Agriculture

his is the first of seven chapters on specific themes in Prince George's County history that are most often associated with archeological remains. The placement of agriculture first in the sequence of historical themes underlies its importance to the history of Prince George's County. We have selected four topics to expand upon that are not only of central importance to the agricultural history of Prince George's County but also have the potential to be investigated through archeology. These four topics consist of postbellum labor practices, crops and livestock, technological changes, and farms and their organization. Associated property types are identified, as are potential areas of research that may be addressed by archeological investigations.

For the purposes of this theme, a farm can be defined as "a parcel of land historically used for farming and having a headquarters complex" (Terrell 2006:8). A farm is generally composed of a farmstead and adjacent land, but it can include noncontiguous parcels as well. A farmstead is the headquarters complex of the farm and consists minimally of a dwelling and associated farm elements (Terrell 2006:8). Farm elements include domestic structures such as privies, smoke houses, spring houses, detached kitchens, wells, and cisterns; agricultural structures such as barns, granaries, and machine sheds; and miscellaneous work and activity areas, livestock pens, and gardens (Terrell 2006:8). In many respects, this typology parallels that which is typically used when describing plantations, e.g., the plantation and the inner yard that form the antebellum plantations. We use the terms "farm" and "farmstead" for postbellum agricultural properties to distinguish them from the slave-based system that provided the essential characteristic of antebellum plantations.

Introduction

Historians and archeologists have emphasized the importance of agriculture as the basis of the American economy until quite recently and its many changes from 1850 through the late 1900s. Catts (2001-2002:143) notes that in 1850 there were 1.4 million farms in the United States, and by the 1890s that number had increased to more than 4.5 million. In contrast, average farm size decreased from 203 acres in 1850 to 137 acres in 1890. Further, Stine (1990:37) indicates that the farm population in the United States has dropped from 42 percent in 1900 to 2 percent in 1985. Through the 135 years analyzed by Catts and Stine, farm numbers increased, farm sizes decreased, and the proportion of the population engaged in agricultural

pursuits fell. This process spurred a major transformation in American society: one that involved a shift in the economy, occupations, settlement patterns, and lifestyles. As will be discussed throughout this chapter, Prince George's County mirrored many of these national and regional trends. Stine (1990) further notes that with the concomitant change in material culture, archeology is well-suited to study this process of rural culture change.

Since the seventeenth century, agriculture was the basis of the Prince George's County economy and it has remained so until recently. And if agriculture was the basis of the county's economy, tobacco was of primary importance throughout the history of the county until recently. That is not to suggest that agricultural history in Prince George's County is in any sense static. Indeed, the county, holding the most slaves in 1860 Maryland, saw massive upheavals in agriculture and its attendant labor relations following the end of the Civil War (Bruchey 1974:397). Agriculture in the county was further impacted by low tobacco prices, exhausted soils, mechanization, opportunities to supply the growing Washington, D.C., and Baltimore markets with fruits, vegetables, meats, and dairy goods, and the ever-encroaching suburbanization.

The characteristics of farms in Prince George's County follow a number of national and regional trends. Foremost, as in many of the former slave-holding states, the number of improved acres decreased drastically between 1860 and 1870 (Table 2). Prior to the Civil War, more than 182,000 acres, the fourth highest total in Maryland, were characterized as improved. Just 10 years later, this total dropped to just more than 125,000, or the 11th highest total. Cash value of farms and farming implements dropped as well (Table 2). This drastic decrease is seen throughout this chapter when examining the more important crops and livestock produced in Prince George's County. However, the period from 1870 through 1900 witnessed a steady increase in the number of improved acres and value of farm implements and, aside from

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Census year	Improved acres (Number)	Cash value ^a (Dollars)	Value of farming implements (Dollars)	Average farm size (Acres)
1860	182,468	10,421,108	211,971	
1870	125,045	7,358,111	159,659	
1880	164,289	6,849,702	199,475	159.0
1890	180,767	8,031,030	246,550	142.0
1900	174,273	8,288,040	323,820	111.6
1910	154,414	11,478,684	488,626	104.9
1920	143,438	17,184,653	1,389,385	93.1
1930	134,707	21,971,531	1,078,401	90.6
1950	187,606	37,047,090 ^b		88.1

^a Value of land and buildings.

