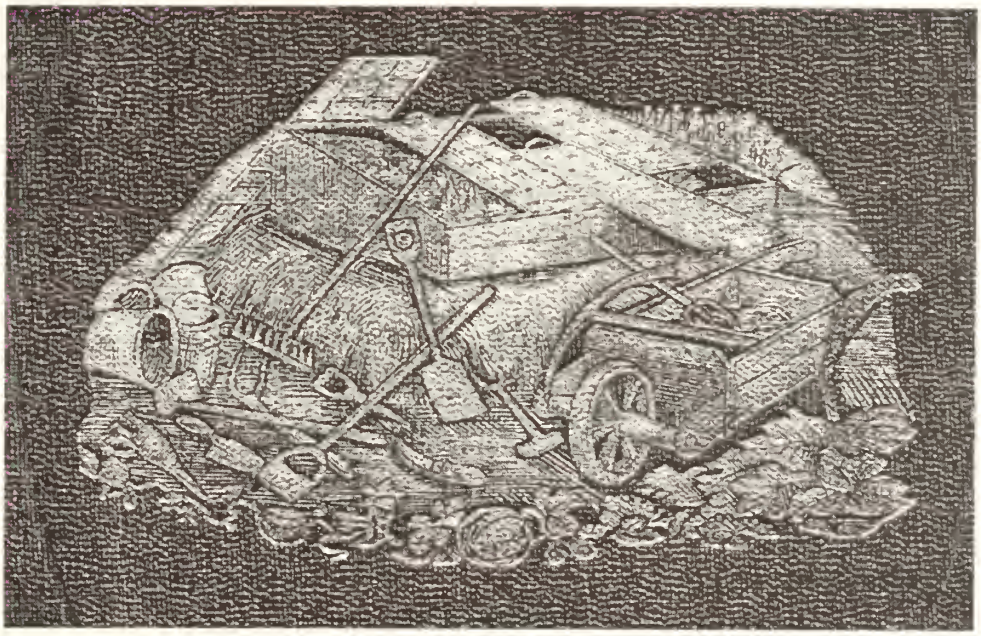
AGRICULTURE IN ANTEBELLUM ST. LOUIS



A Special History Study

Ulysses S. Grant National Historic Site

St. Louis, Missouri

AGRICULTURE

IN

ANTEBELLUM ST. LOUIS

A Special History Study

prepared by

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for

Ulysses S. Grant National Historic Site

St. Louis, Missouri

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Introduction

Ulysses S. Grant National Historic Site was established in 1990 to preserve and interpret the historic site known as White Haven as it relates to Ulysses S. and Julia Dent Grant. During the period 1854 through 1859, Ulysses and Julia lived and worked on the nearly 1,000-acre farm owned by her father, Colonel Frederick Dent. Most biographers and historians have portrayed this period of the Grants lives as one of hardship and failure, while Ulysses struggled to provide for his growing family in a career to which he was unsuited.

This special history study examines that perception by exploring the prevailing agricultural conditions both at White Haven and in St. Louis County during the antebellum period between 1840 and 1860. Although Grant faced numerous challenges while he farmed his father-in-law's estate, his situation did not differ greatly from that experienced by many other farmers. Unless we choose to identify each of them as failures and unsuited to their positions, the perception of Grant as a failure during these years needs to change.

The Grants' experiences at White Haven can be better understood when placed within the context of the wider St. Louis community. General comments about the city during the 1840s and 1850s are provided as background for the discussion of farm life during the antebellum period in St. Louis County. The Grants and the Dents frequently interacted with residents, merchants and others in the city, and would have observed and participated in the many activities and events that transformed St. Louis from a frontier town to a busy metropolis during this period.

While life on a country farm may appear less hectic than city dwelling, the physical work required to make a farm productive is never ending. Today's farmers will find that although technology has made their job easier in some respects, many of their daily activities remain as labor intensive and time consuming as they were during Grant's days at White Haven. It is hoped that readers, who, like myself, have never had the opportunity to live or work on a farm, will come away with a deeper appreciation of daily life in the antebellum period.

I would like to thank Dr. Ross Wagner, a lifetime resident and historian of South St. Louis County, who willingly shared his extensive knowledge of the history of this area, as well as numerous books and documents in his possession. His patience in explaining the intricacies of nineteenth century farming practices to me is greatly appreciated.

1840-1850

Ulysses S. Grant first came to St. Louis in the early fall of 1843, a recent graduate of the United States Military Academy in West Point, New York. He was assigned to Jefferson Barracks, located just south of St. Louis along the Mississippi River. The Barracks was the largest military post in the country in 1843, a supply and command base for troops being sent to forts on the frontier—at that time considered anywhere west of the Mississippi. Easterners still considered St. Louis a frontier town in 1840, despite its establishment in 1764 and its connections to the eastern seaboard and Europe through the port at New Orleans. The proximity of the post to the city made it a reasonably comfortable assignment, and the officers stationed at Jefferson Barracks frequently participated in the social life of the St. Louis elite.

City Life

On his arrival in St. Louis, Ulysses would have observed a bustling river town. City limits had been expanded in 1841 to include 4.78 square miles.[1] The western boundary of the city was slightly over one mile from the riverfront, at today's 18th Street. With the majority of the city's population residing close to the riverfront, the city stretched longer from north to south than east to west. Much of the southwestern part of St. Louis was originally the Commons for the city. Several thousand acres of pasture and timber had provided grazing land for livestock and lumber for residential and commercial construction in the city's early years. In 1836, Mayor John Darby was successful in converting a portion of this land into Lafayette Park, a public parade ground.[2] Chouteau's Pond, a large lake also located in the southwest part of the city, was a major recreational area throughout the 1830s, but was slowly being polluted from residential and factory waste. A manufacturing district that needed water both for operating the plants and for waste disposal was built around the pond in the late 1830s, although commerce remained the city's main industry for several decades.

Construction was booming in the 1830s and '40s. Grant would have seen work progressing on a new courthouse begun in 1839 to replace the original 1826 structure that was quickly outgrown. What St. Louisans now call the "Old" Cathedral was less than ten years old in

[1] James Neal Primm, *Lion of the Valley: St. Louis, Missouri*, 151. Dr. Primm's work has become the standard for the history of St. Louis, especially the political and economic development of the city. I have referenced it extensively in the portions of this study which provide information about St. Louis during the 1840s and 1850s.

1843, built to meet the religious needs of the growing Catholic population of the city. Hundreds of homes were built in the 1830s, and manufacturing and commercial buildings were being constructed. Most of these newer buildings were made of brick, in part because of its longevity and also because lumber was becoming scarce in the immediate area.

The population residing within the city limits in 1840 was 16,439, but by 1845 it had almost doubled to 35,390 due mainly to the influx of German and Irish immigrants.[3] Included in the 1840 population figures were 1,531 slaves, and 531 free African Americans, or about twelve percent of the city's population.[4] The predominantly Catholic immigrants were perceived as a threat to the established social elite in the city. As a result, the Native American (Know Nothing) Party was founded in St. Louis by 1840 to counteract the immigrant population. The Party was anti-Irish and anti-German, but was mostly anti-Catholic.[5] Despite the efforts of the Know Nothings, by 1845 the Democrats, mostly naturalized immigrants, had the majority in the city, and between 1847 and 1849 three Irish mayors were elected to lead the city.[6]

When the city limits were expanded in 1841, the city was divided into six wards, numbered from south to north. The first ward was south of Mill Creek (south of Interstate 64 today), and its population increased the fastest in the 1840s, as immigrants and working people arrived in the city. Housing was relatively cheap in the first ward, with lots costing about $1.50 to $4.00 a front foot in 1848. The second ward included the southern tip of the business district and Chouteau's Pond, where the descendants of the original Creole families resided. The third and fourth wards included the majority of the businesses, as well as the richer residential areas where individuals such as the Lucases, the O'Fallons and the Christys lived. Residential lots in the third ward on Fourth Street sold for $200 a front foot in 1848, and this would soon increase. At the northern end of the city, the fifth and sixth wards included immigrant and working class residents, similar to the first ward.[7]

Salaries for the working class individuals were low following the nationwide 1837 depression, which lasted for five years. Skilled artisans—shoemakers, hatmakers, and printers—earned between four and six dollars per week, while unskilled laborers earned sixty-five cents a

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[2] William Barnaby Faherty, *The Saint Louis Portrait*, 56-7.
[3] Primm, 147.
[4] Sixth Census, 412-413.
[5] *Ibid.*, 171.
[6] *Ibid.*, 173.
[7] Primm, 152-3.

day for a twelve hour day. These wages were to stay low throughout the antebellum period, although salaries in St. Louis may have been somewhat higher given the demand for labor as the city built upward and outward.[8]

As the city grew, so did the need for municipal services such as a reliable and clean water supply, professional fire and police organizations, an improved wharf, a transportation system, and a waste disposal system. A municipal-operated water supply was provided to residents as early as 1835, when the city bought out the privately owned water company. Needs were so great over the next several decades that the system was almost constantly undergoing improvements and expansion. In 1843, the year Grant arrived in St. Louis, capacity was increased to 400,000 gallons. By 1845, a new reservoir was constructed that held over one million gallons of water, but this needed to be expanded once again in 1849 with construction of a solid oak reservoir that held four million gallons.

Fire and police protection were maintained by volunteer forces that often fought amongst themselves over territory and bragging rights. Most of the volunteer groups worked in neighborhoods where they lived, usually associated with a particular ethnic group. It would be several more years before professional departments were established.

The riverfront was St. Louis' link to the rest of the country. According to Julia Dent Grant, her father had been one of the first to purchase a steamboat, "while they were yet experiments, to bring his coffee, sugar, etc., from New Orleans."[9] By 1835 as many as thirty-eight steamboats were loading and unloading at the wharf every day.[10] Natural erosion up river deposited sand on Duncan's Island and nearly connected it to the St. Louis banks, making some sections too shallow for boats to dock. One traveler noted that the boat she was traveling in was stuck for two hours on a sandbar within fifty yards of the shore. This, along with the increase in the river traffic in general, exacerbated the crowding at the levee. To satisfy the demands of the boat owners and merchants, the center of the wharf was paved with stone in 1845, but this did not ease the situation for long. Captain Robert E. Lee was given $50,000 by Congress in 1837 to

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[8] Robert Lacour-Gayet, *Everyday Life in the United States Before the Civil War, 1830-1860*, 115.
[9] Julia Dent Grant, *The Personal Memoirs of Julia Dent Grant (Mrs. Ulysses S. Grant)*, 43; hereafter JDG, *Memoirs*.
[10] Faherty, 53.

build underwater dikes that would redirect water to scour the island and the western bank, but due to disputes with Illinois and lack of funds the work was not completed until 1854.[11]

The growth in population forced residential and commercial expansion north, west and south. Rutted dirt streets, which became rivers of mud whenever it rained, were quickly becoming congested. To accommodate the increasingly heavier horse and wagon traffic, and alleviate the muddy mess, Main Street, the north-south corridor between Walnut and Market, and several east-west streets, including Olive and Chestnut were paved with stone.[12] In an attempt to reduce some of the overcrowding, Erastus Wells began the first mass transportation system in the city when he initiated his omnibus service in 1843.[13] An early predecessor of streetcars and busses, the omnibus was pulled down the street by horsepower, stopping at designated corners for passengers to embark and disembark. Pedestrians continued to pick their way along the city sidewalks, however, that were spread with a thin layer of cinders that did little to protect shoes and clothes from the mud.[14]

Moreover, walking through the city streets would have entailed stepping over and around sewage in open gutters, since no waste disposal system had been established. Although they did not know about bacteria and germs, many of the city residents realized that this sewage was a prime breeding ground for disease. When cholera first struck in 1832, St. Louisans formed a committee that recommended a day of prayer and fasting to keep the epidemic from the city. Another committee tried to prohibit consumption of "watermelon, green corn, cucumbers, cabbages and . . . fresh pork," in addition to requesting that the city "prescribe the manner of erecting necessaries" to reduce the likelihood of disease.[15]

Country Life

Several of the elite families of St. Louis maintained two homes—one in the city, occupied when the social season was in full swing, and the other in the country, where summers were spent to avoid the heat and pollution that bred disease.[16] Colonel Frederick Dent purchased the farm along the Gravois River, some twelve miles from the heart of the city, in 1820 as a

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[11] Primm, 155-56. The eventual cost to the city was $250,000. Elizabeth Sargent, Letters, quoted in Michael Long, *A St. Louis Sourcebook, 1840-1860*, 77.
[12] Faherty, 46-47.
[13] Primm, 198.
[14] Katharine Corbett, *In Her Place: A Guide to Women's History in St. Louis*, 47-48.
[15] Primm, 161.

summer home for his family. By the early 1830s the Dents were residing full time at the estate he named White Haven, along with the enslaved African-Americans who labored to make the farm productive. Colonel Dent gave up his successful mercantile business in the city to enjoy the life of a southern gentleman on his large estate.

