

**Cotton or Corn: the Antebellum Farmer's Dilemma in Fayette County and on the
Ames Land Base
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Cotton, the material that makes up our socks, T-shirts, and other clothing articles, was once the livelihood of nearly the entire South. Everyone in the South was affected by the systems of cotton production, either directly or indirectly. Intense cotton production can be linked to the persistence of slavery in the South after it was abolished in the North in the early 19th century.¹ *DeBow's Review*, a prominent agricultural journal, stated in 1847 that "the alliance between cotton and negroes is now the strongest power in the world."² Cotton's influence was especially strong in politics leading to Senator James H. Hammond's claim "You dare not make war upon cotton! No power on earth dares make war upon it. Cotton is king."³ The dependence of the Southern economy on cotton caused a labor dependence on slavery, which in turn fueled the intense cotton cultivation. The focus on cotton was so intense that the South would fail to grow enough food for the population, especially in the leading cotton production areas, leading to a net importation of food from the Old Northwest and the Upper South states of Tennessee and Kentucky.⁴ West Tennessee however was not the food cultivating area of Tennessee; it belonged to the Cotton Kingdom.

Prior to the Civil War, West Tennessee stood apart from the rest of the state in that it was more similar economically to Mississippi and the Delta region in particular. Unlike Middle and East Tennessee, which produced very little cotton and instead

¹ Bell Irvin Wiley, *Cotton and Slaver in the History of West Tennessee*. Unpublished Thesis: University of Kentucky, 1929, 91.

² *DeBow's Review*, V, 139, (1847).

³ March 4, 1858.

⁴ Samuel Bowers Hilliard, *Hog Meat and Hoecake, Food Supply in the Old South: 1840-1860*. (Carbondale: Southern Illinois University Press, 1972), 203.

specialized in an array of crops and farm animals, West Tennessee, the land between the Mississippi River and the Tennessee River, primarily grew cotton for export and food crops only for subsistence. In 1850 about nine out of ten farmers in Fayette County planted cotton.⁵ The economy of West Tennessee was more similar to the Cotton Belt of West Georgia, Alabama, Mississippi, and Louisiana than the rest of Tennessee. The similarities in economy had great ramifications on the culture and politics of the region as well. In East Tennessee, where farming was primarily a subsistence activity, only seven percent of farmers owned slaves while in the cotton based economy of West Tennessee, nearly sixty five percent of farmers owned slaves.⁶ Thus its culture and politics were more aligned with the Deep South (Mississippi, Louisiana, Alabama, Georgia, South Carolina, Texas, Arkansas, and Florida) than the Outer South (Kentucky, Virginia, Maryland, North Carolina, and Missouri). These differences had political implications as well. Where most of West Tennessee and many in Middle Tennessee supported the Confederacy, East Tennessee by and large did not and even made some attempts to join the Union as West Virginia did. Intensive cotton production was the foundation for the traditions of the Antebellum South and affected everything from political allegiances to what and how much people ate.

West Tennessee's systems and methods of food supply, in a cotton production region where food production was secondary, are a question of importance and deserve attention. "Corn and cotton were largely competitive in their labor requirements" and

⁵ Robert Tracy McKenzie, *One South or Many? Plantation Belt and Upcountry in Civil War-Era Tennessee* (New York: Cambridge University Press, 1994) 7.

⁶ Blanche Henry Clark, *The Tennessee Yeomen: 1840-1860*. (New York: Octagon Books, 1971), 9.

planters were forced to choose between them.⁷ Because the production of cotton in the Deep South was so dominant, some scholars speculate that the most ambitious planters would occasionally neglect to ensure for adequate food supply in exchange for large profits in the cotton market. “[Intensive cotton production] threatened more mundane consequences by reducing the South’s capacity to provide its own foodstuffs.”⁸ If over-planting cotton at the expense of grain, planters would be forced to purchase grain and meat from local neighbors, regional markets, or extra-regional traders. Because West Tennessee and Fayette County in particular were prime cotton production area the planters and farmers would have had a huge profit opportunity in growing extra corn rather than cotton. Thus it is expected that the area’s farmers produced few surplus food crops for export as did Middle and East Tennessee and instead specialized in cotton production. The region did produce most of the state’s cotton and was not the intense wheat, hog, and corn production region that Middle Tennessee was.⁹ Yet the area did not neglect food production to the degree that the heart of the cotton belt and some of the sugar and rice coastal plantations did. The only item that the area may have not produced enough of regularly was pork, but the area was more easily able to adapt to low hog production due to its location and relatively lower intensity of cultivation.

The farmers at Ames, a modern day land base on the border of west Fayette and Hardeman counties, and in Fayette County normally planted enough corn before the Civil War to feed themselves, their slaves, and their hogs, livestock, and work animals. The level of food necessary for sufficiency is difficult to determine because while production

⁷ Gray, Lewis Cecil, *History of Agriculture in the Southern United States To 1860* (Washington: Carnegie Institution of Washington, 1933), 707.

⁸ McKenzie, 32.

⁹ Samuel Bowers Hilliard, *Atlas of Antebellum Southern Agriculture* (Baton Rouge: Louisiana State University Press, 1984).

of the crop has been recorded, historical consumption patterns are much harder to determine with accuracy. Wheat production in West Tennessee was low relative to the United States as a whole but most of the South relied on corn to fulfill most of the carbohydrate portion of the diet.¹⁰ Wheat and cotton were competitive crops in terms of labor and land inputs and most cotton farmers did not plant wheat on a large scale.¹¹ *DeBow's Review* claims that “the more profitable production of other articles as tobacco, rice, cotton, and sugar cane, have nearly fixed the limit of the wheat growing region of the United States in North Carolina.”¹² Southerners definitely grew and ate wheat but when compared to corn it was definitely secondary in importance.

The meat portion of the average Southerner's diet consisted primarily of pork given the overwhelming production of pork according to the censuses, numerous travelers' accounts of pork at the dinner table, and its prominence in agricultural journals such as *DeBow's Review*. This publication particularly argued that African American slaves rejected other foods in favor of corn and pork. It states in an 1849 article that “rejecting teas, soups and light diet [the slave] eats through choice, with full impunity, a full meal of pork fat and corn bread.”¹³ The slaves were not alone in eating primarily corn and pork. The same issue of *DeBow's Review* talks of a traveler witnessing the “never changing bill of fare, which would consist of coffee, corn bread, and bacon.”¹⁴ While beef was certainly available, the lack of its mention in travelers' logs, the relative lackluster production of cattle compared to the North, and the journals insistence that

¹⁰ Hilliard, *Hog Meat and Hoecake*, 163.

¹¹ *Ibid.*, 163.

¹² Lewis C. Beck, “The Production of Breadstuffs-A Report on Breadstuffs in the United States.” *Debow's review, Agricultural, commercial, industrial progress and resources*. Vol. 7, Iss. 2, (Aug. 1849): 155.

¹³ Solon Robinson, “Negro Slavery At The South,” *Debow's review, Agricultural, commercial, industrial progress and resources*. Vol. 7, Iss. 3, (Sept. 1849): 211.

¹⁴ *Ibid.*, 220.

enslaved people only ate pork, seems to indicate that it was not the staple meat.

Furthermore, even today we see that the South prefers pork more than beef. In Memphis, the Carolinas, St. Louis, and Alabama the barbeque and traditional meat dishes are all pork based. Even in 1948 a survey by the U.S. Department of Agriculture found that “per capita pork consumption in the Southern cities included in the 1948 survey was about 12 percent above average for all the cities surveyed.”¹⁵ These statistics suggest that pork was considerably more important than other meats throughout the South and pork production should be closely evaluated in determining an area’s food supply. The reasons for this range from the preservation methods of pork over beef, the much faster reproduction rates of pigs, and devoting less land to swine than cattle.

This paper will explore the various methods that farmers or different classes in Fayette County of West Tennessee, in particular those on what is now the Ames Plantation Land Base, ensured food security. Possible methods would include planting a high ratio of food crops to cash crops and employing a “safety-first” strategy, directing all the farm’s energy towards cash crops and utilizing the revenue to purchase foodstuffs, or operating somewhere in between where the farm was generally self-sufficient but occasionally had shortages where they resorted to market solutions. Furthermore the paper will examine relationships between class and food supply methods within each class, if any exists. The paper will focus on the period between 1850 and 1860 when antebellum cotton production was at its peak. The figures will draw on data from the agricultural censuses of 1850 and 1860, any remaining business records, and personal accounts. Consumption is harder to measure; however several scholars have estimated

¹⁵ Roy Stout, “A Note on Analytical Methods; The Need for Cautions in Assumptions and Data Use.” *Journal of Farm Economics*, Vol. 42, No. 4. (Nov., 1960): 891.

various levels of consumption of foodstuffs that will be used to analyze self sufficiency of Fayette County as a whole and more specifically the farms located on the Ames land base.