Note: Blank fields indicate no data are available from compiled census statistics.

Source: US Department of Agriculture (2007).

^b Approximate value.

1880, the cash value of farms. The number of improved acres in Prince George's County rose from 11th in the state to as high as 6th in 1890, after which it has been slowly decreasing. The cash value of farms, on the other hand, remained fairly steady through this period, with the county ranked between seventh and ninth in terms of cash value from 1870 to 1920, and Benson et al. (2003:115) characterize the county in 1920 as rural with farming as the primary occupation. The cash value of farms began to rise in 1930 and has continued to this day. Finally, a number of researchers have noted that during the postbellum period, in most eastern areas of the United States, a general trend toward larger numbers of farms, but smaller average farm size, has taken place. This, too, is characteristic of Prince George's County. Data are available from 1880 to 1950, and these figures show a gradual decline in average farm size. In 1880, the average farm size was 159 acres, and this was during a period when many plantations were being subdivided due to economic constraints. By 1950, the average farm had been reduced to 88 acres.

Postbellum Labor Practices

Benson et al. (2003:83) indicate that a number of factors were already influencing the institution of slavery in Maryland before and during the Civil War: the proximity of Washington, D.C., which abolished slavery in 1862, the Union army and its recruitment of blacks, and the evolution of free labor (see also Bruchey 1974:397). The effects, as detailed above, included a decrease in the amount of acreage planted, a decline in tobacco production and most other crops and livestock, and a decline in population that was especially prevalent among the African-American population. For many of these benchmarks, as well as others, Prince George's County would not recover to pre-Civil War levels, and this is especially true of tobacco production.

Population in Prince George's County declined by 30 percent between the 1860 and 1870 censuses and did not return to the 1860 level until 1880. In fact, the decline was so precipitous that the State of Maryland encouraged immigration, stressing the safety of the area and potential for good investments (Virta 1991:137), although immigration from outside the United States never had a substantial impact at this time in Prince George's County (Bruchey 1974:399). New residents purchased parts of plantations and began to develop a new agricultural basis. Part of this process was an increase in the total number of farms but an overall decrease in their size, as discussed above. In 1880, the average size of the 800 farms in the county was 159 acres. By 1900, 2,400 farms were present, but these averaged only 111 acres in size. Clearly, the Civil War was a watershed event in the history of agriculture in Prince George's County. And perhaps the most important consequence of the Civil War and its effects on agriculture was the emancipation of slaves and the development of new labor relations as a result of this event (Bruchey 1974:397). In 1860, on the eve of the Civil War, the more than 4,100 slaves held in Prince George's County formed the foundation of its agricultural labor force, and the number was the highest of any county in Maryland. The emancipation of the

enslaved labor force set in motion a transformation from slave to contract-wage laborer to tenant or landowner. Pearl (1996:11) suggests that the African-Americans in Prince George's County, enslaved before the Civil War, worked principally as tenant farmers after the war.

The emancipation of slaves changed the economy of the slaveholding states in that former slaveholders had to devise new methods of guaranteeing farm labor or adapt existing structures to new economic circumstances (Stine 1990:38). Smaller farmers were often forced to switch from an emphasis on subsistence crops to growing cash crops, such as tobacco. Through time, mechanization became pronounced and with it the need for larger capitalization (Stine 1990:39). Large landowners were able to make these transitions and eventually transformed their farms to agribusinesses.