According to the 1840 census, all of St. Louis County (which included the city at that time) had a population of 35,978. With 16,439 residents in the 4.78 square mile area of the city, the rest of the county residents (19,509 people) were spread over more than 550 square miles of land. Of these, 3,085 were enslaved, and 327 were free African Americans (over 17%).[17] The county was initially divided into four townships—Carondelet, Meramec, Bonhomme and St. Ferdinand. All of south St. Louis County was within the Carondelet Township, which was divided into the Gravois and Mattis Creek settlements.[18] The minimum amount of land an individual could purchase from the government according to early land acts was 160 acres at two dollars per acre. Other tracts had been part of land grants by Spanish officials prior to the Louisiana Purchase and later confirmed by territorial judges. Following the Panic of 1819, minimum requirements were reduced that allowed for the purchase of government lands in 80 acre sections at a cost of $1.25 an acre. Occasionally a group of individuals would pool their funds, one person would be designated the purchaser, and then the land would be subdivided by the "purchaser" according to the amount each individual contributed. This was most often done by German immigrants who arrived with funds for the specific purpose of purchasing land when they arrived in St. Louis. In the Carondelet Township, approximately 40 families moved to the area following the 1820 Land Act that allowed for these smaller sections to be purchased, joining the large landholders who had established themselves in the area much earlier.[19]

Colonel Dent's landholding of approximately 850 acres was about average for a farmer in the south St. Louis County area of Carondelet Township. Some farms were much smaller, such as the thirty acres owned by John Wells, while others were much larger. James W. Sigerson had

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[16] Primm, 154.
[17] Sixth Census, 412-413; *St. Louis County Fact Book*.
[18] Sappington-Concord Historical Society, *Sappington-Concord: A History*, 11; hereafter Sappington. Under the Land Ordinance of 1785, which was later applied to the Missouri Territory, surveyors divided the land into townships of that were divided into thirty-six sections of one square mile each, or 640 acres. Initially, public lands were sold in full sections, but laws were later revised to allow for smaller portions to be distributed.
[19] Sappington, 12.

an estate of 1,600 acres and John "Jack" Sappington's 2,400 acre farm was most likely the largest in the area.[20]

Grant first visited White Haven in 1843, to meet the family of his former roommate at West Point, Fred Dent. His subsequent travels back and forth from Jefferson Barracks exposed him to many of the families who owned farms throughout the south county area. Ulysses was introduced to Julia Dent in early 1844, when she returned to White Haven after attending a finishing school for young ladies in the city. It appears that Grant spent much of his time visiting with the Dents and taking walks or horseback rides with Julia. It is doubtful that as a guest, even one who visited on an almost daily basis, he would have participated in any of the aspects of running the farm. Yet he would have soon noticed the numerous activities done mostly by the enslaved laborers that were required to maintain Colonel Dent's estate. His childhood years of working with horses and completing all of the tasks associated with farming gave him an awareness of the difficulties and rewards of land ownership.

Grant remained at Jefferson Barracks until the summer of 1844, when his regiment was transferred to Louisiana. During the four years he was away from Julia and White Haven while serving in Texas and Mexico, his letters to her reflect his desire to return to Julia's side to walk or ride along the banks of the Gravois. When he returned to St. Louis in 1848, he was undoubtedly more interested in his wedding, which took place on August 22, than in activities at his new father-in-law's farm. Although Grant did not physically participate in the farm life in Carondelet Township in the 1840s, his association with the Dents and other St. Louis property owners potentially influenced his 1854 decision to become a farmer himself.

There were two types of farmers in Carondelet in the mid-nineteenth century. Both were basically self-sufficient, but with different emphases on their main cash crops. The large land owners who were some of the early settlers, such as the Sappingtons, the Eddies, the Mackays and the Dents, were considered grain farmers. These large estates, most of which operated with enslaved labor, produced grain crops of wheat, barley, oats, rye, corn and hay, much of which was sold to merchants and traders in the city. Other marketable goods included hemp, tobacco, lumber and hides.[21] Whereas St. Louis had imported flour from the Ohio valley before 1830, the growth of grain farms in the Missouri River valley soon provided more flour than St. Louis

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[20] U. S. Government, *Seventh Census or Enumeration of the Inhabitants of the United States in 1850*; Sappington, 22.

needed, so that 9,000 barrels of flour were being shipped south by 1843.[22] Wheat was the main cash crop, with yields ranging anywhere from six to forty bushels per acre, depending upon the soil and the method of cultivation. Corn might yield twenty-five to seventy-five bushels per acre, again depending on the fertility of the soil.[23] Vegetables and orchard produce were usually grown for personal consumption on these large estates rather than for market.

Truck farmers, mostly German immigrants who came in large numbers in the 1840s, had smaller farms that were worked by family members and supplemented by hired hands during planting and harvesting seasons. These farms grew a variety of fruits and vegetables that were delivered to regular customers in the city of St. Louis as well as "trucked" in and sold in markets such as the Lucas Market, established in 1849 at the corner of St. Charles and Fourth Streets, or the one at Twelfth and Market. These truck farmers had much less cultivated land for grains, and harvested only enough hay and corn to feed their livestock.[24] On all farms, crops were grown as food for individuals living on the farm, fodder for animals, or to sell at market.

All farmers kept a variety of livestock that served several purposes. Mules, horses and oxen could provide transportation or pull plows, harrows and reapers; the manure was used for fertilizer; and when steers became too old they were fattened, butchered and eaten. Cows provided milk as well as meat. Pigs were most frequently used for food, and poultry provided meat and eggs. Sheep were mainly kept for the wool they produced, and even dogs and cats served useful roles in rounding up sheep or keeping the ever present mice and rats to a minimum. Ducks were often kept to provide feathers to fill pillows or bed ticks.[25]

Although no individual agricultural census records are available for 1840, a compendium of the Sixth Census printed in 1841 listed the following information for the entire St. Louis County area. According to the compendium, 861 persons were employed in agriculture in St. Louis County during 1840. This figure most likely represented only the heads of household, rather than everyone who actually participated in making the farm productive. Quantities of livestock, grain, and other goods produced in St. Louis County in 1840 were recorded as indicated in Table 1.

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[21] Sappington, 21.
[22] Primm, 202.
[23] *History of Franklin, Jefferson, Washington, Crawford and Gasconade Counties, Missouri*, 206.
[24] Sappington, 29; McCune Gill, *The St. Louis Story*, 44.
[25] Eliot Wigginton, Editor, *Foxfire 3*, 95-97. There are some twelve volumes of the *Foxfire* series. Hereafter the reference will indicate Wigginton, and Roman numerals to reflect the appropriate volume.

Table 1. Livestock, Grain and Other Goods Produced in St. Louis County, 1840

Livestock:	Horses & Mules	2,026
	Neat Cattle	8,133
	Sheep	2,424
	Swine	11,496
	Poultry	1,871
Grain (in bushels[26]):	Wheat	6,896
	Oats	5,577
	Rye	6,138
	Buckwheat	1,908
	Indian Corn	477,879
Other Produce:	Potatoes (bushels)	90,988
	Wool (pounds)	9,081
	Wax (pounds)	1,800
	Hay (tons)	5,203
	Hemp & Flax (tons)	9,905
	Tobacco (pounds)	197,045
Value of Dairy Products:		$19,350
Value of Orchard Products:		$20,035
Value of Home/Family Made Goods:		$13,495[27]

Being one of the large landholding families in the area, the Dents were most likely grain farmers. In addition to these crops, Julia recalled that livestock such as pigs, hogs, cattle, horses and poultry were raised on the farm, as well as peaches, apples, apricots, nectarines, plums, cherries, grapes and other fruit from the orchards and gardens for consumption by the Dents and the enslaved men and women on the farm.[28] Ownership of one of the first threshers and one of the first reapers in the community no doubt gave Colonel Dent added status among his neighbors. Julia remembered that "people came from far and near" to see the thresher work.[29]

[26] *Webster's New World Dictionary* defines a bushel as "a unit of dry measure for grain, fruit, etc., equal to 4 pecks or 32 quarts (35.24 liters)."
[27] United States Government, *Compendium of the Enumeration of the Inhabitants and Statistics of the United States as Obtained at the Department of State, From the Returns of the Sixth Census.*
[28] JDG, *Memoirs*, 33-34.
[29] *Ibid.*, 43.

The Farmers' Calendar

Farmers spent the early months of the year doing various jobs.[30] One of the major tasks was to do the butchering for the year. The advantage of butchering at this time was that the meat cooled quickly in the winter cold, and pests such as flies were at a minimum. Most meats were preserved rather than used fresh, because it was considered unhealthy to eat freshly cut meat. Butchering and the subsequent preservation of the meat required the help of several men and women. On slave plantations, the work was done with enslaved labor. On farms without slaves, neighbors helped each other, going from one farm to another to assist in the butchering.

To butcher a hog, it was killed and then hung upside down with its throat slit to drain the blood. The next step was to remove the hair from the hide, done by scalding the carcass and scraping off the loosened hair. After removing the hair from the hide, the head was removed and the animal was split lengthwise and hung to remove the entrails. The meat was cooled for several hours and then quartered and cut into manageable pieces. Once it was cut, it could be cured immediately, or sometimes farmers waited two days, sprinkling the meat with powdered saltpetre (potassium nitrate) in between, to protect it from insects.

The rest of the process involved the women. The meat was first soaked in brine, called "pickling" the meat. There were numerous recipes for brine, although most of them contained the same ingredients but in varying amounts. A typical brine recipe used "seven pounds of course salt, five pounds of brown sugar, two ounces of saltpetre, half an ounce of pearlash[31], and four gallons of water." This amount processed approximately one hundred pounds of meat. Molasses could be substituted for some of the brown sugar. This mixture was boiled until all dirt from the loaf sugar separated so that it could be skimmed off the top of the pan. It was then set in tubs to cool while the trimmed and cut meat was placed in casks. The cooled brine was poured over the meat, covering it completely. To ensure that the meat did not float up and become exposed to the air, a heavy stone was placed on top of the meat. The length of time that the meat was kept in the brine varied greatly, depending upon the size of the cuts, the type of meat, and the weather. The shortest time was ten days while a pork ham might require twelve weeks to pickle.

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[30] The following information is compiled from a 1981 *Missouri Historical Review* article and the first *Foxfire* book. Rather than put footnotes after each paragraph, I have chosen to place one footnote at the end of the discussion on butchering.

[31] The white ash from the hearth fire was commonly used in baking to leaven the bread or cake, as in ash cake.

After the pork went through the curing process, it was either used immediately, or preserved by smoking. If the family wanted to use the cured meat, it was removed from the brine, washed in clear water, soaked overnight to remove more of the salt, and then cooked. Smoking was the best way to preserve the meat for longer periods, since, once smoked, it did not have to be kept refrigerated or used immediately. This could be done in a smokehouse, or in a barrel or hogshead. The pork was kept away from the fire so as not to be cooked, but to allow the smoke to penetrate. The fire could be made of various items, such as corn cobs, smoldering sawdust from a hardwood tree such as maple, green hickory, or smoldering rotten maple, bass or white wood. Smoking took anywhere from two weeks to four or more weeks, again depending upon the size of the cut. The fire needed to be kept smoldering the entire time, requiring the addition of more wood and coals on a regular basis.

Some pork was lost to spoilage, and it was also subject to insect infestation. One agricultural magazine suggested rubbing the meat with ground black pepper before curing and smoking it. Another recommended method was to dip the smoked meat in a strong solution of lye, supposedly protecting the pork for a year. After this process was complete, the women wrapped the smoked meat in muslin cloth and hung it from rafters (to keep animals from getting to the pork) until it was ready to be used.

Cows were butchered in much the same way, but the hides were tanned to make leather. The cuts of beef were pickled, but in a slightly different manner than for hogs. The brine that was poured over the meat was weaker, and every two days the brine would be drained, scalded, skimmed and poured back on the meat until it was perfectly clear of blood. The beef would then be lightly salted and placed in casks, with another brine poured over the top until the meat was immersed. This brine recipe included "eight gallons of boiling water, two pounds of brown sugar, one quart of molasses, four ounces of saltpetre and salt." The meat could be left in this brine until ready to use (it reportedly could be kept up to a year), or removed and placed in new casks with salt between each layer of meat.

The smaller cuts of beef were boiled, chopped and packed in molasses, forming mince meat which kept for several months. Another method used for beef preservation was drying. The meat was cut into thin strips and hung on the south side of the house (which received the most sunlight) to thoroughly dry. It was then placed in a crock and stored in a cool, dry place. Another

method of drying beef was to smoke it in a structure that had rods suspended inside. Thin strips could be cured in about twenty-four hours using this method.

Nothing was wasted when the animal was butchered. The fatter cuts of pork were made into sausage, using the cleaned and scraped hog entrails that had soaked in brine for two days and then placed in a lye water solution for twenty-four hours as the casing. A typical recipe required "thirty pounds of meat, ten ounces of fine salt, three ounces of sage, one and a half ounces of pepper, two ounces of cinnamon." The head, feet, tails and ears were cleaned, soaked in a brine for approximately one week, and then boiled until tender, usually for eight to ten hours. They were then salted and packed in a stone jar, covered with hot spiced vinegar, and sealed until ready to use. Another recipe called for using these pieces to make hog's head cheese, which was not a dairy product at all, but was called this because the meat was pressed into compact cakes and weighted similar to the method for making cheese. This "cheese" could be kept all winter, and was often sliced and eaten at breakfast or lunch. Other recipes for using all portions of the slaughtered animal included meat pies, gravies, and sauces.