The 1850 Census

The 1850 census was the first national census in United States history to collect data other than the number of free citizens and slaves. For the first time the census was not simply a tool for allocating seats in the House of Representatives to the states based on population. The 1850 census collected not only the population of the states but also manufacturing output, agricultural output, and the extent of commerce taking place among people who owned property.¹⁶ Thus the 1850 census provides us with relatively comprehensive records that were hard to come by prior to it.

However it is also important to remember that in 1850 there were numerous inconsistencies in the census. As a rule census takers did not collect data for farms that produced fewer than one hundred dollars in goods.¹⁷ Furthermore, poultry was not included until 1880 causing an important supplementary food source to go unaccounted for. Another problematic element of these early censuses is that they fail to identify people who did not own land yet produced crops or tenant farmers. Some scholars speculate that the tenant farmer population may have made up about half of the landless white population in the South as a whole.¹⁸ An additional problem with the census is that throughout the nineteenth century geographic mobility was high as farmers, especially small or landless farmers, tended to move West where land was opening and

¹⁶ Margo J. Anderson, *The American Census: A Social History* (Yale University Press, 1988), 35.

¹⁷ <http://www.archives.gov/genealogy/census/nonpopulation/index.html#ag>

¹⁸ Donald L. Winters. "The Agricultural Ladder in Southern Agriculture: Tennessee, 1850-1870." *Agricultural History*, Vol. 61, No. 3. (Summer, 1987): 40.

opportunities seemed endless. It becomes very difficult to find documents of such mobile families and what sort of contributions they made to the places where they settled for short periods on their way West. Finally census takers and their methods were prone to error. Some modern scholars estimate that in 1850 the census under enumeration of the free population ranged from between 11.7 percent to 14.4 percent.¹⁹

Estimating Southern Food Production and Consumption Habits

Despite having a relatively accurate agricultural census problems still arise when estimating both consumption and production. The census only enumerates the number of livestock. There is no direct data on the weight of particular animals, how many were slaughtered in a year, or were used for other purposes. Even with this lack of information historians, geographers, and economists have estimated the average production using the numerical census figures based off of records detailing fattening procedures in farmers' written accounts, meat packing plant stats, and the average number of hogs in relation to the number of people that were raising them. Samuel Hilliard estimates that the average Southern sow weighed less than 150 pounds although there was extreme variation.²⁰ Another study cited by Hilliard finds that the average weight of 11,212 animals was 146 pounds, again with a large range.²¹

Other scholars have come to different hog weight conclusions. Robert McKenzie estimates that the average hog weighed just ninety pounds prior to slaughter and much less if the hog was not fed grain and fattened before being killed.²² Contemporary accounts on average pig weights at the meat packing center of Cincinnati give us another

¹⁹ Donald H. Parkerson, "Comments on the Underenumeration of the U.S. Census, 1850-1880" *Social Science History*, Vol. 15, No. 4 (Winter, 1991): 509-515.

²⁰ Hilliard, *Hog Meat and Hoecake* 102.

²¹ *Ibid.*, 102.

²² McKenzie, *One South or Many*, 205.

figure. *DeBow's Review* calculated the average hog weight of 208 pounds in 1853 from pigs entering the meat packing plants of Cincinnati.²³ However hogs destined for the commercial market probably should not be representative of swine consumed for subsistence. Furthermore Cincinnati received pigs from all across the Ohio valley and probably does not represent Southern pork, which received less attention than Northern pork. Southerners generally did not feed their swine until the last months right before slaughter and instead allowed them to run free and forage on their own.²⁴ In the early 1830's James Stuart, a European traveler and writer described the hog raising methods employed in the South.

Hogs are very generally allowed to feed on the nuts in the woods for some part of every year. The climate is so mild during the winter in South Carolina, that they are allowed to roam about during the whole year, feeding on nuts, acorns, etc.²⁵

This description, despite its earlier period and more Eastern location, could be applied to most Southern livestock where commodity crops were grown with intensity. Planters obsessed with maximizing cotton crops and keeping costs low would take advantage of the abundant forage of the unimproved land and allow the swine to fatten themselves, subsequently having lower slaughter weights than the North and West.²⁶ None of the estimates of average pig weights can be accepted as entirely accurate although throughout this paper the lowest estimate given by McKenzie of ninety pound pigs will be used, as he bases his estimate on Tennessee raised pork as opposed to pork for the South as a whole.²⁷

²³ "Agriculture" *DeBow's review, Agricultural, commercial, industrial progress and resources*, Vol. 15, Iss. 2, (Aug 1853): 195.

²⁴ Hilliard, *Hog Meat and Hoecake*, 100.

²⁵ James Stuart, *Three Years in North America* (London: Gilbert and Rivington, Printers, St. Johns Square, 1833), 91

²⁶ Hilliard, *Hog Meat and Hoecake*, 101.

²⁷ McKenzie, 205.

The estimates regarding Southern consumption should be regarded with even more skepticism for there is even less information about how much people ate than what they grew. First of all throughout the South there were significant differences between regions and even individual farms in consumption and production. For instance, areas near the coasts produced considerably less hogs and beef because of their access to marine fish and shellfish.²⁸ In the western regions of the South, particularly before the Civil War, deer and other wild animals were abundant enough to provide a major element of the human diet. Hilliard, based on studies of human population densities and the censuses' figures detailing the amount of unimproved land, speculates that there may have been up to twenty deer per square mile and around eight million deer over the whole South.²⁹ The abundance of venison in some regions would allow farmers to produce much less pork and worry less about fat hogs whereas those in the more intensely cultivated areas in the Atlantic Coastal Plain would have more dependence on seafood. Further complicating things is that the census did not enumerate neither wild animals nor seafood thus forcing us to speculate on their importance except on the occasion when an observant farmer recorded such hunts and catches. The census itself cannot account for everything grown. Gardens in particular were important sources of food for Southern people, both free and slave. Yet on the censuses many garden vegetables fail to show up. Tomatoes, melons, berries, and other garden greens are not accounted for.³⁰ It would also be unrealistic to expect that the landowners would account for the garden produce

²⁸ Sam Bowers Hilliard, *Atlas of Antebellum Agriculture*. (Baton Rouge: Louisiana State University Press, 1984).

²⁹ Hilliard, *Hog Meat and Hoecake*, 77.

³⁰ 1850 and 1860 Census

that they harvested over the course of a year. Slave gardens also were not accounted for on the agricultural censuses.

Overview of Antebellum West Tennessee

West Tennessee was opened to settlement in 1818 when by treaty with the U.S. government the Chickasaw Nation ceded the land.³¹ Unlike East Tennessee and Middle Tennessee, which were not prime cotton growing areas, West Tennessee “belonged to the Brown Loam Tablelands, a belt of soil that runs far into Mississippi and sustained the production of some of the finest Mississippi Upland cotton.”³² Furthermore West Tennessee was the closest to the Mississippi River complex with access to the port of New Orleans and the European textile mills, thus had comparatively lower transport costs than the rest of the state.³³ Settlement occurred rapidly in the region, with farmers moving in from the Old Southern states to the east (Maryland, Virginia, North Carolina, South Carolina, and Georgia), Middle Tennessee, and parts of Alabama to West Tennessee. The population of Fayette County grew rapidly from around 800 people in 1825, to 8,652 in 1830, to 21,501 in 1840.³⁴ Slaves also made up a more than the average Tennessee proportion of the inhabitants, with nearly two thirds of the people in Fayette County classified as property.³⁵ Initially, settlers planted food crops, primarily corn, in order to secure a foothold in the region but turned their attention to more profitable cotton cultivation once food surpluses allowed it.

³¹Beverly Bond and Janann Sherman, *Memphis in Black and White* (Chicago: Arcadia, 2003), 21.

³² McKenzie, 7.

³³ Clark, 141.