With the conclusion of the Civil War, Congress created the Freedmen's Bureau to, among other things, establish labor arrangements in the former slave-holding states between the newly freed slaves and their potential employers. Initially, the Freedmen's Bureau established a contract-wage labor system, in which the freed slaves were compelled to accept plantation work on a wage-labor basis (Daniels 1990; Lawson 2007; Messick et al. 2001:28). A Freedmen's Bureau office was opened in Bladensburg in 1866 to assist the transition from slavery to wage labor and to provide assistance with education for former slaves (Benson et al. 2003:86; Daniels 1990; see Chapter 7). At this time, most freedmen worked as field hands for \$10 to \$15 per month, rations, quarters, and the opportunity to grow a garden and raise chickens (Benson et al. 2003:87).

With the collapse of the contract-wage system, various forms of tenancy became common. The term tenant defines a number of different relationships between a landowner and individuals working a farm. Share croppers pay a



Typical tenant house in Prince George's County

portion of the total crop to the owner for the rent of land. Share renters pay the owner of the land a fixed or predetermined part of the crop. Cash renters pay the owner of the land a monetary payment. As part of the agreement, owners could include houses, fertilizer, seeds, tools, work animals, and outbuildings to the tenant. Generally, cash renters would receive only a house, whereas share croppers and renters would receive fertilizer, seeds, tools, work animals, and access to outbuildings as well (Messick et al. 2001:29). Finally, any

individuals in these categories could also be hired for wages to perform specific tasks on the farm, and the owner could hire others for wages to perform specific tasks on the farm that were not rented by his tenants. Payment of rent was enforced by the crop-lien system, in which landowners could place liens on tenant's crops for nonpayment of rent (Stine 1990:39).

The differences in labor relations after the collapse of the contract-wage labor system theoretically produced a hierarchy of labor types (Holland 1990:62; Stine 1990:39). Many historians place wage laborers at the base of the so-called agricultural ladder, share croppers and renters in the middle, cash renters at its penultimate, and owners at the top. The myth of the agricultural ladder generally postulates that hard work and right living allowed individuals on the lower rungs to move upward on the ladder, eventually becoming owners of their own farm (Stine 1990:39) In this sense, moving up the ladder equates with gaining control over labor, crops, and profits, and provided greater autonomy (Stine 1990:39).

Data on postbellum labor practices in Prince George's County are available for the period from 1880 to 1950. The 1870 census does not identify the number of tenants or the type of relationship that the tenants had with the owner for county-level data. The total number of farms recorded in 1870 was 835. Although no data on the number of farms in Prince George's County in 1860 are available, total acreage did decrease between 1860 and 1870 by almost 60,000 acres. It is safe to assume that the total number of working farms in the county also decreased. Census data for 1880 and 1890 provide information on the number of owners and tenants, with the tenants divided between cash and share tenants (Table 3). Starting in 1900, these same data are available with the numbers of white and non-white owners and tenants provided (Table 4).

With a base of 835 farms in 1870, the total number of farms, regardless of labor practices, can be seen to have increased in the county between 1880 and 1920 (Tables 3 and 4). With slightly fewer than 2,500 farms in 1920, the total number of farms increased by 200 percent between 1870 and 1920. Concomitant with this increase during this period is a decrease in farm size. The data available from 1880 to 1950 indicate that the average farm size decreased from 159 acres in 1880 to 93 acres in 1920 and to 88 acres in 1950. Although the number of farms increased by 200 percent between 1870 and 1920, farm sizes decreased by 40 percent between 1880 and 1920. The trend of decreasing farm size continued after 1920, but also decreasing was the total number of farms in the county. The decline of both the number of farms and farm size after 1920 may signal the incipient decline in the importance of agriculture in Prince George's County.

Census data also suggest that by 1890 the percentage of owners to tenants had stabilized (Tables 3 and 4). Using 1880 as a baseline (no data on the number of owners and tenants are available for 1870), the number of owner-

Table 3. Number of farms according to farm tenure (1880 and 1890 censuses).

Census year	Owners	Cash tenants	Share tenants
1880	1,203	211	275
1890	1,232	175	394

Table 4. Number of farms according to farm tenure and race (1900–1930 and 1950 censuses).