The last item to be used was the fat, made into lard and used for cooking, soap, and as a lubricant. The fat was cut from the slaughtered animal, cooled and separated, and put in a pot to boil until it formed a clear liquid. It was then cooled and placed into stone jars, covered, and stored in a cool place. Tallow from cows and sheep was prepared the same way, to be used in making soap and candles.[32]

Farmers also mended tools and prepared for spring planting during the winter months. Turning unimproved land into cultivated fields took several years, depending upon what was currently growing on the land. Any trees had to be chopped or burned down. The remaining trunks and roots were usually worked around for several years, until they rotted enough for easier removal. On plantations with enslaved labor, the young slave children were assigned the job of going through the fields and removing any large stones, to avoid damaging the plow. Removing roots, tree trunks and stones from the field was called grubbing, a tedious and difficult job that some farmers paid four or five dollars an acre for someone else to do.[33] Then the ground was plowed, a time consuming job, especially on land that had not been previously cultivated. The farmer may have spent much of his time during the winter months felling trees and hauling

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[32] Janet Bruce, "Of Sugar and Salt and Things in the Cellar and Sun: Food Preservation in Jackson County In The 1850s," *Missouri Historical Review*, Vol. LXXV, No. 4, 426-434; Wigginton, I, 189-201.

timbers, as well as cutting firewood for the following year. As early as mid-February farmers would begin purchasing seed for vegetable gardens and pastures.[34] As soon as the ground thawed, the plows would be hitched to the oxen or horses to break up the ground. Most plows were of similar design and material to withstand the heavy use they received. The Eagle plow, a popular plow with a long, curved moldboard turned the soil to one side as it cut the furrow.[35]

Picking the best time to plow was often difficult and the process was time consuming. The soil, if too wet and of a clay composition, stuck to the plow and caused delays. Plow blades, originally made of cast iron, became dull after a short time and needed to be sharpened frequently. There is no evidence to confirm a blacksmith in the immediate area at this time. Farmers often had two plow blades so that one could be taken to a blacksmith in the city and sharpened while the other one was being used. Occasionally the farmer may have tried to do this himself to save the travel time. On newly cultivated ground, a two-man team with a 24-inch plow pulled by three yoke of oxen could turn three acres a day. For fields that were being replanted, much less time was needed. After the furrow was cut, a harrow was pulled over the same ground to break up the larger clods of dirt, and even out the ground or cover the newly planted seed. On farms that used enslaved laborers, the younger enslaved children might follow behind the plow, breaking up the clods of dirt with their hands or feet, or a sturdy stick. The early harrows were designed with wooden pegs that were driven into a timber so that the peg poked through the timber. These pegs, as well as the later-designed harrows with iron teeth, broke easily in newly cleared ground that had rocks or other objects such as tree roots. Several different designs of harrows were used, either triangular or square, alone or in multiples. Two square harrows could smooth a six-foot area, allowing the farmer to harrow about ten acres a day.[36]

After plowing and the first harrowing, seed was planted. Early methods included a handcrank, fiddlebow, or wheelbarrow seeder, but by the 1840s Seymour's Broadcast Sowing Machine was patented, allowing for more consistent planting. The handcrank and fiddlebow seeders had a bag that was carried using a shoulder strap, and as the farmer walked across the field he turned the crank or worked the bow back and forth to distribute the seed. Since the seed was spread over a small radius of several feet, even distribution of the seed depended upon the

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[33] Perry Sappington, Logbook, unpublished record book, unpaginated.
[34] Christhof Schaaf, Day Book 10, 343, 354; unpublished record book.
[35] Appendix A includes copies of photographs of some of the tools described in this section.
[36] R. Douglas Hurt, *American Farm Tools*, 21; hereafter Hurt, *AFT*.

farmer maintaining consistent cranking and walking speeds. The wheelbarrow seeder had a long box that allowed seed to be dropped as the wheel turned. For each of these seeders, a harrow had to be pulled back over the ground to cover up the seed after it was dropped. Advantages of the Broadcast Sowing Machine when it became available were that the seed was released closer to the ground, reducing the amount scattered in the wind, and the seed dropped more consistently, resulting in a more uniform crop distribution (not too thick or too thin as could result with the crank, bow or wheelbarrow seeders). On average, it took approximately an hour to an hour and a half to sow an acre of wheat using these methods, using one to two and a half bushels of seed per acre, depending upon the individual's rate of distribution. Thus, for a fifty-acre field, approximately thirty days of labor would be needed to plow, harrow, sow fifty to one hundred or more bushels of seed and harrow again to cover the seed. Of course, with several teams working, the job could be completed in a shorter amount of time. The use of enslaved laborers and other hired hands would also reduce the amount of time needed, allowing farmers such as Colonel Dent to have as many as 250 acres of his estate under cultivation with one crop or another, considered "improved land" in census records.

Almost as soon as the sowing was completed, weeding began. This was either done by hand with a hoe, or, by the 1840s many farmers had adapted the harrow by removing the front tooth so it could go over the planting row and the other teeth would till up the weeds on either side of the plant. The harrow was only used for the first weeding, since by the second weeding the crop was taller and would have been damaged as the harrow passed over the new stalks. Corn and most grains were weeded as many as four times during a season. Hoeing by hand remained the standard method for weeding after the plants grew taller than the harrow throughout the 1840s and 1850s.[37]

Much of the land under cultivation was planted in grass seed, to provide hay for livestock. Grasses such as timothy, red-top, red clover and orchard grass were frequently used for grazing pastures and hay. When the grass reached its optimal height in June or July, but before it went to seed, it needed to be cut. Most of the harvesting was done by hand, unless the farmer was wealthy enough to have a thresher. Men wielding scythes would begin working around sunrise, harvesting one to one and a half acres per person before quitting sometime after sunset. A horse-drawn mowing machine could shorten the amount of time needed to cut the hay,

[37] Hurt, *AFT*, 35-37.

but men or children needed to follow behind with pitchforks or a "tedding machine" drawn by a horse to spread the hay out to dry. Before the day was done, the cut hay needed to be raked (usually with a horse-rake) into "windrows" or long rows, throughout the field. They would continue to turn the hay to dry it for another day, unless the weather indicated rain when neat "cocks" or heaps would be made of the hay to keep out rain. Once the hay was thoroughly dry, it was gathered into a barn or piled in large stacks until needed.[38]

When the time had come to harvest the grain, farmers used the cradle scythe to cut the sheaves close to the ground, an improvement over the sickle which allowed an individual to harvest only three-fourths to one acre per day. By comparison, the cradle scythe tripled the amount harvested by keeping the harvester upright and piling the cut sheaves which were then bound by others following behind. Usually two cradlers followed by three binders could stack up to 1,000 sheaves per day.

The Hussey reaper was sold commercially in the 1830s, while the McCormick reaper was not introduced until the early 1840s. According to one source, Hussey's reaper was best suited for cutting hay rather than grain, but farmers soon learned that this new invention would pay for itself in a short time, due to savings in labor, less loss of grain, and amount of straw saved.[39] However, neither one of these tools became common on farms until after the Civil War.[40]

Once the harvesting was done, the grain needed to be separated from the straw and chaff. This work was usually completed during the early winter months, after the grain had a chance to dry out completely. Sheaves were brought from the field into the barn, where threshing (removing the grain from the heads of the sheaves) began. In the early nineteenth century many farmers had horse-powered threshers that would remove the grain from the straw much faster than hand "flails" or horse-treading had done before. Yet both the grain and the straw fell to the floor, which meant that the straw had to be raked, the grain swept up, and then winnowed. Winnowing removed the chaff from the grain, and was initially done out of doors where a wide, shallow basket of grain would be tossed up, the chaff would blow away, and the grain would fall back into the basket. By the 1840s threshing machines were redesigned to complete the threshing, separating and winnowing in one operation. One man brought the bundles to the

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[38] Hank Trent and Linda Trent, "Farm Life, Month By Month," *The Citizens' Companion*, 24; *History of Franklin, Jefferson, Washington, Crawford and Gasconade Counties, Missouri*, 206.
[39] Hurt, *AFT*, 40-45.
[40] Lacour-Gayet, 112.

machine; another fed the sheaves into the thresher; one held the bag to catch the grain, and one raked the straw away as it fell from the thresher. With these four men and the power of two horses, 100 bushels of grain could be threshed per day.[41]

After threshing, a portion of the grain was taken to a mill for grinding. John "Jack" Sappington had a large tread grist mill that many of the farmers in the area might have used to grind wheat into flour for household uses. Some grain would be kept for the next year's planting and any excess grain was sold to millers or grain merchants in the city that would sell the grain for export.[42]

Corn harvesting could not be handled with a reaper. This task remained a labor and time intensive job until the 1880s. In the nineteenth century corn was mostly used as fodder for the animals rather than food for human consumption. Because it did not hurt the corn to remain on the stalk corn was usually the last grain harvested, after haying and autumn plowing was finished. The corn stalks were cut low to the ground with a corn knife, gathered into bundles, and placed into a shock (which had as many as 150 stalks in it). This was not simply a matter of stacking the stalks against one another, since improper stacking could result in the shock falling or the crop rotting because water did not drain properly. Several methods were used to stack the corn, with wooden tools assisting in the process. Later, usually during the winter months when other activities were less pressing, the ears would be picked from the stalk, husked and taken to the corn crib.[43] When more corn was grown than could be used as feed on a farm, pickers would go through the rows and pull the ears off the stalk. A wagon pulled by horses would move through the fields, and a picker might pick as much as 100 bushels per day. This corn was then sold to other farmers or to livery stables and markets in the city.[44]

On farms with enslaved labor, the corn was husked by hand at large "huskings." Julia recalled in her *Memoirs* that slaves from several nearby farms would come together for "corn shuckings of which they also made a feast; they would pile the freshly gathered corn in a rick ten or twelve feet high and, it seemed to me, a hundred long."[45] On other farms, husking pegs and gloves with iron spikes were used to strip the husk off the ear of corn, allowing the worker to husk one acre of corn per day. The next step was to shell the corn, or separate the kernels from

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[41] Hurt, *AFT*, 67-73.
[42] Sappington, 22.
[43] Hurt, *AFT*, 57-58.
[44] *Ibid*, 62.

the cob. The Burrall sheller pushed the ear of corn through a tube, a blade inside cut the kernels off which fell into a bucket, and the cob was discharged to the side.[46] The dried corn husks might be used for ticking (stuffing) for the beds for the enslaved on the farm, while the stalks and cobs could be plowed back into the soil or used as fodder or bedding for the livestock.

Vegetable gardens required similar soil preparation and special gardening tools. *The Young Gardener's Assistant*, written in 1832, explained the exact process for planting vegetables, herbs, and medicinal plants.[47] After the soil was tilled, manure and other compost was mixed into the soil. If enough manure was not available for the entire garden, then it was concentrated in the beds of the plants that most needed it: broccoli, cauliflower, cabbage, lettuce, spinach, onion, radishes and salads (a common term for green, leafy vegetables rather than our twentieth century idea of a salad). During dry weather ashes, soot, tobacco dust and lime were used to kill insects looking for the moisture from new seedlings.[48]

Several strong garden rakes or drills were needed to create holes at designated intervals for the seed. It was recommended that rakes have five teeth, each about two inches long and tapered to a point so that a maximum two inch deep hole would be made when the rake was pressed down to form uniform depth for the seeds. The teeth might be set two, eight, twelve or fourteen inches apart, depending upon the type of seed being planted to allow appropriate space for growth.[49]

Within a garden, individual beds could be five to ten feet square, with a three or four foot wide border around each bed. A portion of this border might be used for flowering plants, if a separate flower bed was not used. The entire garden would be surrounded by a three to six foot wide walk, with a five to ten foot wide border around that. It is assumed that this border helped to keep a clear area so the garden would not be overgrown with grass, weeds or other plants to hinder the vegetable growth, and to ensure loose soil for developing roots. All kinds of vegetables could be grown in these individual beds, as well as fruit vines such as gooseberries, raspberries, strawberries and currants. The earliest harvested fruits and vegetables would be planted in the beds along the east, south and west sides of the garden, to get more of the sun. Those young plants, slips and cuttings that needed to avoid the intense heat of the sun would be

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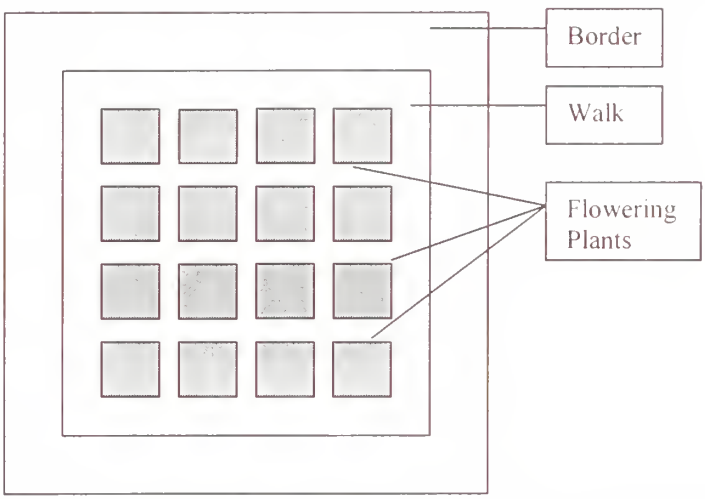
[45] JDG, *Memoirs*, 42.
[46] Hurt, *AFT*, 65.
[47] T. Bridgeman, *The Young Gardener's Assistant*.
[48] *Ibid*, 3..

placed in the northern facing beds where it was shady and cooler during the hot summers. The author of *The Young Gardener's Assistant* also stressed that trees should not be planted in or near these "kitchen gardens" even though they would provide the shade needed by some plants. Roots of trees would take away moisture from the plants, air circulation would be hindered during the summer when trees were in full leaf, and the "dropping of trees" was "particularly injurious to whatever vegetation it falls upon."[50] The following diagram represents a typical garden set out in the above described format.

Diagram 1. Recommended Layout of Kitchen Garden

North—Shady and cool for raising young plants and cuttings that needed to avoid intense heat of sun.



Earliest fruits and vegetables planted on East, South and West side of garden.