³⁴ Glyn DuVall and Dan Allen IV, “Report of a Systematic Historical Archeological Survey of a Portion of the Ames Plantation Fayette County, Tennessee” 1997. 8.

³⁵ McKenzie, 7.

By 1850 the area was firmly established as cotton country and “was producing four fifths of the state’s cotton crop.”³⁶ Cotton production soared in the western part of the state from 9,213 four hundred pound bales in 1840 to 28,302 bales in 1850 to 35,281 bales in 1860, a three-fold increase.³⁷ The huge increase in cotton production was fueled by escalating prices. In the same twenty year period cotton prices doubled.³⁸ These escalating prices were caused by a number of economic events, largely those thousands of miles away in Great Britain. “Britain was the primary market for American cotton and America was the principal source of supply for the British cotton industry.”³⁹ British demand for cotton textiles was dependent on the state of the British economy, thus when Britain was booming the price of American cotton went up. Alternately, when Britain faced hard times American cotton farmers suffered. For example in 1834 and 1835 demand for cotton rose because of large British harvests that depressed the price of British bread. With a smaller percentage of Britain’s income going to food they could buy more clothing, creating demand for American cotton higher, which elevated cotton prices.⁴⁰ World demand for cotton “grew at five percent per year between 1820 and 1860, a rate of growth never equaled thereafter for such a sustained period” as a result of demand for British textiles.⁴¹ Interestingly, the New Orleans price actually fell between 1820 and 1860 from 15.5 cents per pound to 12.89 cents per pound.⁴² However the costs for producing and shipping cotton also fell greatly as growing methods, gin technology,

³⁶ McKenzie, 6-7

³⁷ Clark, 174.

³⁸ Ibid, 142.

³⁹ Peter Temin, “The Causes of Cotton-Price Fluctuations in the 1830’s,” *The Review of Economics and Statistics*, Vol. 49, No. 4. (Nov., 1967), 467.

⁴⁰ Ibid. 469

⁴¹ Gavin Wright. “The Efficiency of Slavery, Another Interpretation,” *The American Economic Review*, Vol. 69, No. 1. (Mar., 1979), 225.

⁴² Grey, 1027.

and internal transportation networks improved. Thus despite the lower price, cotton became much more profitable per unit than any food crop at the time and planters were able to grow a lot more of it. The New Orleans price of corn in 1850 was 66 cents per bushel where as the price for cotton was 11.7 cents per pound.⁴³ A bushel of corn is about 56 pounds meaning that per pound corn was worth 1.18 cents. Ignoring any differences in cost, cotton at New Orleans was almost ten times more profitable than corn. With such a price difference it is no wonder that cotton dominated the Southern economy. By 1850 West Tennessee, as most of the Deep South, was a single commodity economy. Because of the singular reliance on one crop Southern farmers were vulnerable to market collapses across the ocean, bad weather at home, and food self-sufficiency.

The cotton economy also allowed those who had access to capital to grow while smaller subsistence operations were slowly pushed out of cotton country. Between 1850 and 1860 Fayette County experienced a 23 percent drop in the free white population and a decrease in food production while posting a large increase in acres cultivated and cotton produced.⁴⁴ Tenancy dropped as well from an estimated 14.1 percent in 1850 to an estimated 13 percent in 1860.⁴⁵ The drop in population and food production while cotton production increased indicates that the largest planters were expanding land devoted to cotton at the expense of the earlier subsistence patterns of the yeoman class of whites.

Census records also indicate more directly that West Tennessee was dominated by the rich planter far more than the other Grand Divisions of Tennessee. In 1860 the median wealth of a free farm household in West Tennessee was \$5,500 whereas it was

⁴³ Ibid. 1027.

⁴⁴ Gary Edwards, "Venerate the Plow: Agricultural Life in Antebellum Fayette County, Tennessee," *The West Tennessee Historical Society Papers* 51(1997), 91.

⁴⁵ Winters, 41.

only \$3,500 in Middle Tennessee and \$1,950 in East Tennessee.⁴⁶ The cotton revenue brought into West Tennessee surely provided a strong incentive to plant cotton over food crops, to continue acquiring more slaves and land, and to support politicians who were pro-slavery and anti-tariff. Furthermore, West Tennessee's proximity to the Mississippi River made importation of food from the Northern Ohio Valley states cheaper and easier than that of the rest of Tennessee increasing the attractiveness of cotton over food even more. The key question is whether they put too much emphasis on cotton production over food.

Estimates of Fayette County Self Sufficiency: Samuel Hilliard

When dividing the 1850 production of corn, swine, and cotton by the 1850 county population Fayette County farmers produced about 36 bushels of corn per person, a little less than two pigs a person, and a bit more than one four hundred pound bale of cotton per person.⁴⁷ Samuel Hilliard, author of *Hog Meat and Hoecake*, posits that the sufficient ratio of corn to be about thirteen bushels per person, seven and a half per horse, and four per hog.⁴⁸ We must also take out ten percent of the corn crop which would be the amount required reserve as seed to plant the next year's crop.⁴⁹ Based on Hilliard's estimated corn consumption figures for humans and hogs throughout the South (described later), with ten percent of the crop reserved for seed, Fayette County would have had nearly 44 percent more corn than was needed for the human and hog population. The produced corn that was not consumed by humans, horses and mules or pigs made up

⁴⁶ McKenzie, 63

⁴⁷ Seventh Census, 1850, Schedules 1 "An Enumeration of Free Inhabitants" 2 "An Enumeration of the Slave Population" and 4 "Productions of Agriculture" (Compiled by Gary Edwards).
963,328 bushels corn / 26,719 people; 52,108 swine / 26,719 people; 28,302 bales of cotton / 26,719 people.

⁴⁸ Hilliard, *Hog Meat and Hoecake*, 158.

⁴⁹ William K. Hutchinson; Samuel H. Williamson, "The Self-Sufficiency of the Antebellum South: Estimates of the Food Supply," *The Journal of Economic History*, Vol. 31, No. 3. (Sep., 1971): 595.

43.8 percent of the total production or 264,077.2 bushels of corn, a large surplus in a cotton production region Fayette County.⁵⁰ The county, even when you factor in spoilage and other natural threats, was as a whole self sufficient in corn production. The ratio (total corn production divided by estimated human and hog consumption) decreased slightly in 1860 to about 44.3 percent surplus or about 235,531 bushels as a result of more intensive cotton cultivation at the expense of corn, greater wheat cultivation, and a large increase in horses and mules.⁵¹ However, as mentioned earlier in the work, these surpluses are based on numbers which Hilliard calculated for the American South as a whole, ignoring the reality that the South's many regions obviously deviated from the norm. The county produced 16,667 bushels of wheat not including the twelve percent of wheat saved for seed,⁵² in 1850. If we take Hilliard's consumption estimate of one bushel of wheat per year per person then Fayette County was only producing 62.4 percent of what should have been the consumption norm.⁵³ However when compared with the surplus corn it would be reasonable to hypothesize that the inhabitants of Fayette County simply ate more corn to make up for the shortfall of wheat. An interesting note though is that in 1860 wheat production soared to 52,240 bushels giving the population 2.15 bushels of wheat per person, a 345 percent increase of wheat per capita over 1850.⁵⁴

⁵⁰ Seventh Census, 1850, Schedules 1,2, and 4 (Compiled by Gary Edwards).

Produced Corn: 963,328 * .9 (10% Reserved Seed) – Consumed Corn: [26,719 people * 13 bushels + 52,108 swine *4 bushels + 6,285 horses * 7.5 bushels].

⁵¹ Eighth Census, 1860, Schedules 4 “Productions of Agriculture” (Compiled by Gary Edwards).

⁵² Hutchinson and Williamson, 594.

⁵³ Seventh Census, 1850, Schedules 1,2 and 4 (Compiled by Gary Edwards).

Hilliard, *Hog Meat and Hoecake*, 167.

16,667 bushels of wheat divided by 26,729 people.

⁵⁴ Eighth Census, 1860, Schedules 1,2, and 4 (Compiled by Gary Edwards).

52,240 bushels divided by 24,327 people.