Tenure Type and Farmer Race	1900	1910	1920	1930	1950
Farms Operated By Owners (Total)	1,401	1,547	1,529	1,514	1,437
White	1,134	1,272	1,269	1,240	1,221
Non-White	267	275	260	274	216
Farm Operated By Managers (Total)	92	79	66	41	18
White	82			37	15
Non-White	10			4	3
Farms Operated By Tenants (Total)	881	662	862	736	675
White	571	465	518	433	353
Non-White	310	197	344	303	322
Share Tenants (Total)	552	229	656	139	172
White	338			75	80
Non-White	214			64	92
Cash Tenants (Total)	329	186	206	112	
White	233			99	
Non-White	96			13	
Share-Cash Tenants (Total)		7	0		
White					
Non-White					
Tenure Not Specified/Other (Total)		240	0	485	
White				259	
Non-White				226	

Note: Blank fields indicate no data are available from compiled census statistics.

Source: US Department of Agriculture (2007).

managed farms decreased between 1880 and 1890 but stabilized thereafter. In 1880, 81 percent of owners managed their farms, with only 19 percent managed by tenants. By 1890, 68 percent of the owners managed farms while 32 percent were managed by tenants. Thereafter, owner management varied from a high of 71 percent (1910) to a low of 63 percent (1900). The use of tenant arrangements appears to have stabilized at about 35 percent for the period of 1890 to 1950. These figures are somewhat higher than the average for Maryland (Bruchey 1974:398).

Beginning in 1880 and continuing through 1920, data are available on the types of labor arrangements into which tenants entered with landowners (Table 4). Cash and share tenants are specified in the census data and presumably the share tenants include both share croppers and share renters. Although there is some variability in the data, share agreements always were the dominant form of tenant farming in Prince George's County. Share tenant arrangements range from a low of 55 percent of the known tenant agreement forms (for certain censuses not all agreements were specified) in 1910 and 1930 to a high of 76 percent in 1920. These figures are slightly below the average for Maryland (Bruchey 1974:399).

Incomplete information, in that not every census year is reported, is also available for the types of labor arrangements on farms in Prince George's County for whites and non-whites (presumably mainly African-Americans) between 1900 and 1950 (Table 4). Farm ownership during this period was always overwhelmingly dominated by whites, and there is some evidence for a decline in farm ownership by African-Americans. In 1900, 267 farms were recorded as owned and farmed by African-Americans, representing 19 percent of the total. By 1950, this figure had dropped to 216, or only 15 percent of the total. Similar data are also available for both share and cash tenant arrangements (Table 4). When all tenant categories are combined, there appears to be an increasing trend in the number of African-Americans during this period who were tenant farmers.

In sum, the census data indicate that farm ownership by African-Americans was decreasing slightly although tenant arrangements increased significantly, from 35 percent of all tenants in 1900 to 48 percent in 1950. African-Americans engaged in agricultural pursuits were increasingly confined to tenant arrangements during this 50-year period.

Although fewer data are available for the type of tenant arrangements in Prince George's County during this period, some trends do emerge. Although the total number of share tenants decreases through time between 1900 and 1950, it is increasingly common that those engaged in this type of arrangement are African-Americans (Table 4). Although only 39 percent of all share tenants in the county in 1900 were African-American, by 1950, 53 percent of a diminished total were African-American. Cash-tenant arrangements appear to exhibit an opposite trend. Although as a category the number of cash-tenant

arrangements decreases, the number and percent of African-Americans who engaged in this arrangement also decreased. In 1900, 29 percent of all cash tenants in the county were African-American, but by 1930 (the last census for which data are readily available), only 12 percent of the cash tenants were African-American. Through this period, African-Americans engaged in agricultural pursuits were more likely to be tenants and through time were more likely to enter into share arrangements.

Crops and Livestock

Near the borders of the District of Columbia and on the railroad the large tobacco plantations have been divided up into small truck farms. The other staples are wheat, corn, rye and grapes. Owing to the decrease in prices of tobacco many of the farmers have given up tobacco growing and are trying fruit raising and dairy farming, in which their efforts have met with great success (Scharf 1892).