Most important for vegetable gardens was to keep a book to record when the ground was tilled and when seeds were planted, in order to know when to expect the young plants to sprout, as well as for regulating crops according to harvest. In addition, it was important to rotate crops within the beds to avoid disease or poor nourishment.[51]

[49] *Ibid.*, 6.
[50] *Ibid.*, 1-2.
[51] *Ibid.*, 3.

The author did not recommend specific days for planting, although he did advocate early sowing and planting, provided the soil was adequately prepared. His planting dates allowed for a week to ten days' window of opportunity, leaving the gardener to adjust according to his climate and current weather conditions.[52] After the seeds were sown, they needed to be covered up, either by a rake, or a roller if the ground was dry, to protect the seed from flies, grub worms and other insects.

A typical Missouri garden might include cress, artichokes, egg plants, rhubarb, kale, lima and yellow beans, beets, cauliflower, cabbage, carrots, celery, corn, cucumbers, lettuce, melons, onion, parsnips, peas, potatoes (Irish and sweet) pumpkin, radishes, spinach, squash, tomatoes and turnips. The leafy greens and some of the vegetables were used immediately as they ripened during the growing season, but others were grown to provide vegetables during the winter months. Some of these, such as turnips, potatoes, beets, carrots, squash, pumpkin and onions kept for several months in a root cellar, without much preparation. They were harvested before the first frost, and stored in baskets or wooden bins that were covered with straw to keep them warm and dry. Carrots, beets, parsnips, and sweet potatoes were also layered in wooden bins with sand to keep pieces from touching one another. Although sweet potatoes yielded a large crop per acre, they did not keep as well over the winter, and farmers lost as much as half of their crop. Cabbage was either buried in a dirt pile outside, or stored in a cask in the root cellar. Cauliflower could actually be replanted in the cellar, and kept throughout the winter.

Other preservation methods for vegetables were drying and pickling. Pumpkin slices, corn and green beans were dried in the sun, but dried beans needed to be boiled for a longer time before serving to make them more tender. Pickling of vegetables was similar to that for meat, in that the vegetable would be soaked for a time in brine, drained and then stored in a vinegar solution. Everything from onions to cucumbers to cabbages and mushrooms would be pickled in a similar manner.

Fruits were more difficult to preserve, since they are softer and contain more sugar, causing them to spoil much faster. To store them whole, they were layered with sand in a container, making sure each piece did not touch other pieces and all were kept cool and dry. A keg of apples harvested in September and sealed with mortar at the seams reportedly kept fresh until the following July. Probably the most common method of preserving fruit was by drying

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[52] *Ibid*., 3-4.

the slices in the sun or in a brick oven overnight. The dried pieces would then be wrapped in cotton or linen bags, and hung in a cool place. To prevent worms, the dried fruit might steamed over a kettle of boiling water twice during the winter season. Another method was to sprinkle the fruit with whiskey before storing it in barrels or boxes.

Fruit preserves were made following a three-step process. First the fruit was washed and the stems were removed. One pound of fruit would then be covered with a half pound of sugar and set aside for two or three hours to draw out the juices. This mixture would then be cooked over a low fire, gradually adding another half pound of sugar and boiling for fifteen to twenty minutes. Finally, the mixture would be poured into jars and covered with paper or sealed with corks and stored in a cool, dry place. Other methods used less sugar, a shorter cooking time, or a honey solution to reduce the expense and to retain more of the fruits' flavor. As with vegetables, fruit could be pickled and then stored in a sweet, spiced vinegar solution.[53]

These are only some of the numerous activities that occupied the typical farmer in the mid-nineteenth century. Many individuals, including family members, enslaved individuals, and hired help, were required to complete the tasks that would provide sustenance for the residents and some level of profit for the owner. Julia recalled that her father, after having experienced the "the repose of a country life . . . did not like the mercantile business" any longer, and "gradually gave up all occupation and passed his time in the summer months sitting in an easy chair reading an interesting book, and in the winter, in the chimney corner beside a blazing hickory fire, occupied in the same way."[54] Most farmers did not have such luxury, and the work entailed in operating a farm may have induced Colonel Dent to put White Haven up for sale in 1846. At that time, 300 acres were under cultivation, and stone smoke and dairy houses and other buildings were constructed on the farm. An additional six hundred acres was wooded, and divided into forty-acre lots.[55]

It is not clear why Colonel Dent put this farm, as well as many other lands up for sale. He may have financially overextended himself, or realized that the life of a Missouri farmer was not as relaxing as he had anticipated. Regardless of his reasons, he was apparently unable to find a buyer. White Haven was not sold at this time and the Dents would continue to make it their home. When Grant returned to St. Louis in 1848 to marry Julia, the family was residing in their

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[53] Bruce, 434-441.
[54] JDG, *Memoirs*, 42-43.

new town home in the city, at the corner of 4th and Cerre Streets. Colonel Dent may have leased out the White Haven farm to tenants for a year or two, but returned to the farm by 1850.

[55] "Improved and Unimproved Land for Sale" *Missouri Republican*, August 5, 1846.

1850-1860

When Julia returned to her father's home from Michigan for the birth of their first son in early 1850, she was returning to a city devastated by disease and fire. Between January 1 and July 30, 1849, 4,547 people died of cholera. A quarantine was established to prevent further infestation from individuals arriving from New Orleans, from where the disease was originally brought by immigrants. Two new cemeteries were established in that year—Bellefontaine as a Protestant burial ground, and adjacent to it Calvary Cemetery, where Catholics buried their dead.[56] The quarantine continued in the city during 1850, with 2,500 people detained on an island in the Mississippi River. Because most of the immigrants remained in the city, the epidemic did not spread to the surrounding countryside to any large extent. Julia most likely avoided coming in contact with the disease, or being detained on the island, since she arrived from the north, and went straight to her father's home at White Haven. Cholera claimed 883 more lives in St. Louis in 1850 and another 845 in 1851.[57]

In the midst of the 1849 cholera epidemic, fire broke out on the *White Cloud*, one of the many boats tied up on the levee on May 17. A strong wind soon carried the fire to the piles of freight (mostly hemp) and then to the wooden warehouses on Front Street. Over 1,000 firefighters fought the blaze that was only stopped by the foresight of one man, Thomas Targee. Targee realized that the only way to stop the fire was to create a fire break by destroying buildings before the fire reached them. Targee lost his life when a keg of gunpowder that he was placing in a building exploded, but thanks to him the fire was limited to a fifteen square block area. Property losses were estimated as high as six million dollars, but the city rapidly began to rebuild—brick and cast iron buildings with wide, cobblestone streets that were expected to prevent such devastation in the future.[58]

Grant came to St. Louis sometime in the late summer of 1850, as the city continued to rebuild. He apparently only stayed long enough to come out to White Haven to be reunited with Julia and their infant son, Fred (born May 30), and then return with them to Detroit. Julia and Fred visited St. Louis again in 1851, spending most of their time at White Haven before rejoining Ulysses at his new post at Sackets Harbor, New York. One year later, she, two-year old Fred, and

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[56] Gill, 116

[57] Primm, 162-3.

[58] Charles van Ravenswaay, *St. Louis: An Informal History of the City and Its People, 1764-1865*, 383-388.

the newest addition to the Grant family, Ulysses Jr., returned to White Haven for what was to be a much longer stay. Grant's transfer to the Pacific West Coast separated the family for two years, due in part to low peacetime wages in the army that left him unable to send for Julia and the two boys.

While he was in Oregon territory, Ulysses began farming about one hundred acres of land, planting potatoes, barley, onions, and corn for which he expected a sizeable return on his investment of money and labor. He seemed proud to write Julia that "I have in the ground a field of barley evry [sic] grain of which I sewed [sic] with my own hands." He also intended to do all the plowing and furrowing in the summer and observed that "There are two things that I have found out by working myself. One is that I can do as much, and do it better, than I can hire it done. The other is that by working myself those that are hired do a third more than if left alone."[59] Within three months, Grant's hopes of making large profits were dashed when the Columbia River overflowed, and "destroyed all the grain, onions, corn. And about half the potatoes upon which I had expended so much money and labor." During this time of fluctuating fortunes for Ulysses, Julia remained at White Haven, taking care of their children and waiting to learn if she was to join him on the west coast. After numerous attempts to obtain a leave of absence were denied, Grant, lonely and depressed, decided to put into effect a plan he had only considered in March of 1854: "resign and trust to Providence, and my own exertions, for a living" in St. Louis, where he could be with Julia, Fred and Ulysses Jr.[60]

City Life

When U. S. Grant returned to St. Louis to be reunited with his family in the early fall of 1854, he undoubtedly noticed many changes in the city and in the surrounding rural area. In 1855 the city expanded its boundaries to include seventeen square miles divided into ten wards. The western boundary was just west of Grand Boulevard, the northern boundary was parallel to the intersection of Grand and Bellefontaine, and the southern boundary was Keokuk Street. At its widest point, the city measured almost three miles, and almost seven miles from north to south. [61] Not only was the city much larger and more densely populated, business was booming. Third

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[59] Ulysses S. Grant to Julia Dent Grant, March 4, 1853, *The Papers of Ulysses S. Grant*, I, 291; Hereafter, *Papers*. Ulysses S. Grant to Julia Dent Grant, March 31, 1853, *Papers*, I, 297.

[60] Ulysses S. Grant to Julia Dent Grant, March 6, 1854, *Papers*, I, 323. For more about Grant's life on the West Coast, and the reports of his drinking, I recommend Charles Ellington's *The Trial of U.S. Grant*.

Street was a busy commercial district where the new Customs Building and Post Office were located, along with a city market, boarding houses and numerous retail stores, many of which were built to replace those destroyed by the 1849 fire.[62] The Mercantile Library opened a new building at Fifth and Locust in 1854, and in 1856 George Englemann, James B. Eads and others formed the St. Louis Academy of Science. By 1850 most private homes were west of Fifth Street, and Fourth Street was the center of retail trade, nicknamed Verandah Row because of the numerous ladies shops in the area. [63]

St. Louis City in 1850 had a population of 77,860, and 125,200 by 1856. One year later over 150,000 people were residing in the city. In 1850 forty-three percent of the city's population was of German or Irish descent, and by 1860 over half of the city's population had emigrated from Germany or Ireland. The actual number of slaves also increased from the previous decade, to 2,636 in 1850, but dropped as a percentage of the total population to 3.4 per cent. The free African American population increased in a similar manner, to 1,398, but decreased to 1.79 per cent of the city's total population. The majority of the slaves and free blacks, sixty-seven and fifty-eight per cent respectively, resided in Wards three and four, where the most affluent members of the white society lived.[64] With the huge boom in the 1840s and 1850s, lot prices in prime downtown areas skyrocketed. Residential lots on Fourth Street that had sold for $200/front foot in 1848 now sold for three times that amount.[65] Lots on Third Street, which sold for $1.50 a front foot in 1830, sold for $1,500 a front foot thirty years later. Residential housing was being constructed at a rate of one thousand homes a year in the city, and five and six story "skyscrapers" were becoming popular. Thirty-three of these tall buildings were constructed in 1858 alone.[66]

As long as building continued at such a rapid pace, bringing with it the need for workers, salaries probably increased slightly for skilled laborers. Many slave owners took advantage of the need for workers and hired out their enslaved men and women. These individuals could earn between five and thirty dollars a month, depending on their level of skill, either in the city or on

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[61] Primm, 197.
[62] *Ibid.*, 189.
[63] *Ibid.*, 194, 196.
[64] *Ibid.*, 173.
[65] *Ibid.*, 153.
[66] *Ibid.*, 188.

other farms in the area. Some of these individuals may have been able to keep a portion of their wages and purchase their freedom from their masters.[67]

During Grant's five-year residence in St. Louis City and County, other changes occurred in the city. Municipal services that had been lacking or inadequate were established and improved to meet the huge demands of the citizens and businessmen. The water supply was increased in 1855, when a new reservoir was constructed at Benton and 11th Streets (a sign of the city's westward expansion). By 1859 seventy miles of water pipes had been installed, providing an "abundant supply" of water to the city at a total cost of eighteen million dollars.[68] The first paid fire department was established in 1856, replacing the neighborhood volunteer firefighters that often quarreled between themselves over territory and quality of service.[69]

A professional, uniformed police department with 140 officers began patrolling the city in 1855, a reaction to the election riot of 1854.[70] The riot was set off on August 7 when nativist Whigs and Know Nothings accused the Democrats, who were supported by many of the German and Irish immigrants, of stuffing ballot boxes with ineligible immigrant votes. Exacerbated by the scorching heat of August, fighting erupted amongst voters standing in long lines because several election officials insisted on thoroughly examining naturalization papers of prospective voters. Fighting continued for two more days until order was restored, and a committee was soon formed to establish regulations that would prevent further riots. Within a few months police officers were provided with uniforms and given added authority, including freedom from prosecution in executing their duties during any future disturbances. With the 1855 reforms, the city was patrolled on a twenty-four hour, seven days a week basis to maintain peace. In 1855 the Know Nothing Party elected Washington King as mayor, although he was replaced a year later by Democrat John How, who had been in office during the 1854 riot.[71]

Robert E. Lee's recommended improvements to the levee by eliminating the sandbars in the river were completed in 1854, and soon the large freight and passenger steamships were

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[67] LaCour-Gayet, 175, Sappington Log Book.
[68] Primm, 158-159.
[69] *Ibid.*, 173.
[70] *Ibid*, 179.
[71] *Ibid*, 177-180. We do not know the exact date that Ulysses returned to St. Louis in 1854. Earliest estimates are late August, which means he may have just missed the election. Given the concern over the immigrants in the city who outnumbered the native citizens, Grant's brief association with the Know Nothing Party (he attended one meeting) and his belief that he lost a political position in the city in 1859 to a German immigrant is more understandable.