In the South beef was widely replaced by pork as the staple meat. The amount of hog meat thought to be necessary per person in the Antebellum South to be 150 pounds.⁵⁵ Again Hilliard estimates these numbers. The estimates are based on reports of European and Northern traveler's diary descriptions of the South, the state's responses to an 1848 Patent Office survey, journal records advising the proper diet for slaves, and internal plantation documents detailing slave rations.⁵⁶ West Tennessee may have been different than the rest of the South as it was further north, had easier access to the major meat producing region of the Ohio Valley, and was less densely populated than the East and probably still could depend more regularly on wild game to supplement the daily diet. Dividing the 1850 and 1860 Fayette County hog population by the human population we can deduce that the county produced about 1.95 hogs per person in 1850 and then 1.69 hogs per person in 1860.⁵⁷ According to Hilliard's estimates of Southern pork consumption of 150 pounds per person for the average Southerner, Fayette County, to be self sufficient, would need to produce 4,007,850 pounds of pork in 1850.⁵⁸ Given a three year growing period and including reductions in the population due to disease and death Hilliard estimates that the hogs would have had a 43 percent slaughter ratio which means that at an average pig weight of 140 pounds Fayette County's 52,108 swine would have yielded 3,136,901.6 pounds of pork in 1850.⁵⁹ Thus the county would have in 1850 been producing 117 pounds of pork per person well below Hilliard's estimated Southern average of 150 pounds.⁶⁰ According to Hilliard's consumption estimate, it produced

⁵⁵ Hilliard, 106.

⁵⁶ Ibid. 105.

⁵⁷ Seventh and Eighth Census, 1850 and 1860 , Schedules 1,2, and 4 (Compiled by Gary Edwards)

⁵⁸ Hilliard, *Hog Meat and Hoecake*, 130.

26,719 people * 150 pounds consumed annually.

⁵⁹ Hilliard, *Hog Meat and Hoecake*, 102.

⁶⁰ Seventh Census, 1850, Schedules 1,2, and 4 (Compiled by Gary Edwards).

870,948.4 pounds pork less than what would be needed to keep up with the Southern average. By 1860, assuming the same slaughter ratio and average slaughter weight, the county would have produced 2,475,665 pounds of pork and about 102 pounds per person even more less than in 1850.⁶¹

Hilliard comments less on cattle than pork as it “was relied upon less often as pork [and] fewer people bothered to keep detailed records of beef weights and beef rations.”⁶² Although in sheer numbers per capita Southern cattle exceeded the national average, Southern cattle were significantly inferior. Most reports “describing them as smaller than the best kept animals of the North and West.”⁶³ Hilliard estimates that the average cow yielded 300 pounds of beef and that twenty percent of a herd would be slaughtered each year.⁶⁴ He also estimates, based on the nation’s average meat consumption of 175 pounds between 1830 and 1880 and Southern pork consumption of 150 pounds annually that beef must have been consumed in the South to a tune of 25 to 35 pounds a year on average and rarely by slaves.⁶⁵ Fayette County had 10,826 “other cattle” (non-dairy and non-work cows) which, when you assume twenty percent were slaughtered at an average weight of 300 pounds, then the county produced 649,560 pounds of beef in a given year.⁶⁶ Then, assuming Hilliard’s consumption habits of 35 pounds of beef annually by free whites (he believed beef was not given to slaves in significant amounts), the 11,455 free people of Fayette County would have needed 400,925 pounds of beef thus giving Fayette County a surplus of 248,635 pounds of beef

3,136,901.6 pounds pork divided by 52,108 people

⁶¹ Eighth Census, 1860, Schedules 1,2, and 4 (Compiled by Gary Edwards).

⁶² Hilliard, *Hog Meat and Hoecake*, 130.

⁶³ *Ibid.* 129.

⁶⁴ *Ibid.* 129.

⁶⁵ *Ibid.* 130.

⁶⁶ 10,826 cattle * 20% slaughter ratio * 300 pound average slaughter weight.

annually.⁶⁷ This surplus probably went towards making up the pork deficit although not entirely as 250,000 pounds of beef would not replace over 800,000 pounds of pork.

Based on Samuel Hilliard's consumption estimates and animal slaughter weight hypothesis Fayette County was quite self sufficient in corn and in wheat by 1860. However if Hilliard is accurate the county did not raise enough hogs, nor enough cattle to make up the swine deficit. I would hypothesize that due to the region's proximity to both the inland port of Memphis and to the food surplus region of Middle Tennessee that the county simply imported pork from up north and from the east.

Estimates of Fayette County Self Sufficiency: Hutcheson and Williamson

Another estimate offered by William Hutchinson and Samuel Williamson estimates human consumption based off of a 1848 report by the Commissioner of Patents and the magazine *Southern Cultivator* estimates human consumption of twelve bushels of corn, three bushels of wheat, two bushels of potatoes, a quarter bushel of beans per person annually.⁶⁸ They also estimate that cattle consumed one bushel of corn annually, horses consumed thirty bushels of either oats or corn, mules twenty bushels of corn or oats, and sheep one-fourth of a bushel of corn.⁶⁹ For swine, the predominate meat, Hutchinson and Williamson estimate annual consumption in Tennessee to be 9.84 bushels in 1840, 9.77 bushels in 1850, and 10.75 bushels in 1860.⁷⁰ Thus if we apply their consumption estimates of corn (with the assumption that mules and horses ate a diet of ten bushels of oats annually in addition to corn) for humans, horses, cattle, sheep and swine to the number of each animal in Fayette in 1850 then the total need for corn in

⁶⁷ 11,455 free persons * 35 pounds of beef annually.

⁶⁸ Hutchinson and Williamson, 595.

⁶⁹ Ibid. 595.

⁷⁰ Ibid. 596.

1850 is 944,657.7 bushels per year.⁷¹ Corn production in 1850 was 963,328 bushels and when you consider that about ten percent of that would have been reserved for seed it would have been 866,995 bushels and the county would have had a 77,662 bushel deficit in corn. In 1860 the needed corn was 856,684.25 whereas production was 852,980, a 3,704 bushel shortage.⁷² The county would also have a larger deficit in wheat if three bushels was the normal annual consumption. In 1850 Fayette only produced 18,940 bushels of wheat meaning that the population only would have .709 bushels of wheat per person, well below three bushels a person.⁷³ The ratio improved in 1860 when the wheat harvest was 59,364 bushels and the per capita production was 2.44 bushel per person, much closer to Hutchinson and Williamson's consumption estimates if still short.

Hutchinson and Williamson also provide slightly different estimates for human consumption of pork. They estimate that 180 pounds of pork was eaten annually by field hands and 120 pounds were eaten by non-field hands based on writings by planters, farmers, and writers of the antebellum period.⁷⁴ Because there is no way of accurately knowing what percentage of the population were field hands and what percentage was not, predicting the level of consumption is difficult.

Estimates of Fayette County Self Sufficiency: Robert McKenzie

Robert McKenzie provides a third estimate for animal weights and consumption habits. McKenzie estimates that the average white person ate 10.16 bushels of grain a

⁷¹ 6285 horses and mules*15 bushels corn annually + [5463 work oxen + 2275 dairy cattle+ 10826 other cattle]*1 bushel annually + 8382 sheep * 0.25 bushels annually + 52108 swine * 9.77 bushels annually + 26719 humans * 12 bushels annually.

⁷² Eighth Census, 1860, Schedules 1,2, and 4 (Compiled by Gary Edwards).
6,790 horses and mules * 15 bushels annually + 14045 cattle *1 bushels annually + 41,124 swine * 10.75 bushels + 24,327 humans *12 bushels annually.

⁷³ Seventh Census, 1850, Schedules 1,2, and 4 (Compiled by Gary Edwards).
18,940 bushels of wheat divided by 26719 people.

⁷⁴ Ibid. 603.

year and the average slave ate 13.5 bushels of grain annually.⁷⁵ These estimates are roughly equal to Hilliard's in terms of corn; however McKenzie does not distinguish between corn and wheat.

When you analyze McKenzie's consumption and production numbers on pork, people were producing and eating less ham and bacon than what Hilliard assumed. Robert McKenzie assumes "conservatively" that the average pig weighed ninety pounds at the time of slaughter, 50 pounds less than what Hilliard estimated.⁷⁶ The consumption estimate put forward by McKenzie estimates 136.5 pounds of pork were eaten per year by slaves and 152.6 pound were consumed annually by whites.⁷⁷ If we accept both of McKenzie's estimates, then the annual consumption of hogs would be less than Hilliard's 150 pound a year estimate and Hutchinson and Williamson's 120 pounds a year non-field worker and 180 pounds a year field worker estimate. If you take the numbers of swine enumerated on the census and assume, as McKenzie does, the average age of slaughter for them was twenty months, then it means that .445 of the hog population would be slaughtered each year, and that 23,188 pigs were killed in 1850 in the county.⁷⁸ Fayette County had 52,108 swine in 1850. If 44.5 percent were slaughtered at a weight of ninety pounds, then there would be a total pork output of 2,086,925.4 pounds.⁷⁹ Then if we assume McKenzie's estimates of slave and free white consumption, the total needed pork would be 3,381,569 pounds and a 1,294,643 pound pork deficit would exist in Fayette County during 1850.⁸⁰ In 1860 there was a lower population (24,327) and lower swine

⁷⁵ McKenzie 205.