Although these words were written by Thomas Scharf in 1892, more than 25 years after the end of the Civil War, the effects of that war on the people and economy of Prince George's County were still being felt. Tobacco was the dominant crop before the Civil War and remained the most important agricultural commodity after the war. However, as suggested by Scharf and noted by many others, the agricultural economy of the county became increasingly diversified after the war. Tobacco production actually had begun to decline prior to the Civil War, in part due to competition with other markets and in part to the exhaustion of the county's soils. The agricultural economy may have been in transition prior to the Civil War, but with the physical and labor-related upheavals resulting from the war, this trend intensified.

Even so, the cultivation of tobacco remained a way of life and the center of the economy after the Civil War. The emancipation of slaves led to a labor shortage that resulted in increased production costs, and Prince George's County tobacco production never reached antebellum levels again. Despite the changes in the labor force and size of farms, tobacco remained the most important crop in the county until the 1980s (Virta 1991:263). The crop was



Typical rural viewshed of Prince George's County

so important to Maryland in general, and Prince George's County in particular, that an extended discussion on the "Culture and Curing of Tobacco in Maryland" was presented in the 1880 federal census (USCB 2007). King (1991a) also provides an overview of the tobacco industry in the county.

Providing a glimpse of tobacco production in the county, the 1880 census indicates that Prince George's County tobacco was a cheap pipe tobacco that was popular among individuals in Germany and the Netherlands who could not afford more expensive brands. It was a mild tobacco and included the broad leaf, narrow leaf, and Baden (or poor land) varieties. The preferred areas for growing tobacco in the county were hillsides with light clay micaceous and feldspathic soils. These would respond best to fertilization, including manure and commercial fertilizers that were then being made in Baltimore. Approximately 20 percent of the tobacco fields in southern Maryland (including Prince George's County) were being treated with commercial fertilizers at that time. Fertilization increased yields and crop quality, but due to the exhaustion of soils, needed to be applied with every planting. Tobacco also was rotated with other crops, most importantly clover cover and wheat. Although not explicitly stated, the census suggests that for every year tobacco was planted, one year of wheat and two years of clover were planted.

Tobacco cultivation began in late winter or early spring with the sowing of seeds. In May and June the small plants were transferred to the fields and planted in rows. The tobacco was weeded, hoed, and inspected for worms and insects. When the flowers grew, the buds were broken off to encourage fuller and stronger leaves. In August and September, the plants could grow from four–seven feet and were ready to harvest. Harvesting consisted of cutting the entire plant, which was then hung to dry in barns. Called air-cured, this process was virtually the only drying process used in Prince George's County at the time. Over the winter months, the leaves were stripped from the stalks and tied into bundles. The bundles (called hands) were packed into large wooden barrel-like hogsheads through a screw-type press called prizing. The tobacco was transported from farms to be stored or sold. In 1880, most tobacco from Prince George's County was transported to Baltimore and sold by a commission merchant hired by the planter.

Due largely to buyer complaints of foreign material in the hogsheads, tobacco also was sold "unprized" in the "loose-leaf" form. The loose-leaf marketing method became firmly established after the Civil War, although as late as the 1930s many southern Maryland farmers continued to sell the crop in hogsheads in Baltimore. At market, hogsheads were examined by Maryland Tobacco Authority state inspectors and sold through a closed-bid auction. Some believed that this method left the crop in good physical condition compared to the handling required in the loose-leaf markets. Prince George's County adopted the loose-leaf marketing system in 1938. Warehouses to store and auction the tobacco were constructed, such as the Edelen Brothers Warehouse and the Planters Tobacco Warehouse (MIHP PG:79-41B), which were both located in Upper Marlboro but have since been demolished.