crowding the wharf again. The improvements also included paving the wharf for one mile along the riverfront. As a result, St. Louis shipping increased in tonnage from 24,955 in 1850 to 1,370,000 tons in 1854. In 1857 more of the wharf was paved, allowing boats to dock simultaneously and cutting the time they were moored at the dock by one half.[72]

The omnibuses that had been introduced in 1843 traveled along many streets, including Second and Market, and as far south as Arsenal. The year 1855 was the peak of prosperity for these people carriers, although people began to complain about the "elbowing democracy...the discourtesy of the drivers, and the rough rides over the stony streets." By 1859, 14,000 passengers a day were transported on the omnibuses. In that same year, Erastus Wells introduced the first Missouri Railway Company, which rode over iron rails imbedded in the street. [73] The first railroad service from St. Louis to Jefferson City began in November, 1855, but on its maiden voyage the Gasconade River bridge collapsed, killing twenty-six people, including several of Wells' omnibus partners who had invested in the railroad.[74]

By 1849 Choteau's Pond was no more than an open sewer, and between 1851 and 1852 it was drained "as a menace to public health." Disposal of sewage in the city improved somewhat by the mid-1850s, when the tax created to establish a sewage system funded thirty-one sewers throughout the downtown area at a cost of $525,000.[75]

City roads continued to be a problem for residents and visitors alike. In 1851 approximately thirty-two miles of city streets were considered "improved," which meant they were either paved with stone or macadamized. Roads were macadamized by grading the route, laying a rock base on the road bed, spreading smaller gravel over the rock, and then covering the road with a thick coating of tar. The heavy wagons and omnibusses soon crushed the limestone gravel and rock, leaving these improved roads just as muddy as the unimproved dirt roads. In the summers the tar would become sticky and deep ruts would be cut by the heavy wagon wheels. South County farmers bringing their goods to market down the macadamized Gravois Road would often steer their horses over to the unpaved sides of the road to avoid getting stuck in the rutted street. Twice as many miles of city roads were unimproved, meaning no efforts for grading or paving were made at all. "Swedish Nightingale" Jenny Lind visited St. Louis in 1851,

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[72] Kirschten, 164-5; Primm, 165.
[73] Primm, 189, 198-200.
[74] Kirschten, 299; Primm, 189, 190-200.
[75] Primm, 164.

and described St. Louis roads as "a huge reservoir devoted to the manufacture of mud on a wholesale scale, by the joint operation of art and nature." Citizens approved a bond issue to correct this situation and within a year landowners were required to build sidewalks if the streets outside their front doors had been paved or macadamized. By 1853 one hundred miles of plank sidewalks were completed along city roads.[76]

In 1850, the Miller's Exchange merged with the Chamber of Commerce (which had been established in 1837), to form the Merchant's Exchange. This greatly aided the reputation of Missouri wheat, which was already of exceptional quality due to the low moisture content. The Exchange accepted for sale only the best grain, thereby making it easier to market.[77] Demand for American wheat increased during the 1850s, as a result of the Crimean War which kept Russian wheat out of the world market. By the late 1850s, 173 million bushels of wheat were produced annually in the United States. When Russian wheat reentered the world market in 1857, a tightening of credit in the East resulted, known as the Panic of 1857. In St. Louis several banks were forced to close and prices for wheat plummeted due to overproduction. Many farmers who had borrowed against an anticipated windfall on their wheat were devastated by the Panic. One of the casualties was William T. Sherman, who had been managing the San Francisco branch of the St. Louis banking house of James H. Lucas. The St. Louis, San Francisco, and New York branches closed their doors, and Sherman returned to St. Louis for two years before accepting a position with a military school in Alexandria, Louisiana. By 1858 the situation began to turn around as credit became more readily available.[78]

Many organizations were formed to provide social activities for city dwellers. People attended picnics organized by community and religious groups, drama and musical presentations, stage productions and lectures almost nightly.[79] Beer gardens sold German lager beer, which began to predominate the beer market in the 1850s. Twenty-four breweries operated in the city in 1854, producing 60,000 barrels of beer a year. By 1860, forty breweries were producing 189,400 barrels of beer a year. The *Missouri Republican* reported in 1860 that "the average St. Louisan poured down 658 glasses [of beer] a year."[80] A monthly crime report published in May 1859 for the month of April recorded 187 arrests for drunkenness on a public street, indicating that beer

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[76] *Ibid.*, 164-165; Ross Wagner, personal interview with Pamela Sanfilippo, September 9, 1999.
[77] Primm, 202.
[78] Kirschten, 194-195; Primm, 209.
[79] Primm, 206, 191.

production and consumption was taking its toll. In order to meet such levels of production and demand, hops, oats, wheat, and barley were purchased from farmers throughout the state.[81]

Country Life

Despite the tremendous growth of the cities during this period, the nation remained predominantly rural. On the eve of the Civil War, seventy-five per cent of America's population lived in the country.[82] Farms in Carondelet Township changed in ownership, size and value by 1850. The first German, Jonas Mueller, arrived in the area in 1833, purchasing about seventy-five acres of land from Joseph Sale for the sum of $97.11. By 1840 more than fifty German families had settled in the Gravois area. Carondelet Township had a German majority by the 1850s, all of whom had purchased farmland from the earlier settlers. Their plots were usually smaller, ranging from several acres to less than one hundred acres, where they specialized in market gardening or truck farming without the enslaved laborers used by many of the larger estates.[83] A few of the larger farms still existed, including those owned by the Dents, the Sigersons, and several Sappingtons.

Farming

Scientific practices were introduced to farming methods in the 1850s. Farmers who had relied on the weather predictions of the *Farmer's Almanac* to guide them in planting and harvesting in the earlier decades, now turned to *The Elements of Scientific Agriculture*, published in 1850.[84] Chemists were now able to analyze the soil to determine what nutrients were lacking and what was needed to grow a particular crop. In this way, the appropriate fertilizer could be used to enhance the production on the farm. Depending upon what the soil lacked, and what was being planted, gypsum, animal manure, salt, nitrate of soda, lime, wood ashes, or bone dust might be used to increase the yield. In order to learn the science of agriculture, Uriel Wright recommended the establishment of a School of Agriculture in Missouri, where students would master such subjects as climate, soil, manures, tools and implements of tillage, clearing of

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[80] Kirschten, 37.
[81] Primm, 206; Steven Rowan, *Germans for a Free Missouri: Translations from the St. Louis Radical Press, 1857-1862*, 82.
[82] Lacour-Gayet, 111.
[83] Sappington, 28.
[84] Lacour-Gayet, 112.

ground, viticulture (vines), culture of fruit trees, rearing of cattle and horses, and rural economy.[85]

Among the many dangers the farmer faced was that his crop would be ruined by insects. Several species could do great damage in a relatively short period of time. The "army worm" was a 1 ½" caterpillar, brownish gray with yellow stripes, that could move quickly through a field. To prevent or remedy the situation, it was recommended that farmers dig "deep trenches in their path, crushing them by means of a roller, turning into the field hogs and turkeys to devour them, or sheep to trample them under foot." Another tiny insect harmful to grains, the grain-aphis, would attach to the plant, sucking out the moisture. In small numbers these could be controlled by their natural predators, ladybugs and other insects, but if they became too numerous, a fire made from leather scraps, wet straw and hay would create "a dense smoke to windward of the field, on a damp, lowering day" that would suffocate the pests.[86]

Few changes occurred in farming practices and machinery during the 1850s, although many farmers may have purchased equipment that had been introduced earlier but was not in widespread usage. One of these would have been a reaper, which tripled the amount farmers were able to harvest in a day, up to twelve acres, compared to the cradle scythe. By the late 1850s John Deere's plow with its steel blade that remained sharp for a longer period of time and did not allow the mud to adhere to it as readily was being mass produced, and it is possible that farmers in the Carondelet Township began using it. The stronger, more adjustable single section harrow may also have been adopted by area farmers. [87]

During June and July, corn and other crops needed regular hoeing to prevent weeds from choking out the crop and to keep the soil loose for moisture absorption. Weeding was done by a cast-steel hoe, or a horse drawn hoe, which would make working the ground faster, especially for corn fields, where hoeing was still done four times during a season.[88] Grain could be cut and threshed by hand, as it was in the previous decade, or with the use of horse-drawn reapers and a

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[85] Uriel Wright, "Address of Uriel Wright before the First Agricultural Fair in Missouri," *The Western Journal and Civilian*, 109-110.
[86] Trent, 24.
[87] Hurt, AFT, 15-16; R. Douglas Hurt, *Agriculture and Slavery in Missouri's Little Dixie*, 163. See Appendix A for pictures of these tools.
[88] Hurt, AFT, 35.

steam thresher that would separate the grain faster than a "threshing gang." These mechanical threshers became common among farmers during the 1850s.[89]

For the kitchen garden, June and July were busy months for harvesting. Green beans, new potatoes, green peas, summer squash, lettuce, small carrots and beets were ripening and needed to be attended daily. To prevent insects and diseases that were common during these months, lime or ashes, sulphur, snuff or tobacco water was sprinkled around the plants. These months could be especially dry, and unless someone was readily available to haul water from a well or cistern, turning the soil was the best means of bringing moisture from below to the surface. On large plantations the enslaved children were usually recruited to water these gardens as well as to weed and hoe around the plants.[90]

Fruit orchards and vines took an equal amount of care and cultivation, if the farmer wanted to produce a good yield at harvest time. Magazines such as *The Valley Farmer* and *The Western Journal and Civilian* included articles on the planting and care of these crops, including the importance of labeling the trees and vines to ensure accurate records. Some of the agricultural societies also kept a list of those species that were noted to do well in Missouri climates, and published their recommendations in these magazines.[91]

Livestock on the farm also needed daily attention. Cows put out to pasture would eat grass that still contained many nutrients, so they produced more milk during these spring and summer months. The milk was put in a cool place, either a spring house, well, or ice house, in shallow pans to separate the milk from the cream. The cream could be churned into butter while the milk was used to nourish the family. Because milk spoiled rapidly in the heat, much of it was made into butter and cheese which could be kept and used during the winter months. The milk and cream were set in pans to separate (this usually took about twenty-four hours), and then the cream was stored in a jar until enough was accumulated to churn. Temperature was a factor in producing butter. In order to produce the best quality and quantity in the shortest amount of time, it was recommended that the cream should be 55 degrees when starting. The process normally took about forty-five minutes, with constant churning. When completed, it was worked two or three times over the course of two days to remove as much of the buttermilk as possible. In order

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[89] Lacour-Gayet, 112.
[90] Trent, 24.

to keep the butter from spoiling, it was washed with cold, clean water after churning, instead of ladling out the whey. The hardened butter was then salted and stored in stone jars covered with wet muslin or linen, which could be kept for up to a year. It was more difficult to make butter in the winter, mainly due to problems maintaining the fifty-five degree room temperature.[92]

An ice house, where produce and dairy products could be stored to keep them fresh, was considered "one of the necessary appendages to every rural dwelling" in 1856. Instructions were provided in *The Valley Farmer*, a regional magazine, for constructing and using an ice house to its best advantage. While the author stated that "ice will keep best in houses made entirely above ground," he followed with a recommendation that placing "the ice house against the side of a bank or rising ground" served the dual purpose of keeping the ice for a longer period and making it easier to fill (done from the upper side of the hill).The key to constructing an ice house was to assure proper drainage, without admitting air at the bottom which would melt the ice faster. The ice was packed closely together, in cubes of no less than ten feet, to ensure that the stored ice would last through the summer. Although the writer described construction of an above-ground frame and timber structure, the description of the flooring and roof are worth including here:

> "The bottom of the house should be filled about one foot deep with blocks of wood; these are leveled off and covered with wood shavings, on which a strong plank floor is laid to receive the ice. Upon the beams above the ice a light floor is laid and covered several inches deep with saw-dust or tan-bark. The roof of the house should have a considerable pitch, and the space between the upper floor and the roof should be ventilated by a lattice window in each gable end, or something equivalent to pass out the warm air which will accumulate beneath the roof. An opening should also be made in the floor, above the ice, a few inches square, in which a tube should be inserted and extend one or two feet above the floor."[93]

Instructions were provided for what might today be considered a trivial detail. When the ice was packed, blocks were to be turned upside down from the way ice formed, because as it formed it was more porous, which would result in more exposure to the air, thereby melting the ice faster.[94] The placement, design and construction of the ice house at White Haven indicates

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[91] *The Valley Farmer* began publication in St. Louis in 1849. After the 1857 Panic the magazine was purchased by Norman Coleman and renamed *Coleman's Rural World*. Publication of this farmer's magazine continued as late as 1916.

[92] Bruce, 441-442; "Butter Churning," *The Valley Farmer*, v. 11, n. 6, 184.

[93] "Ice Houses," *The Valley Farmer*, v.VIII, no. 1, 4-5.

[94] "Ice-Houses," *The Valley Farmer*, 4-5.

that it was built to conform to these standards and reinforces the belief that they were able to keep ice throughout the summer if it was properly packed and insulated.[95]

Any type of food preparation and storage required numerous kitchen utensils, as well as the appropriate storage space. Catherine Beecher's *A Treatise on Domestic Economy for the Use of Young Ladies at Home and at School* detailed the ideal kitchen arrangement and equipment, from "three good dishcloths hemmed and finished with loops" to earthen pans, numerous tin pans, stoneware jars, iron pots, a long fork, a hook with a handle, large and small gridirons, skillets, baking pans, ladles, skimmers, skewers, kettles, a mill and box, knives, forks, spoons, cleavers, saws, chopping trays, apple parer, steel for sharpening knives, sugar nippers, six to eight irons, wooden tubs, pails and bowls, baskets of all sizes and shapes and towels and cloths.[96] Just finding places to keep all of these items must have been a chore.