⁷⁶ Ibid. 205.

⁷⁷ Ibid. 205.

⁷⁸ Ibid. 204.

⁷⁹ 52,108 swine * .445 slaughter ratio * 90 pounds each

⁸⁰ 11,455 free whites * 152.6 pounds annually + 15264 slaves * 136.5 pounds annually.

numbers (41,124).⁸¹ These changes meant that 1,647,016 pounds of pork would have been produced, assuming production conditions did not change and that 3,463,185 pounds of pork were needed assuming consumption patterns did not change.⁸²

According to McKenzie's low weight hog estimate Fayette County ran a more significant pork deficit than if we accept Hilliard's estimates

Fayette County Self Sufficiency: Conclusion

Because two of the three corn consumption estimates indicate that the county was growing enough corn and that the third shows that it was really close to growing sufficient corn, it seems that Fayette was able to provide for itself with regard to grain. Given that all three of these author's production and consumption theories indicate that Fayette County was running a deficit of hog meat, it is likely that the area was indeed not producing enough pork and would have either done without, substituted it with another meat, or imported supplies from outside the county.

A possible reason for lower pork production may be that the residents of Fayette County were different than the average South in that they ate less than the average amount of pork. As already mentioned, there may have been a large local deer herd that would have supplemented the domestic animal stock. Indeed, when one looks at the agricultural census records for the area around Ames in 1850 and 1860 over half of the land base that was counted was not in cultivation or improved indicating that the farmers did not have the labor or incentive to cultivate the land.⁸³ However, leaving so much land idle would be a boon to the deer, rabbit, and turkey population. The amount of

⁸¹ Eighth Census, 1860, Schedules 1,2, and 4 (Compiled by Gary Edwards).

⁸² Eighth Census, 1860, Schedules 1,2, and 4 (Compiled by Gary Edwards).

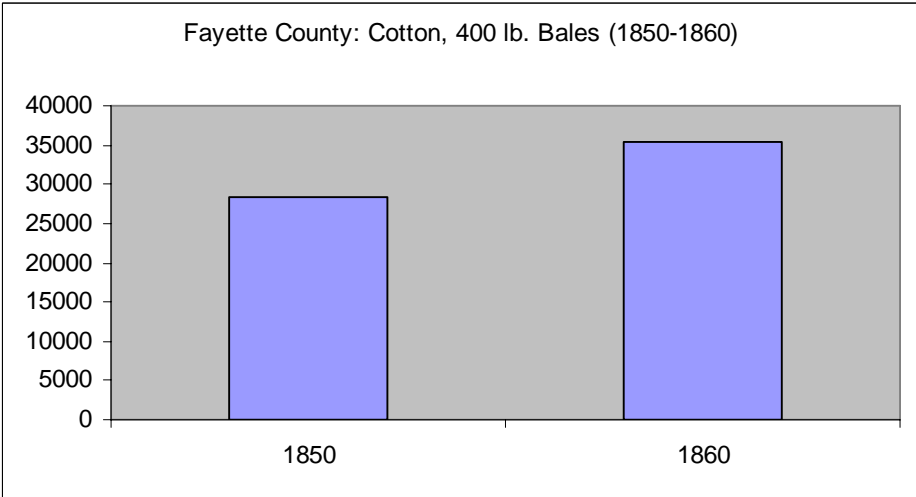
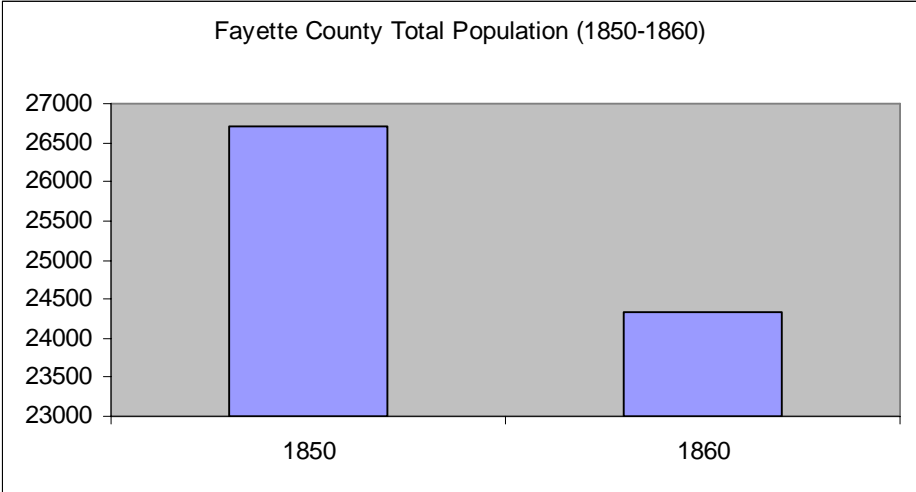
Pork Production: 41,124 pigs *.445 slaughter ratio* 90 pound average weight

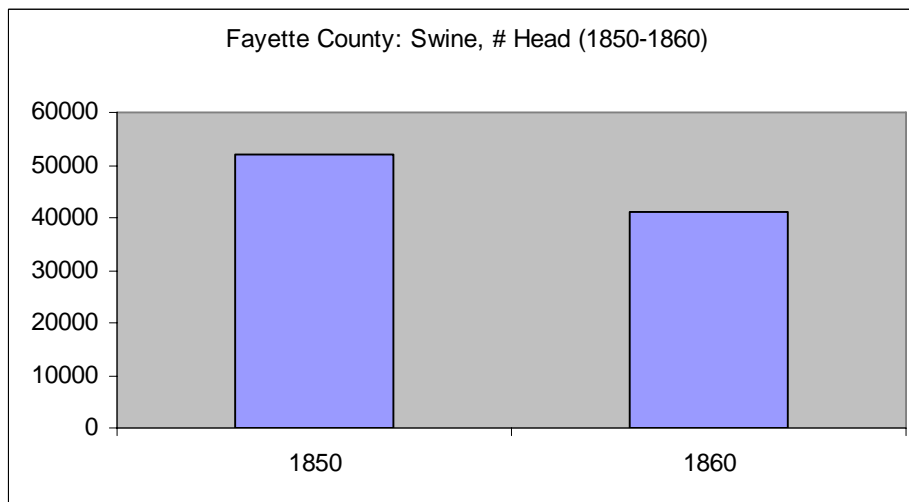
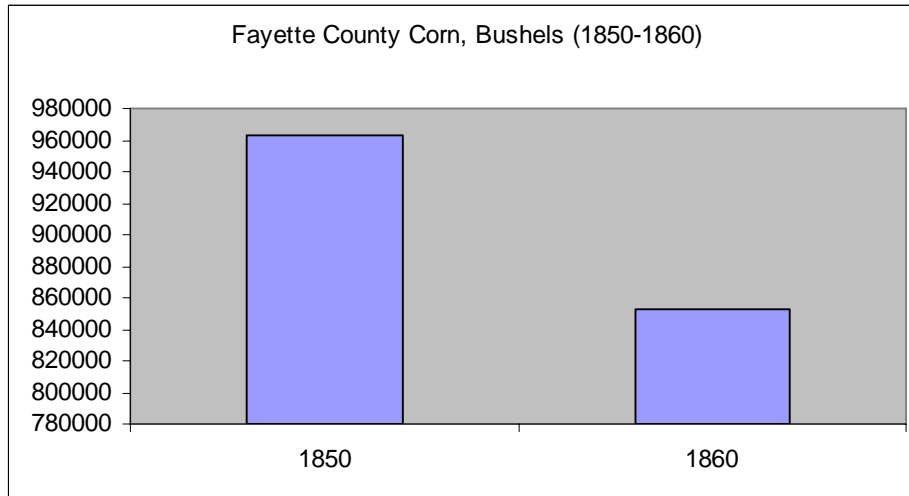
Pork Consumption: 15,437 slaves*136.5 pounds per year + 8,854 free people * 152.6 pounds per year.