The importance of tobacco production can be seen both in the total number of pounds produced through time, as well as the rank of that total compared to other counties in Maryland. At the onset of the postbellum period, tobacco production dropped by 10 million pounds between 1860 and 1870 in Prince George's County (Table 5). Throughout the next 60 to 70 years, production

remained lower than the antebellum period, fluctuating between 3.2 million and 6.5 million pounds, or never more than half of the 1860 total. The total increased in 1950 to 9.5 million pounds. One explanation for this pattern is that tobacco production often increased during periods of war, such as World Wars I and II and the Korean Conflict. Although raw poundage may have dropped after the Civil War, this decrease seldom affected the rank of Prince George's County within Maryland. Prince George's County produced the most tobacco within Maryland in 1860, and this rank remained the same throughout the postbellum period with two exceptions. The two exceptions are both southern Maryland counties: Charles County in 1900 and St. Mary's County in 1910. In both instances, Prince George's County was ranked second in tobacco production in those years.

Grain production also saw substantial declines after the Civil War (Table 5). Wheat, rye, and oats all declined after the war, with the steepest drop being wheat; more than 200,000 fewer bushels were produced in 1870 than in 1860 (Table 5). From 1880 through 1950, wheat production was variable, from a high of nearly 130,000 bushels in 1880 to a low of nearly 56,000 bushels in 1910. Prior to the Civil War, Prince George's County produced the seventh-highest amount of wheat in Maryland. After the war, the county never ranked higher than 15th.

The production of both rye and oats also declined between 1860 and 1870, although not as sharply as that of wheat. However, through 1930, both crops evidence a gradual decline in production. The amount of rye produced in the county was actually fairly stable, compared with overall production in Maryland. Between 1870 and 1920, Prince George's County ranked between sixth and tenth in rye yields in the state, compared to eighth prior to the war. This rank decreased beginning in 1930. On the other hand, oat production was always minor in the county, both before and after the war, when compared with other counties in the state. During most decades, oat yields ranked between 12th and 17th in the state.

Corn production seemingly counters these trends. Although corn did decline by nearly 200,000 bushels between 1860 and 1870, its production stabilized by 1880 to near pre-War levels. Beginning in 1880 and continuing through 1950, corn production was near or slightly below pre-War levels. This trend is also evident in its ranking within Maryland. Prior to the Civil War in 1860, Prince George's County ranked eighth in corn yield. After the war, the county never ranked higher than tenth, with its rank declining through time.

If tobacco and grain production suffered during and after the Civil War, often stabilizing below pre-War levels or continuing to decline during the postbellum period, one area of agriculture did evidence a pattern of significant growth: truck and market farming. Truck and market farming, including vegetables, fruits, and potatoes, became a significant alternative to the county's farmers when faced with declining tobacco prices and exhausted soils. If both factors pushed county farmers toward truck farming, increasingly better modes

Table 5. Crop production in Prince George's County between 1860 and 1950.

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Crop	1860	1870	1880	1890	1900	1910	1920	1930	1950
Tobacco (lbs)	13,446,550	3,665,054	6,575,246	3,209,896	5,542,080	3,542,392	4,379,759	5,962,067	9,562,737
Barley (bushels)	125	18	0	0	300		215	1,860	11,157
Wheat (bushels)	312,796	79,706	129,946	74,229	104,110	55,793	99,928	100,851	57,476
Rye (bushels)	24,234	23,849	17,041	12,222	8,800	7,867	11,354	1,617	3,353
Oats (bushels)	98,073	57,411	37,395	40,527	18,760	12,986	6,662	2,566	16,121
Hay (tons)	6,328	6,536	5,269	13,423	14,559	10,379	23,585	7,616	12,709
Corn (bushels)	699,144	518,131	656,888	590,660	676,930	720,248	686,961		
Potatoes (bushels)	30,936	68,278	91,698	177,216	226,267	385,736	372,154	124,727	38,240
Orchard Products (value in dollars)	5,370	15,346	49,258	65,781ª	38,408	$62,126^{a}$	51,184ª		22,372
Market- gardens (value in dollars)	30,483	52,429	136,077	79,830				512,814	276,320

^a Data given in number of bushels. Note: Blank fields indicate no data are available from compiled census statistics. Source: US Department of Agriculture (2007).

of transportation (including better railroad access, invention of the automobile, and improved roads) and population increases in Baltimore and Washington, D.C., provided the pull.