During the 1850s cheaply produced tin cans came into use for storing fruits and vegetables, although it is difficult to determine how widespread their use was in the St. Louis area. "Arthur's Self-Sealing Can" allowed women to heat the fruit or vegetable in a can placed in hot water, and then seal it with the lid that had been heated to soften the solder. The Mason jar, patented in 1858, quickly became popular with homemakers because the seal did not require solder, and the air-tight storage reduced the need for high levels of sugar or salt in the preservation process.[97] Honey and molasses continued to be used as a sweetener, although some Missouri and Illinois farmers grew sugar cane for their own consumption. Sugar was most often used at the table, while honey and molasses were used in cooking, canning and preserving.[98]

Because the summer heat would quickly spoil large carcasses, beef was not slaughtered at this time, unless it was going to be consumed within a very short period of time. Young chickens and pigs would supply fresh meat during June and July since they could be eaten the same day they were killed. The pickling, curing, and storage tasks were eliminated for daily consumption, but because meat would spoil so rapidly many people considered "fresh" meat harmful.

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[95] For additional information on ice houses, especially the one at White Haven, see Alan O'Bright, *The Farm on the Gravois: Historic Structures Report*," 5.1-5.35.

[96] Bruce, 420-421. For a complete list of the "necessary" kitchen utensils, see pp. 420-421 of this article, which is taken from Beecher's *Treatise*.

[97] *Ibid*, 434-441.

[98] Primm, 202, 204. Sugar cane was grown in the Missouri River valley, and brought to St. Louis for processing. By 1855 St. Louis"Belcher Sugar Refinery was the largest in the United States, and one of St. Louis' largest employers. Most of this sugar was not sold in St. Louis stores, but was shipped to eastern cities.

Preparing these foods was time-consuming work, done mostly by women, whether it was the "truck farmer's" wife and daughters, or the enslaved women and girls on larger plantations.

Perry Sappington was the son of Zephaniah and a nephew of the largest landholder in the area, John Sappington. His experiences may have been common for a Carondelet farmer in the 1850s. His daily log book was preserved and it provides detailed records of his farm income and expenses. A compilation of the entries in his log book between 1852 and 1860 are categorized and listed in Appendix B.

Sappington apparently built a house and set up housekeeping in 1852, because the log book indicates that numerous construction items were purchased. In addition, many household goods were purchased and the log book began in that year. From the items listed in the log book between September 1852 and July 1853 it cost Sappington about $250 to construct a frame home with one large or two small brick chimneys. His log book was kept between 1852 and the middle of 1856, and then there is a break of several years, which would coincide with the Panic of 1857, when he perhaps was not making or spending much money. It picks up again in 1858, but the records are not kept the same and it is difficult to tell what his expenses and income were after 1856. Based on the calculations from the log book, Perry Sappington was paying out more than he was taking in between 1853 and 1856, except for one year when he sold a slave woman, Ann, and her two children. Table 2 lists his income and expenses by year.

Table 2. Perry Sappington's Income and Expenses, 1852-1856[99]

Year	Income	Expenses	Difference
1852 (9 mos.)	$ 399.00	$ 504.13	($105.13)
1853	$ 635.70	$ 780.67	($144.97)
1854	$1,572.18	$1,067.23	$504.95
1855	$ 465.43	$ 829.28	($363.85)
1856 (6 mos.)	$ 690.65	$ 673.55	$ 17.10
Totals	**$3,762.96**	**$3,854.86**	**($91.90)**

[99] Perry Sappington, Daily Log Book, unpaginated, miscellaneous 1852 entries. Unpublished in private hands.

In each of these years, the expenses would have outweighed the income even more if Sappington had not received large sums for notes that were paid off ($165 in 1852), estates that were settled ($365.00 in 1853 and $68.25 in 1855), land that was sold ($239 in 1854 and $455.00 in 1856), and slaves that were sold (Ann and her children were sold for $1,100.00 in 1854). Most of his other income resulted from selling wood and props, and small amounts for hay and produce from the farm. With only this one log book available, it is impossible to determine if Sappington's farming venture was truly typical of the Carondelet area.[100]

Grant's experiences seem to parallel those of Perry Sappington, at least in regard to some of the difficulties experienced in the late 1850s. In December 1856 he wrote his father that he had wanted to plant sixty to seventy bushels of potatoes the previous year, but only planted twenty because that was what he had available and could not afford to purchase more. From those twenty bushels, his yield was over 350 bushels, not counting what had been consumed by the family. He also planted twenty-five acres of wheat, which he claimed "looks better, or did before the cold weather, than any in the neighborhood." In the midst of this, Grant cleared the eighty acres of land Colonel Dent had given to Julia and built the Hardscrabble log cabin. Grant indicated that he made approximately $50 a month selling wood and props between April and December. His plans for the following year included planting what was left of the potatoes (approximately twenty acres' worth), buying fifty bushels of seed, planting five acres of sweet potatoes, five acres of early corn, and five to six acres of cabbage, beets, cucumber pickles and melons to sell in the city markets. His biggest problem was money to purchase the seed to get started, and he asked his father for a loan of $500 at ten per cent interest.[101]

In February 1857 Grant began planning for his spring tilling and planting. He had cleared another ten acres of wooded land, and expected to get 300 cords of wood from it. The twenty-five acres of winter wheat he had planted should have yielded four to five hundred bushels, but due to a bad winter he only reaped seventy-five bushels. Given the drop in prices for wheat, it is unlikely that the expected yield would have brought him much more profit. The oats and corn he had planted were doing well, although these were not marketable goods. Ulysses also expected 1,500 bushels of Irish potatoes, and had sweet potatoes, melons and cabbages for market. He

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[100] *Ibid.*

[101] Ulysses S. Grant to Jesse Root Grant, December 28, 1856, *Papers*, I, 334-5.

asked his father again for a loan of $500, but there is no indication that the money was forthcoming in response to either request.[102]

Several letters from 1858 give an indication of Grant's farming enterprises for that year. By March he had rented out his land around Hardscrabble, and was farming Colonel Dent's 200 acres of plowed land. He also maintained an additional 250 acres of wooded pastures that he anticipated having fenced up within a few weeks. He hired two African Americans for the year, and with one of Colonel Dent's slaves expected to plant twenty acres of potatoes, twenty acres of corn, twenty-five acres of oats, fifty acres of wheat, and twenty-five acres of meadow. [103]

By September of that year, Grant's expectations had not been realized. There was much sickness in the family: young Fred was ill with "billious" and typhoid, Ulysses and Julia had chills and a fever, Julia's sister Ellen and her child were ill, and seven of Colonel Dent's slaves were sick. Grant was behind in his work on the farm, and would not recover enough by October to get out of his financial difficulties. He and Colonel Dent resolved to sell off 400 acres of the northern end of the farm, sell off their livestock, and rent out the cleared land. The sale of land did not occur, but Grant moved to the city to find work to support his family.[104]

Different tasks brought different salaries on the farm. Day laborers, whether slave or free, could earn seventy-five cents a day for stacking hay, or $2.50 for mowing in 1852. Skilled workers could earn more. Perry Sappington paid $8.50 for someone to put up a lightning rod, $35 to paint his house, and $31.25 to dig a well for him. He hired out two of his slaves at $5 a month, and another, Albert, presumably a skilled laborer, for $13 a month. When Grant decided to leave White Haven, he indicated that a young boy belonging to Julia could bring three dollars a month.[105]

Several of the Carondelet Township farmers entered livestock and crops in the 1858 Agricultural and Mechanical Fair, hoping to win awards. Harrison Long, who owned 150 acres of land in the Gravois Creek area received an award for the best quarter acre of sweet potatoes, harvesting 81 ¾ bushels on that small amount of land. He also won for the best half acre of Irish

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[102] Ulysses S. Grant to Jesse R. Grant, February 7, 1857, *Papers*, 1, 336-337; Ulysses S. Grant to Mary Grant, August 22, 1857, *Papers*, 1, 338.
[103] Ulysses S. Grant to Mary Grant, March 21, 1858, *Papers*, 1, 336-7.
[104] Ulysses S. Grant to Mary Grant, September 7, 1858, *Papers*, 1, 343; Ulysses S. Grant to Jesse R. Grant, October 1, 1858, *Papers*, 1, 344.
[105] Perry Sappington logbook; Ulysses S. Grant to Jesse R. Grant, October 1, 1858, *Papers*, 1, 344.

potatoes, producing 12 ½ bushels.[106] At the 1858 fair, John Sappington earned the diploma for the Model Farm. A description of Sappington's farm was provided in the *Report of the Third Annual Fair*, and is quoted from to provide an idea of the farm of one of the Dents and Grants' closest neighbors:

> The dwelling-house, to which is attached a fine yard and garden, is of two stories, and contains a parlor, sitting-room, dining-room, kitchen, with bedrooms and garret. There is a well fifty feet in depth, twenty-five of which have been forced through a solid rock, which has been chiselled into perfect smoothness at the bottom in the form of a basin; and at the bottom of the basin a two-inch hole leads to the fountain below, from which the water forces itself in full volume to the height of eight feet. This water, thus oozing from a rocky bed, is remarkable for its purity and icy coolness. At any time the well can be perfectly cleansed without trouble, (by stopping the aperture at the bottom of the basin,) almost with as much ease as a washbowl can be emptied of its contents, and thoroughly washed. The milk-house is adjoining the well, and, to keep it always of a cool temperature, is partially connected with it by a grated window sufficiently large to be influenced by its chilly atmosphere; and at the door of the dwelling is a fine cistern.
>
> At a convenient distance from the dwelling are quarters for the negroes, a meat-house, hen-houses, carriage house, and shoemaker's shop. There is also a fine barn, with every convenience in its interior arrangement in the way of stabling for horses and other stock; having sheds for grain and threshing machine—racks under the projections for feeding—with cutting room, mows, sheds, and shuck-pens. There is also connected with it a work-shop, tool-house, and mill for grinding feed for stock. All the business of the farm centres there, and every thing is under cover.
>
> There is an orchard on the farm of the most choice collection of fruits in Missouri—Mr. Sappington having been thirty years in bringing it to its present state of perfection.
>
> Around every field of the farm there is a wagon-road, and they are connected together by twenty-one gates or bars, and divided by substantial fencing. These fields are amply supplied with water from ponds which have been used since 1814, and contain fine pan fish in abundance. Fifty acres of woods form a part of this noble farm, and the growth is carefully watched, and encouraged by removing all of the decaying branches, also the underbrush so that it can not extract the strength from the soil, which would injure the timber."[107]

Creating and maintaining such a farm required the work of numerous individuals over the course of many years. Most of the farmers in Carondelet Township looked to someone like John Sappington as a model to emulate on their own farms, albeit on a smaller scale.

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[106] *Report of the St. Louis Agricultural and Mechanical Association, Third Annual Fair, 1858*, 177.
[107] *Ibid.*, 179-180.

Poultry was not listed in the 1850 agricultural census, however most farms had at least some fowl for meat as well as eggs. In order to keep fifty chickens, at least half an acre of land was required. A structure approximately twenty feet by twelve feet would house the same number of poultry, and it was recommended that the yard be at least partially shaded. According to one report, "A hen well fed and attended to, will produce from 160 to 200 eggs a year." During the summer months these eggs could be kept in a bucket lowered into the well, or kept in the spring house or ice house. Keeping eggs during the winter was more difficult, and there were several suggested methods. Eggs could be covered with lard, butter, sheep tallow, varnish or glue, and then stored in a cool place, or preserved in a brine solution.[108]

According to Julia, the enslaved at White Haven were provided with all types of food. She recalled that "papa used to buy for them great barrels of fish—herring from that part of the country [Virginia and Maryland]. Molasses, tobacco, and some whiskey (on cold, raw days) were issued regularly to them from the storehouse, and then they had everything the farm produced, such as all vegetables, bacon [bacon was a generic term for several cuts of pork], beef, and, of course, poultry."[109] The fact that it was these individuals who labored to produce these items rather than the inanimate "farm" was apparently lost on Julia.

Livestock at White Haven included "fine-blooded horses, short-horned Durhams [cattle], Berkshire [a medium-sized black swine with white markings] and Chinese hogs, imported fowls: in fact, everything that could be obtained."[110] These were typical of the animals kept on most farms in the area. Several of the farms also kept sheep for their wool. The information in Appendix C was compiled from the 1850 Federal Census as a sampling of the farms in the Carondelet Township and their agricultural productivity. Wheat, Indian corn, oats, Irish potatoes and sweet potatoes were the crops grown by most of these farmers, with wheat and potatoes being sold at market while the corn and oats were used for feed. Many of the farmers sold fruit from their orchards with James Sigerson, who grew and sold fruit trees being the largest money maker from this enterprise. He also listed a value for his market garden, indicating he may have been a truck farmer on a larger scale than most.