⁸³ Seventh and Eighth Census, 1850 and 1860, Schedule 4 (Compiled by Gary Edwards).

uncultivated land should lead us to believe that the wild animal population in the county was above the Southern average and that the residents of the county would have taken advantage of the game. It is possible to believe that the people of Fayette County replaced some of the pork in their diet with game and it may have been sufficient if assuming Hilliard's average hog weights, but not if assuming McKenzie's estimated average hog weights.

The other possibility of course is that pork was brought in from more productive food producing regions. Particularly as transportation improved with the construction of the railroads in the 1850's through the region pork could have been shuttled from either the food rich Nashville area to the East or the Memphis inland port to the west.





Source: 1850 and 1860 Censuses (Compiled by Gary Edwards)

The Ames Land Base

In 1850 Ames Land Base in southeastern Fayette County and western Hardeman County was occupied by over ninety different landowners ranging from John W. Jones' 2200 improved acres down to Leroy Culp's 18 improved acres, making it an ideal area for the study of food production as it relates to farm size and class.⁸⁴ The land is located about fifty miles west of Memphis and five miles north of Grand Junction. Cotton was the primary economic crop but large amounts of corn, pork, and other foodstuffs were

⁸⁴ Eighth Census, 1850, Schedule 4.

also produced, probably for local consumption. The area had access to the North Fork of the Wolf River; however water levels were insufficient during most seasons. So prior to the railroads' construction in the 1850's most planters hauled their cotton to the Memphis markets by wagon.⁸⁵ A considerable amount of the land was also held by speculators, inheritors of early grants, and absentee landlords, which put a sizable amount of the land out of agricultural production at times.

By 1850 John W. Jones was the largest landowner on the Ames Land Base and Fayette County as a whole. Between 1830 and 1840 Jones acquired a large tract of land from M.H.C. Moorman, his father in-law.⁸⁶ Jones had "182 slaves to farm 2,000 improved acres – twenty times the West Tennessean median level – and to harvest more than 12,000 bushels of corn and 800 bales of cotton."⁸⁷ Jones far surpassed all of the other farmers at in the Ames land base in cotton production, food production, land ownership, and slave ownership and was continuously acquiring more land and wealth right up until the Civil War. John W. Jones's farm was worth \$30,000 in 1850 whereas the next wealthiest farm was his brother Wiley Jones whose holdings were worth just above half that at \$16,000.⁸⁸ Other large cotton oriented planters in the region other than John W. Jones included Wiley B. Jones, William P. Ingram, Alexander McNeil, Burwell Whitmore and Thomas J. Polk who with Jones produced over half of the cotton at Ames in 1850 out of over ninety landowners.⁸⁹ At the same time the smallest landowners such as Benjamin Finney and David Booth owned fifty acres or less and produced fewer than

⁸⁵ Edwards, 92.

⁸⁶ Jamie Evans, Ames Landownership Maps: 1830 & 1840.

⁸⁷ McKenzie, 21.

⁸⁸ Eighth Census, 1850, Schedule 4.

⁸⁹ Eighth Census, 1850, Schedule 4.

Jamie Evans, Ames Ownership Maps: 1850

twenty bales of cotton.⁹⁰ The average value of the 41 farms accounted for in 1850 was about 3,347 dollars, excluding personal wealth such as cash on hand and household goods, which was not counted by the censuses.⁹¹ The 41 farms accounted for on the Ames land base, had on average in 1850: 261 acres of improved land and 249 acres of unimproved land, 34.6 slaves, 64 pigs, 18 cows of which 5.7 were milk cows and 2.75 were work oxen.⁹² These farmers also raised an average of 11.9 bushels of wheat, 1250 bushels of corn, 155 bushels of oats, 60.5 four hundred pound bales of cotton, 88 bushels of sweet potatoes and a smattering of other crops.⁹³ Compared to Fayette County as a whole, Ames was producing more per individual farm than the Fayette County average. Fayette County as a whole only averaged 648 bushels of corn per farm, 19 bales of cotton per farm, and 35 pigs per farm.⁹⁴ The farms at Ames tended to be larger in land area and owned by people with more capital, thus they were producing more than Fayette County in general, which was already one of the richest counties in the state.

Despite the differences in property sizes, access to capital, and financial security both small landowners and the large landowners both produced an array of diverse crops neither focusing only on cotton nor food crops. There was no complete specialization in commodity crops and more surprisingly, no entirely subsistence farms, everyone produced some cotton. In addition to the 41 active farmers in the area it is important to note that several of the landowners on the Ames land base performed other professions and did not report agricultural output in 1850 or 1860. Willis Person and Robert

⁹⁰ Eighth Census, 1850, Schedule 4.

⁹¹ Eighth Census, 1850, Schedule 4.

⁹² Eighth Census, 1850, Schedules 2 and 4.

⁹³ Eighth Census, 1850, Schedule 4.

⁹⁴ Ibid.

Moorman owned and lived on the land but were preachers at local churches.⁹⁵ Others such as Mary Cotton were not farming but leased their land and slaves. In Mary's case her slaves and land were rented to John W. Jones and she fails to show up on the agricultural census.⁹⁶ Another landowner, Mr. Williams, was a doctor and preacher and did not cultivate any land despite owning land that he had inherited in the area.⁹⁷

Analyzing the 41 farms located on the Ames land base in 1850 with agricultural census records farmers planted more based on how much improved acreage they held. Based on a simple regression model for each additional acre, planters produced an additional .3791 bales or 151.6 pounds of cotton.⁹⁸ Each additional improved acre owned is correlated with an additional 5.19 bushels or about 290 pounds of corn harvested.⁹⁹ Approximately every additional five improved acres is correlated with an additional pig on the farm.¹⁰⁰ These rates are not crop yields and do not necessarily imply causation. The additional crops planted are per improved acre owned by the farmer, not the amount of that crop grown on each acre planted of that crop. The census did not ask about the amount of acreage planted of each crop, but only the total amount of that crop produced. Thus the only relationship that can be analyzed is production of a crop compared to the total improved acreage. The figures do show that at Ames, in terms of weight, more corn than cotton was produced per acre owned.

As in the greater Fayette County, the Ames land base farmers produced enough corn, especially the biggest planters such as Jones. Jones produced 12,500 bushels of

⁹⁵ Interview with Jamie Evans, July 11, 2007.

⁹⁶ Ibid.

⁹⁷ Eighth Census, 1850, Schedule 4.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

corn in 1850.¹⁰¹ Based on Hilliard's, Hutchinson's, and McKenzie's estimates of consumption, the plantation would have needed 5,217.5, 9,144, and 6,548 bushels of corn respectively.¹⁰² No matter what estimate that is used, Jones was self sufficient in corn. Jones had 500 swine in 1850 and using McKenzie's low estimate of hog weights and slaughter ratio Jones would have produced 20,025 pounds of pork in 1850 whereas using Hilliard's higher estimate of 140 pound pigs he would have produced 30,100 pounds of pork.¹⁰³ With 240 slaves and four free whites on the plantation Jones would have needed 33,384 pounds of pork for the slaves according to McKenzie and 36,600 pounds according to Hilliard.¹⁰⁴ Jones ran a pork deficit of between 6,500 and 13,359 pounds if he was indeed consuming the amount of pork that these scholars speculate. However the 63 beef cattle that Jones owned would have produced 4,668 pounds each year according to McKenzie and 4,080 pounds based on Hilliard's projections.¹⁰⁵ It would seem that beef would have made up some of the pork shortfall on the Jones plantation.

Meanwhile, despite their disadvantages, smaller planters almost all produced cotton, albeit on a smaller scale. Out of 41 farmers recorded as producing agricultural goods on the 1850 census none of did not produce any bales of cotton.¹⁰⁶ They also produced enough corn. Peter Culp needed 193.5 bushels of corn for his family, slaves, horses, and pigs in 1850 based on Hilliard's consumption estimates whereas McKenzie's estimates would require 439.05 bushels of corn for his slaves, horses, oxen, milk cows,

¹⁰¹ Ibid.

¹⁰² Seventh Census, 1850, Schedules 1,2 and 4.

¹⁰³ Seventh Census, 1850, Schedule 4.

¹⁰⁴ Seventh Census, 1850, Schedules 1 and 2.

McKenzie: 240 slaves * 136.5 pounds pork annually + 4 free whites *152.2 pounds pork annually.

Hilliard: 244 people *150 pounds pork annually.

¹⁰⁵ Seventh Census, 1850 Schedule 4.

McKenzie: 63 cattle * 240 pounds * .286 slaughter ratio.

Hilliard: 63 cattle *300 pounds * .20 slaughter ratio.

¹⁰⁶ Seventh Census, 1850 Schedule 4.

swine, cattle, and sheep.¹⁰⁷ Peter Culp produced 700 bushels of corn that year.¹⁰⁸ In terms of pork production Peter Culp's 25 pigs would have yielded 1001.25 pounds of pork according to McKenzie's estimates and 1,505 pounds according to Hilliard.¹⁰⁹ The consumption on his farm would have been 1,718 pounds using McKenzie's projections and 1800 pounds according to Hilliard.¹¹⁰ Using either of these projections, Peter Culp was close to achieving self-sufficiency in foodstuffs. When you consider the seven meat cows that would yield around 420 to 470 pounds of beef a year Culp looks even more self sufficient.¹¹¹ However the surplus was quite small so that it was probably not sold to anyone but the nearest neighbors or held in storage for harder times.

The desire to achieve the status of great planters such as John W. Jones must have given even the smallest farmers an incentive to produce cotton even if they did not reach the economies of scale to do so profitably. For example in 1859 cotton was selling for .103 dollars per pound.¹¹² Leroy Culp who produced three 400 pound bales of it would have made only \$123.6 from the sale of his cotton before you even factor in the costs of him having another person gin the cotton and the shipping of the cotton.¹¹³ The reasoning for such a small operation to produce cotton is specifically a mystery however there are several general hypotheses. Perhaps it was marginally profitable for Peter to

¹⁰⁷ Seventh Census, 1850, Schedules 1 and 2.

Hilliard: 13 bushels of corn * 12 humans + 7.5 bushels of corn * 5 horses + 4 bushels of corn * 25 swine.
McKenzie: 7 slaves * 13.5 bushels of corn + 5 free whites * 10.16 bushels of corn + 5 horses * 25 bushels of corn + 4 oxen * 35 bushels of corn + 2 milk cows * 5 bushels of corn + 7 other cattle * 2.25 bushels of corn + 12 sheep * 0.25 bushels of corn.

¹⁰⁸ Seventh Census, 1850, Schedule 4.

¹⁰⁹ McKenzie: 25 pigs * 90 pounds * .445 slaughtered annually.

Hilliard: 25 pigs * 140 pounds * .43 slaughtered annually.

¹¹⁰ McKenzie: 7 slaves * 136.5 pounds + 5 free whites * 152.6 pounds.

Hilliard: 12 people * 150 pounds.

¹¹¹ Hilliard: 7 cows * .2 slaughter ratio * 300 pounds.

McKenzie: 7 cows * .28 slaughter ratio * 240 pounds.

¹¹² McKenzie, 208.

¹¹³ Seventh Census, 1850, Schedule 4.

produce cotton on a small scale and he envisioned himself eventually becoming a large scale planter. However in the short run Leroy probably needed to ensure revenue to pay the taxes on his seven slaves, to cover ginning and transportation costs, and to finance any debt he had to cotton dealers or banks at the time. It was common for ginning operations to be connected to supply firms where the “farmer had run up a debt, crop liens (legal claims on the cotton filed by a lender) could leave the farmer with little or no saleable cotton.”¹¹⁴ He also may have simply been supplementing his father’s eleven bales of cotton and sharing the processing, transportation, and marketing costs thereby making the small operation profitable. Unfortunately, there are no records to indicate precisely what motivated him to produce so little cotton.

Changes on the Ames Land Base: 1850-1860

Whatever the small farmers’ ambitions it was the established large planters who grew the most between 1850 and 1860. As in the greater Fayette County area, the bigger plantations grew in size and wealth while smaller farmers left and sold their land to the bigger cotton producers. The trend was not entirely new. Earlier generations of hopeful farmers had come through tried their hand at creating a life in Fayette County only to then move on to other parts of the nation. The Holcombe family originally resided in Virginia before selling their land there and coming to Fayette in 1839.¹¹⁵ However they had moved out of Tennessee before 1850 and resided in Texas by May of 1850 selling their land to John W. Jones.

¹¹⁴ <http://eh.net/encyclopedia/article/phillips.cottongin>

¹¹⁵ Jack Greer and Jane Greer, *Leaves from a Family Album*. Waco, Texas: Library Binding Co. 1975. 15.

Alexander McNeil experienced the most growth at Ames during the 1850's. His farm grew from 1,100 total acres in 1850 to 2,300 total acres in 1860.¹¹⁶ Although fully half of his new land was unimproved and not in use in 1860, he still produced ninety additional bales of cotton in 1860 than 1850 and grew a 1,500 additional bushels of corn.¹¹⁷ William May also experienced a good deal of real estate expansion. His landholdings increased from 600 acres in 1850 to over 1,000 acres in 1860, with 964 acres classified improved, meaning they were being cultivated.¹¹⁸

John W. Jones, the largest planter actually had a decline in total acreage between 1850 and 1860. However Jones was richer and more powerful than ever in 1860, he just began divesting himself of some of his land to his relatives. Much of John W. Jones' southern land was transferred to Caleb B. Jones, a new addition to the Ames land base.¹¹⁹ Caleb Jones just appears with a solid 1,700 acres with an 1860 cotton crop of 225 bales, second on the land base.¹²⁰ Caleb looks like he gained a foothold in the cotton aristocracy of the area through a connection with John.

In terms of self sufficiency Jones produced 12,500 bushels of corn in 1860 when he would have needed 5,217.5 according to Hilliard and 6,548 bushels according to McKenzie.¹²¹ In either case the corn crop was more than double what he needed to keep his farm operating and enough to probably sell. Jones had 500 pigs in 1860 which would amount to 20,025 pounds of meat with McKenzie's calculations and 30,100 pounds with

¹¹⁶ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ Jamie Evans, Ames Plantation Property Maps: 1850-1860.

¹²⁰ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

¹²¹ Eighth Census, 1860, Schedules 1,2, and 4.

Hilliard: 13*240 slaves+7.5*13*7.5 horses+4*500 swine.

McKenzie: 13.5*240 slaves+25*13 horses+20*56 mules+35*16 oxen+5*25 milk cows+2.25*68 other cattle+.25*100 sheep+2*500 swine.

Hilliard's model.¹²² Then according to Hilliard's 150 pound consumption per person hypothesis the plantation would need 28,950 pounds of pork while McKenzie believed it would need 26,521.8 pounds.¹²³ The plantation either was self sufficient in pork or very close to it by 1860. However the beef production of 4080 pounds with Hilliard's numbers to 4668 pounds with McKenzie's numbers would have at least made up a significant part of the shortfall.¹²⁴

A number of farmers fail to show up on the 1860 census after producing food and cotton in 1850. Leroy Culp who produced the three bales of cotton in 1850 is not producing anything in 1860.¹²⁵ Leroy fell into the category of those continually going west to find their fortune. Apparently Leroy moved further west for he deeded his land back to his father on October 19, 1857 and moved with his wife to Clark County Arkansas.¹²⁶

However his preacher-farmer father Peter is still producing about the same amount of cotton, corn and a whole lot more pork with an increase in hogs from twenty five to sixty.¹²⁷ Perhaps Peter began selling some surplus pork in the area? Whatever Peter's business strategy he lived out the rest of his life in Fayette County on the same land farming and preaching at the Primitive Baptist Church of Mt. Pisgah. At his death in 1881 Peter had 390 acres of land which he had sold off and divided the proceeds equally

¹²² Eighth Census, 1860 Schedule 4.

McKenzie: 500 pigs*90 pounds*44.5% slaughter ratio.

Hilliard: 500 pigs*140 pounds*43% slaughter ratio.

¹²³ Eighth Census, 1860, Schedules 1 and 2.

Hilliard: 193 people*150 pounds pork.

McKenzie: 184 slaves * 136.5 pounds pork + 9 free people * 156.2 pounds pork.

¹²⁴ Eighth Census, 1860 Schedule 4.

Hilliard: 68 cows * 300 pounds *20 % slaughter ratio.