Ten years later, many of the farmers had sold off land or divided it among their heirs. Joseph Sale increased his landholding seventeen-fold, but most farmers had less land in 1860

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[108] *Ibid.*, 141, 142, 147.
[109] JDG, *Memoirs*, 34.

than in 1850. Appendix D lists several of the farmers who reported their holdings in the 1860 Agricultural Census for Carondelet Township. Colonel Dent and Ulysses Grant closed out their farming enterprises in 1859 and leased out their lands, so they do not show up on the agricultural census records. Joseph White leased Hardscrabble and the eighty acres of land Grant farmed, only twenty of which he listed as improved on the census. Yet he grew Indian corn, oats, and Irish potatoes, and produced six tons of hay. Following the drop in wheat prices, few farmers planted their fields in wheat. Other than corn and oats for livestock, potatoes and butter became more common products on these farms by 1860.[111]

Grant closed out hisfarming interests in 1859, and moved to the city to work in the real estate offices of Boggs and Grant, with an office at Third and Pine. When that position did not provide enough money to support both families, he applied for the position of County Engineer, which would have brought a salary of $2,000 a year. The job entailed "taking care of the County roads and grading and macadamizing of those thoroughfares and keeping the same in repair." Despite having the endorsement of many individuals in St. Louis City and County, Grant lost the nomination to Mr. Salomon.[112]

Although Grant and Dent leased out their lands after 1859, Ulysses did not give up on his idea to become a farmer. He had worked hard, and most likely read farming magazines and discussed practices with other farmers in the area. During the Civil War, Grant began acquiring the White Haven estate, and later hired a caretaker to manage the farm during his absence. His instructions to the caretakers show a remarkable interest in and knowledge of farming practices that he intended to implement during the late 1860s and early 1870s. His experiences as the owner of White Haven, however, are another story.

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[110] *Ibid.*, 43.
[111] U.S. Government. *Federal Census, Schedule 4: Agriculture. St. Louis, 1860.*
[112] John F. Darby, *The Personal Recollections of John F. Darby, Mayor of St. Louis, 1835*, 281; Ulysses S. Grant to County Commissioners, August 15, 1859, Papers, I, 348-349.

Conclusion

So many biographers and acquaintances of Ulysses S. Grant referred to his time in St. Louis as a period of poverty and unhappiness that Julia Grant felt the need to defend her husband in her memoirs. She wrote, "I have been both indignant and grieved over the statement . . . that he was dejected, low-spirited, badly dressed, and even slovenly. Well, I am quite sure they did not know *my* Captain Grant, for he was always perfection, both in manner and person, a cheerful, self-reliant, earnest gentleman."[113] While the reader must acknowledge that Julia's comments reflect a spouse's natural tendency to defend a loved one, this paper demonstrates that the Grants' farming experience did not greatly differ from that of most individuals in the St. Louis area at that time.

Grant's income of approximately $50 a month did not leave him destitute, however the lack of funds to purchase seed and the physical maladies suffered by the families at White Haven were detrimental to the success of his farming endeavor. From an early age he "was fond of agriculture" and between the ages of eleven and seventeen was responsible for "breaking up the land, furrowing, ploughing corn and potatoes, bringing in the crops when harvested, hauling all the wood, besides tending two or three horses, a cow or two, and sawing wood for stoves" at his parents' home in Georgetown, Ohio.[114] Thus claims that he was unsuited to a farmer's life or any non-military position are unfounded and are refuted by evidence to the contrary. Perhaps the fact that his military success was so great made him seem incapable in other areas where he did not achieve fame as society measured it. Placing him within the context of other farmers in the Carondelet area and recognizing that he did not own the majority of the land he was farming in the 1850s gives us the opportunity to reevaluate the Grants' experiences at White Haven, and provide visitors with a window into the past.

There is often the temptation to include everything one learns while researching a particular topic, believing that it is relevant to the study. In this case, such an attempt would have resulted in including whole sections of books and entire articles that were interesting and informative. I have tried to summarize and condense the information as much as possible to produce a study that would be a useful tool for interpreters, without becoming superficial. There is probably more information about antebellum St. Louis and farming than most people want to

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[113] JDG, *Memoirs*, 75.

know, but not as much as some individuals may desire. The bibliography which follows is provided for those interested in learning more about the lives and activities of mid-nineteenth century St. Louisans.

[114] Ulysses S. Grant, *Memoirs and Selected Letters*, 22.

APPENDIX A: FARM TOOLS

1840s to 1850s Plows and Harrows:

Figure 1. The Eagle Plow. There were many variations of the Eagle plow. The curved moldboard turned the soil to one side as it cut the furrow. (Smithsonian Insitution)

Figure 2. The wooden harrow. This early farm tool was hand made using wooden pegs driven through timbers. (Smithsonian Institution)

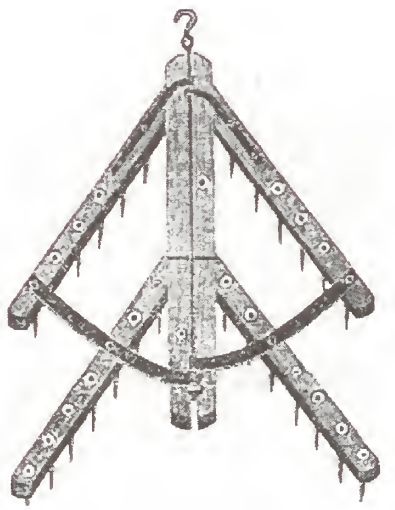

Figure 4. The Geddes Harrow. An improvement over the wooden harrow, the iron teeth of this harrow were not as susceptible to breakage. The swivel hook that attached by rope to the horse's harness also reduced damage to the harrow. (Smithsonian Institution)

1840s Sowers:

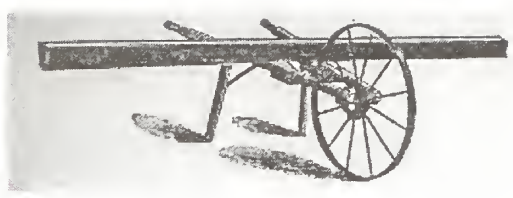

Figure 5. Wheelbarrow sower. The wheelbarrow sower was a distinct improvement over the hand-operated handcrank and fiddlebow seeders, allowing more even distribution and less waste of seed. (Smithsonian Institution)

Figure 6. Broadcast Sower. The broadcast sower was hooked up to the horse, allowing the farmer to ride behind and guide the horse for straighter planting. (Smithsonian Institution)

1840s Scythe and Rakes:

Figure 7. Cradle Scythe. Common in the 1830s and 1840s, the cradle scythe tripled the amount of grain harvested each day, and allowed the cutter to stay upright instead of bending, grasping the sheaves, and cutting low to the ground with a sickle. (Smithsonian Institution)

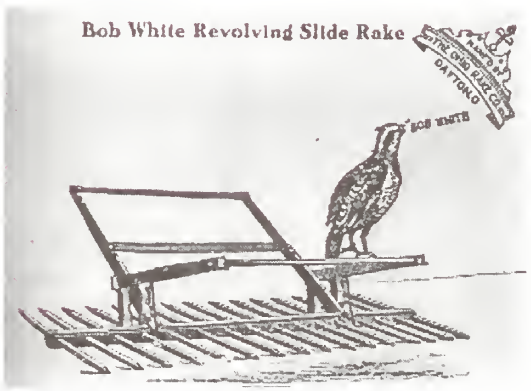

Figure 8. Hay Rake. After the sheaves were cut, the hay rake was dragged through the field to collect the hay in long rows, which would be allowed to dry before gathering into the barn. (Smithsonian Institution)

1840s Reapers:

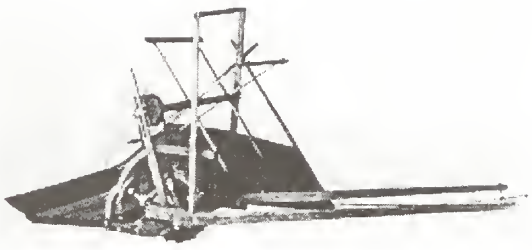

Figure 9. McCormick Reaper. Introduced in the 1840s, this reaper was popular amongst grain farmers who saved time and money, even after the initial investment. (Smithsonian Institution)

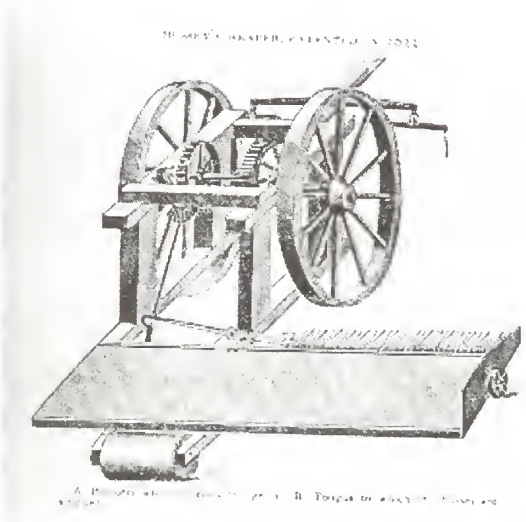

Figure 10. Hussey Reaper. Obed Hussey introduced his reaper in the 1830s, but it apparently was better for cutting hay than grain. (Smithsonian Institution)

1840s Thresher and Corn Sheller:

Figure 11. Thresher. This "Thrashing Machine," typical of the period, threshed the grain, separated it from the hay, and then separated the grain from the chaff as the grain fell to the floor and the chaff was blown away. (Smithsonian Institution)

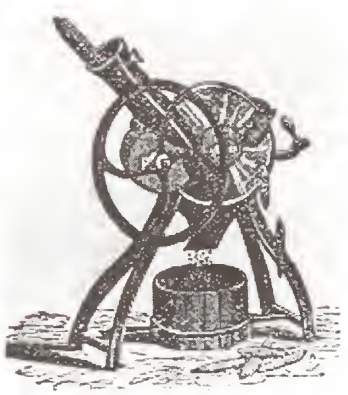

Figure 12. Corn Sheller. After the corn had been removed from the stalk and husked, this "automatic" sheller fed the corn through a tube with blades that cut the kernels off. The kernels fell into the bucket and the cobs were discharged to the side. (Smithsonian Institution)

1850s to 1860s Plow and Harrow:

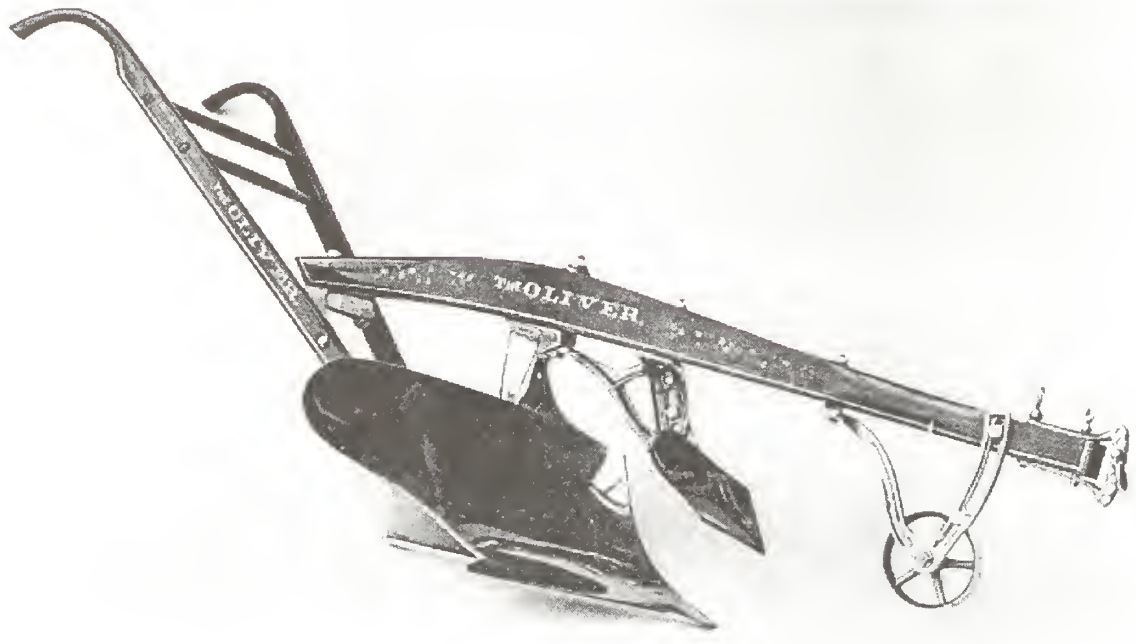

Figure 13. Michigan Double Plow. The shiny polished iron moldboard on the Michigan Double Plow reduced the buildup of dirt as the plow cut through the earth. The first blade cut a shallow furrow, allowing the second blade to cut a deeper furrow. (Smithsonian Institution)

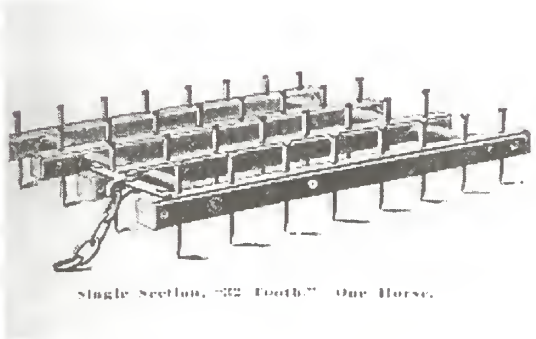

Figure 14. Single Section Harrow. Rather than using the wooden or Geddes triangle harrows, this "32 Tooth," one horse harrow was sturdier and broke up the ground faster and easier. (Smithsonian Institution)

1850s Seed Sower:

Figure 15. "Patent Improved Broadcast Seed Sower. This sower was designed to be worn by the individual, as in the sketch above, or attached to the back of a wagon. According to the advertisement, the sower would disperse seed in a path between 25 and sixty feet wide, depending upon the type of seed sown. In 1859 this sower cost $10, and was produced in Canton, Missouri. (*The Valley Farmer*)

Appendix B

Items Recorded in Perry Sappington's Log Book, 1852-1860

Farming Implements

Pair of back bands	$1.25 (1852)
Pair of trace chains	$.60 (1852)
Ploughs [sic]	$6.75 (1852); $8.75 (1854)
Scythe & snathe[115]	$1.55 (1852)
Axe	$1.25 (1852, 1853)
Iron Wedge	$.60 (1854)
Hoe	.50 (1854)
Nails (per pound)	$.06 ¼ (1854)
Monkey wrench	$1.50 (1854)
Mowing scythe, snathe & fork	$2.60 (1854)
Shovel	$1.10 (1855)
Chain pump	$7.30 (1855)
Wheel barrow	$5.00 (1855)
Barrel	$.80 (1855)
Cutting box	$10.00 (1855)
Augur [sic]	$.60 (1855)
Pump	$10.90 (1856)
Manure fork	$1.25 (1856)
Harrow teeth	
Cedar posts	6 ¼ cents each (1853)[116]; $.20 (1854)
50 feet of plank	$1.50 (1855)
Shot gun, flask, shot bag	$29.45

Livestock

Horse	$75.00 (1852)
Mules, two	$100.00 (1855)
Cow & calf	$25.00 (1854)
Chickens, eighteen	$2.45 (1853)
Sow and pigs	$5.00 (1854)
Hogs, four	$28.00 (1856)

[115] A snathe was the handle for the scythe.
[116] Sappington was apparently fencing in some of his land, for he purchased 300 cedar posts in 1853.

Related materials

Harness & lines	$2.00 (1854)
Saddle & bridle	$17.25 (1854)
Bell collar	$.50 (1854)
Collar for mule	$1.25 (1855)
Harness for mules	$8.65 (1855)
Buggy & harness	$140.00 (1856)
Whip & lines	$3.75 (1856)
Horse shoeing	$1.00 (1853)
Blacksmithing	$37.35 (1853)

Feed for Livestock

Hay, 1 ton	$8.50 (1855); $10.00 (1855)
Oats, bushel	$.50 (1855); $.64 (1855); $.28 (1856)

Seed

Clover seed, bushel	$6.75 (1853)
Timothy seed, pound	$2.50 (1853); $3.50 (1855)
Garden seeds	$.25 (1854)
Corn, bushel	$.45 (1854)
Wheat seed, bushel	$1.50 (1855)

Land

50 acres of land	$25.00 (1855)
Lot in Fenton	$16.00 (1853)
Recording of Deed	$2.80 (1853)

House Construction

Lumber	$26.15 (1852)
Lumber	$45.66 (1852)
Lumber	$18.35 (1853)
Lumber, 2nd rate, 200 ft. & sash	$5.75 (1853)
Boards	$11.50 (1853)
Nails for building	$7.70 (1852)
White lead, oil, & lithrage	$2.90 (1852)
Shingles	$25.00 (1852)
Flooring	$33.75 (1852)

Locks, butts, glass & putty paints	$11.25 (1852)
Glass, putty & nails	$2.75 (1853)
Moulding plane, lock butts, etc.	$2.30 (1853)
Butts and window fastenings	$3.15
Window sash	$7.20 (1852)
Window springs	$.50 (1852)
Window blinds	$15.00 (1853)
Brick, 2300	$10.35 (1852)
Brick, 2600	$7.50 (1853)
Masonry work	$10.00 (1853)
Green paint	$2.00 (1853)
Paint brush	$.50 (1852)
Door lock	$.50 (1853)
Lathing nails	$2.00 (1853)
Hair for plastering	$1.10 (1853)
Plastering	$8.40 (1853)

Household Items

Kitchen Items

Coffee mill	$.50 (1853)
Decanter	$1.50 (1853)
Tin bucket	$.32 ½ (1853)
Stove pan	$.90 (1854)
Churn	$4.00 (1854)
Drawing knife	$.75 (1854)
Stone jar	$.60 (1853)
Knives and forks	$2.00 (1855)
Sausage mill	$5.25 (1855)
Coffee pot & pans	(1856)
Queenware (?), knives, forks, Spoons, candlesticks, etc.	$10.75 (1853)
Butter plates, preserve & cream mug	$.85 (1853)
Tinware	$2.00 (1853)
Table cloths, towels, etc.	$5.00 (1853)

Furniture

Cooking stove and pipe	$23.50 (1853)
Breakfast table, 6 chairs	$8.00 (1853)
Dining table	$6.00 (1853)
Centre table	$3.50 (1853)
Small bedstead	$2.50 (1853)
Wardrobe, bedstead & chair	$19.50 (1854)
Work stand	$2.00 (1853)
Wash stand	$2.00 (1855)

Bureau	$23.00 (1852)

Miscellaneous

Cradle	$2.00 (1853); $3.00 (1855)
Fringe & bed ticking	$2.50 (1853)
7 yards bed ticking & thread	$1.00 (1854)
Mantle clock	$12.00 (1853)
Grind stone	$1.50 (1853)
Yard of carpet	$.45 (1854)
Wash tub, milk bucket, cups	$2.90 (1855)
Ten pounds candles	$1.50 (1854)
Thermometer	$.75 (1854)
Umbrella	$2.00 (1855)
Andirons	$1.30 (1855)
Smoothing irons	$.60 (1853)

Consumable Goods

Tobacco, plug	$.25 (1853)
Flour, barrel	$5.00 (1853); $6.25 (1853); $7.50 (1854); $7.25 (1854); $8.50 (1856)
Flour, 100 pounds	$3.63 (1854); $3.75 (1854); $4.25 (1855)
Bacon, pound	$.09 (1853) $.08 ½ (1853); $.08 (1853); $.08 (1854)
Sugar, pound	$.05 ½ (1853)
Molasses, gallon	$.45 (1854)
Lard, pound	$.12 ½ (1853)
Coffee, pound	$.11 (1853)
Tea, pound	$1.00 (1853)
Rice, pound	$.06 ¼ (1853)
Meal, bushel	$.65 (1853); $.62 ½ (1854); $.75 (1854)
Corn meal, bushel	$.75 (1853)
Nutmeg, pepper, salt, candles & tub	$1.65 (1853)
Butter, pound	$.13 (1853)
Cheese, pound	$.12 ½ (1853)
Eggs, dozen	$.20 (1853)
Whiskey, gallon	$.25 (1853); $.35 (1854)
Whiskey, 2 gallons & jug	$1.05 (1855)
Brandy	$.75 (1854)
Pork, pound	$.04 (1853) (purchased 356 lbs.); $3.90 (1854)
Wood, cord	$1.50 (1854); $1.41 (1854); $1.77 (1855); $4.85 (1855)

Mackerel	$.50 (1854)
Mackerel, ½ barrel	$4.50 (1855)
Oysters	$2.00 (1856)
Potatoes, bushel	$.57 (1855); $.50 (1855)
Irish Potatoes, pound	$.81 (1855)
Sweet Potatoes, pound	$1.00 (1855)

Clothing

Coat and pants	$9.50 (1852); (1854)
Pants and vest	$4.50 (1853)
Hat	$3.35 (1852); $.95 (1854); $2.50 (1856)
Bonnet	$1.25 (1854)
Silk apron	$1.50 (1853)
Dress and buttons	$1.00 (1855)
Pantaloons	$4.75 (1853)
Pant, shift and dress	$3.60 (1853)
Socks, pair	$.50 (1853)
Shoes, pair	$.75 (1852); $1.25 (1852); $.60 (1853) (1854); $.80 (1855); $.75 (1856)
Moccasins	$1.00 (1854)
Boots, pair	$3.75 (1853); $5.12 ½ (1854)
Gloves, pair and thimble	$2.50 (1856)

Material

Linen, yard	$.80 (1852); $.60 (1854); $.75 (1854)
Calico, yard	$.13 (1854); $.12 (1855)
Hicory [sic] shirting, yard	$.12 ½ (1852)
Flannel, yard	$.45 (1854)
Lindsey, yard	$.20 (1854)
Cross-barred muslin, yard	$.30 (1853)

Labor

Hire of Ann, per month	$5.00 (1852)
Mowing, one day	$2.50 (1852)
Stacking, one day	$.75 (1852)
Grubbing, per acre	$4.00 (1853); $5.00 (1853)
Putting up lightning rod	$8.50 (1853)
Frederick, per month	$5.00 (1854)
Henry, 7 ½ days of work	$2.95 (1854)

Digging well	$31.25 (1855)
Plastering kitchen	$3.50 (1855)
Hire of Albert for 1 ½ months	$19.50 (1855)
Making wagon wheel	$2.25 (1852)
Making rails	$3.10 (1853)
Burning brush	$2.15 (1853)
Painting house	$35.00 (1853)

Slaves

Ann and two children	$1,100 (1854)

Miscellaneous

School tax	$2.25 (1854)
Missouri Republican subscription	$2.00 (1856)
Donated to build church	$10.00 (1856)
Charity on Dec. 5	$2.50 (1853)
Ear rings	$2.50 (1854)
Comb	$.50 (1853)
Maps	$4.65 (1852)

Items Sold

Load of Props	$1.15 (1854); $2.35 (1855)
1 acre oats & 2 acres of grass	$20.00 (1859)
30 bushels of potatoes	$15.00 (1859)
400 bundles of oats	$10.00 (1859)
25 bushels sweet potatoes	$18.75 (1859)
Pound of hay	$.70; $.75; .$80 (Winter 1859-1860)*
One stack of hay	$25.00 (1859); $45.00 (1859)

Over the winter 1859-1860 Mr. Sappington sold 22,795 pounds of hay.

Appendix C: 1850 Agricultural Census

Carondelet Township

Name	Improved Land*	Unimproved Land*	Cash Value	Farm Implements	Horses	Asses & Mules	Milch Cows	Oxen	Other Cattle	Sheep	Swine	Value of Livestock
Frederick Dent	250	640	$40,000	$400	5	1	14	1	20		35	$600
Joseph E. Sale	30	30	720	50	2		2		4	2	22	250
John Wells	15	15	200	30	1		1	2	1	1	8	80
James W. Sigerson	1000	600	150,000	600	11		8	22	12	105	25	1,500
Thomas Sappington	60	120	4,500	150	4		3	4	10	25	20	175
John Sappington	150	720	20,000	600	7		10	10	25	13	100	650
Zeno Mackay	75	300	10,000	300	6		7	2	10		40	300
Harrison Long	65	85	2,500	100	3		4	2	3		30	300
Zephania Sappington	100	203	4,500	150	11		8		11	23	75	725
John F. Long	30	30	1,500	80	3		2					170
*In acres												

Name	Wheat (bu.)	Rye (bu.)	Indian Corn (bu.)	Oats (bu.)	Wool (lbs.)	Irish Potatoes (bu.)	Sweet Potatoes (bu.)	Buck Wheat (bu.)	Value of Orchard Produce	Butter (lbs.)	Hay (tons)	Value of Market Garden Produce	Value of Animals Slaughtered
Frederick Dent	100		1,000	400		500			$50	200	4		
Joseph E. Sale	100		450	250		120	70		20		6		
John Wells			250	20		115					18		
James W. Sigerson**			3,000	300		825	100		50,000		25	3,500	100
Thomas Sappington	90		400	60	50	30	50			300	10		95
John Sappington	300	60	500	400	75	200	150		300	400	10		205
Zeno Mackay	50		200	50		50	20			150	6		85
Harrison Long	60		600	100		10	20	3	25	40			25
Zephania Sappington	30	50	1500	200	80	200	75		50	150			
John F. Long	60		500	100								30	
**Sigerson sold fruit trees													

Appendix D: 1860 Agricultural Census

Carondelet Township

Name	Improved Land*	Unimproved Land*	Cash Value	Farm Implements	Horses	Asses & Mules	Milch Cows	Oxen	Other Cattle	Sheep	Swine	Value of Livestock
Joseph W. White	20	60	$6,000	$100	4	2	2	2			3	$500
Joseph E. Sale	250	750	30,000	300	9	3	25	8	30		50	1,600
Perry Sappington	40	40	1,600	150	1		4		2		5	125
Sebastian Sappington	130	140	10,000	150	7		10	2	5		60	650
Lemwell Pardee	30	40	5,000	100	2		2				6	160
John Sappington	100	100	6,000	200	14	2	12	9	25	10	60	1,500
Maria Mackay	80		8,000	100	2	2	4					400
Harrison Long	40	20	4,000	100	4		4	2	5		20	450
George Sappington	55	20	1,500	150	2		4		4		15	250
Linton Sappington	100	22	5,000	150	2		1				2	200
*In acres												

Name	Wheat (bu.)	Rye (bu.)	Indian Corn (bu.)	Oats (bu.)	Wool (lbs.)	Irish Potatoes (bu.)	Sweet Potatoes (bu.)	Buck Wheat (bu.)	Value of Orchard Produce	Butter (lbs.)	Hay (tons)	Value of Market Garden Produce	Value of Animals Slaughtered
Joseph W. White			900	200		500			$50	200	6		
Joseph E. Sale			3,500	500		1,000	500		250	350	15		
Perry Sappington			300	60		200	50			300	5		
Sebastian Sappington			1,050	500		800	300			200	40		
Lemwell Pardee			250	140		200	400			200	5		
John Sappington			2,000	500	30	800	200		500	100	15		
Maria Mackay			1,000	300		700	50			200			
Harrison Long						400	50			200	15		
George Sappington			400	100		700	100		25	300	8		
Linton Sappington			800	500		200			25	200	10		

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