McKenzie: 68 cows * 240 pounds * 28.6% slaughter ratio.

¹²⁵ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

¹²⁶ Mary Frances Beasley, *Culp and Related Families*. Arkansas Sesquicentennial Commission, 1986.Pg. 77.

¹²⁷ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

between all his children and grandchildren with the exception of his son Judson's children.¹²⁸ Over his lifetime Peter's farm never grew much nor declined much, it always hovered between four hundred and five hundred acres, and before the Civil War he had around ten slaves.¹²⁹ He was not interested in becoming the large aristocrat that Jones and McNeil were. In 1850 and 1860 he only produced respectively eleven and twelve bales of cotton.¹³⁰

Wiley B. Jones' farm also gained monetary value but lost a considerable amount of acreage between 1850 and 1860.¹³¹ In 1850 the census states that Wiley had 2,600 acres of land, which according to the 1860 census had declined to 1,200 acres.¹³² However Wiley's wealth had increased by \$4,000 and his cotton production has increased by sixty bales.¹³³ Furthermore Wiley had 33 additional slaves in 1860 than 1850 to farm less land.¹³⁴ Finally according to the deed records compiled by Jamie Evans, it looks as if Wiley had actually acquired more land, not less in the Ames area.¹³⁵ It may be possible that Wiley held land elsewhere in 1850 which was recorded on that year's census and sold those holdings before the 1860 census thereby appearing as a loss of land in 1860 despite more intensively farming the land he had where Ames is. Wiley may just have sold off land elsewhere that he held for speculative purposes, because his improved land increased to 1,100 between 1850 and 1860 while the overall loss of land was simply the result of less unimproved land.¹³⁶

¹²⁸ Beasley, 51. (Peter Culp's will).

¹²⁹ Seventh and Eighth Census, 1850 and 1860, Schedules 2 and 4.

¹³⁰ Ibid.

¹³¹ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

¹³² Ibid.

¹³³ Ibid.

¹³⁴ Seventh and Eighth Census, 1850 and 1860, Schedule 2.

¹³⁵ Jamie Evans, Ames Plantation Property Maps: 1850-1860.

¹³⁶ Seventh and Eighth Census, 1850 and 1860, Schedule 4.

As a whole the Ames tract saw a decline in the number of landowners as several of the already big landowners bought up land of those smaller land owners who moved on, generally further west.¹³⁷

Conclusion

The farmers of Fayette County and of the Ames land base seem to have been self-sufficient in terms of grain and starchy foods but failed to provide entirely for their meat sources, at least livestock meat. The main reason for the shortcoming was that raising more meat would have meant devoting more resources, labor, and land towards swine and cattle production at the expense of maximizing cotton production. To raise more swine would have meant raising more corn to feed the swine, having more slaves tend the swine, and having to put more effort into processing and preserving the swine when the energy could be applied towards cotton cultivation. Further reasons for the lackluster meat production in the area include a potentially large deer herd, relatively easy access to pork and cattle from other regions, or below average consumption. The undeveloped, unimproved land in 1850 amounted to nearly half of all the land at Ames and would have sustained a large deer and turkey population that the inhabitants could have easily hunted. Also, as stated earlier, Fayette County was between the Memphis port and Middle Tennessee, both areas where there was a lot of meat either being produced or was shipped through and buying meat would have been affordable, especially for the largest cotton producers. The third possibility is that the inhabitants of Fayette County just did not follow the larger consumption estimates cited in this paper and did not eat that much meat. If they just ate less meat and more corn the area would have actually been self-sufficient.

¹³⁷ Jamie Evans: Ames Property Boundaries 1850 and 1860.

Table 1: Ames Farmers Output in 1850

	Acres of Land		Other Cattle	Sheep	Swine	Indian Corn, Bushels of	Ginned Cotton, bales 400 lbs.
	Improved	Unimproved					
Baugh, William	132	100	15	0	29	1000	22
Booth, Amelle & David	50	150	4	5	15	375	13
Carter, Jones W.	30	170	3	8	13	300	2
Chambers, T. E.	130	5	4	0	60	600	28
Culp, Leroy	18	0	4	0	20	250	3
Culp, Peter	120	380	7	12	25	700	11
Dickens, Fanny	300	146	10	14	55	2500	60
Dowdy, Elizabeth	70	85	6	0	6	200	2
Dowdy, William	175	225	5	0	40	875	17
Duke, Merrit	80	420	2	12	42	400	5
Ewell	250	150	10	12	95	740	30
Finney, Elizabeth/Benj.	40	120	5	0	30	750	6
Gates, William	125	150	20	0	80	500	30
Goode, Alexander	175	22	5	0	28	750	38
Graves, William	200	267	12	0	40	1250	9
Graves, Nancy	90	120	4	5	28	650	11
Graves, W.M.C.	200	269	12	0	40	1250	9
Green, Mary A.	25	5	2	0	6	200	7
Harris, E.W.	275	125	12	40	62	2000	78
Humphrey, Jesse	100	300	10	40	35	400	17
Hunt, John	240	300	20	4	80	1500	40
Ingram, William P.	225	150	0	35	100	0	117
Jernigan, David	160	354	16	20	100	1000	30
Jones, John W.	2200	1820	68	100	500	12500	875
Jones, Wiley B.	1000	1600	15	65	200	3000	300
May, William	20	0	0	0	0	200	4
May, William A.	350	250	10	0	75	2000	91
McNeill, Alexander	600	500	23	33	100	2500	100
Moody, Benjamin	500	130	12	25	80	1500	55
Parker, Charles W.	150	250	3	0	33	500	5
Patterson, J.T. (heirs)	200	300	15	18	130	1000	8
Polk, Thomas J.	450	120	10	0	20	3000	117
Poore, William	300	100	15	0	50	500	25
Putney, David (heirs)	300	50	1	0	50	500	70
Swift, C.M.	275	225	3	0	60	1000	58
Thorton, John	180	198	10	0	90	1250	25

Whitmore, Burwell T.	300	210	12	6	100	1750	59
Wilks, Mary G.	275	45	8	0	30	700	25
Winfield, Martha	130	30	8	0	30	400	33
Winfield, William E.	150	228	0	0	20	250	33
Worsham, Mary	124	100	5	0	30	500	15
TOTALS	10714	10169	406	454	2627	51240	2483
Averages	261.3171	248.02439	9.90243902	11.07	64.07	1249.756098	60.56097561
Standard Deviations	358.7991	356.39406	10.9790821	20.53	80.12	1958.116746	140.3600814

Table 2: Ames Farmers Output in 1860:

	Acres of Land		Other Cattle	Sheep	Swine	Indian Corn, Bushels of	Ginned Cotton,
	Improved	Unimproved					
Anderson, A.J.							
Baugh, William							
Boals, N.	80	75	10	15	30	500	15
Bryant, N.A.D.							
Burton, John W.							
Carter, Jones W.							
Cotton, Edwin							
Culp, Peter	125	355	5	0	60	750	12
Dickens, Fanny (Heirs--Burton??)							
Dowdy, Elizabeth							
Dowdy, William	300	200	18	6	60	1250	90
Falls, Hugh							
Finney, Elizabeth (Jernagan)							
Humphrey, Jesse	150	2800	8	40	70	750	75
Hunt, John							337
Ingram, William P.							37
Caleb B. Jones	1600	100	40	50	100	2000	225
Jones, John W.	2000	1500	100	120	600	12000	800
Jones, Wiley B.	1100	100	30	144	220	5000	360
May, William A.	964	140	20	50	150	3600	135
McNeill, Alexander	1150	1150	30	100	100	1000	190
Moody, Benjamin	250	250	7	0	35	500	43
Patterson R.G.	60	150	6	15	50	750	2
Philes, S.P.							
Putney, David (heirs)							
Pulliam, John and Jack	600	2210	40	40	300	4000	198
Rawings, William							
Swift, C.M.							
Turner, William A.							
Whitmore, Burwell T.							75
Wilks, Mary G.							
Winfield, Martha	130	40	13	50	95	0	25
Winfield, William E.	225	208	9	17	60	900	40
Worsham, Mary							
Totals	8734	9278	336	647	1930	33000	2659
Averages	623.8571	662.7143	24	46.21	137.9	2357.1429	156.4117647
Standard Deviations	632.5271	898.2483	25.090605	45.33	153	3159.0442	199.4664943

*Note: The missing farmers data exists but I was unable to locate it.

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