The Prince George's County experience parallels that of much of the state. Orchard products increased by nearly 200 percent between 1860 and 1870, and then again between 1870 and 1880 before beginning a general decline (Table 5). Although data are presented as bushels for some census years and pounds for others, there appears to be a general decline in orchard products between 1880 and 1900. Much of the orchard produce, apples and peaches, was shipped to Baltimore where it was canned. Market garden products, vegetables mainly, also evidence a strong increase after the Civil War (Table 5). Once again, strong increases are evident through 1880, with a decline by 1890. Most likely due to its proximity to Washington, D.C., and Baltimore, Prince George's County ranked between second and fourth in the state in market produce yields between 1870 and 1890. Although data are absent for the period of 1900 through 1940, the more than 350 percent rise in produce between 1890 and 1950 attests to the continued and increased importance of this sector of the agricultural economy. However, the county dropped in relation to other areas in Maryland. Whereas prior to 1900 it ranked in the top four counties in market produce, by 1950, despite increased total production, it had fallen to the 13th highest yielding county in the state.

Potatoes, a root crop that is particularly suitable for growth in sandy soils, also witnessed a great increase in production (Table 5). Potato yields saw steady increases from 1860 through 1910, with a significant decline by 1930. During the period between 1900 and 1920, Prince George's County ranked between third and seventh in the state in potato yields. By 1930, it had dropped to 11th.

Livestock also played a major role in the agricultural economy. Similar to crop production, the numbers of all of the major categories of livestock raised in the county (horses, mules, oxen, cattle and cows, sheep, and swine) witnessed sharp declines between 1860 and 1870 due to the Civil War and its aftereffects (Table 6). Particularly difficult for many of the farmers was the loss of draft animals to the war; mules and oxen declined by almost 60 percent between 1860 and 1870, while in contrast, horses declined less than 30 percent in that same time period. Cattle declined at approximately the same rate as horses between 1860 and 1870, by 30 percent for dairy cattle and 35 percent for other cattle. Sheep and swine, however, witnessed much steeper rates of decline. Sheep declined by 45 percent and swine by 70 percent between 1860 and 1870.

Subsequent to 1870, as discussed above, many of the crops rebounded to near their 1860 totals or actually exceeded their 1860 totals. This was not so for livestock; some species slowly rebounded to pre-War levels and others declined (Table 6). Prior to the Civil War mules and oxen contributed greatly to the farm economy as draft animals. However, after the Civil War, and especially after the late 1800s, mechanized machinery began to replace draft animals as the means for plowing fields, harvesting crops, and transporting crops to the

Table 6. Livestock production in Prince George's County between 1860 and 1950.

Livestock	1860	1870	1880	1890	1900	1910	1920	1930	1950
Horses	4,701	3,434	5,660	5,853	7,300	6,745	6,604	4,508	3,159
Asses/ Mules	1,364	532	626	342	348	452	699	575	380
Oxen	3,441	1,247	1,406	1,002					
Dairy cattle	3,887	2,620	3,865	4,070	3,982	4,705	6,669	3,745	3,111
Other cattle	4,855	3,108	2,974	2,423	3,223	3,357	1,715	3,591	7,136
Sheep	8,828	4,906	7,786	3,794	6,418	9,233	3,476	4,880	2,115
Swine	25,927	9,045	11,413	10,385	11,027	10,021	13,322	8,934	12,024
Poultry			45,036	126,052	103,369	96,781	128,931	142,426	117,664

Note: Blank fields indicate no data are available from compiled census statistics.

Source: US Department of Agriculture (2007)

farmstead and markets. The number of mules in the county never exceeded 700 after the war, at best representing a decline of just over 45 percent. Although the post-Civil War numbers peaked in 1920 at 699 animals, this total declined again with the transition to tractors, harvesters, and trucks. Oxen fared worse, peaking at 1,406 animals in 1880, a 60 percent decline over 1860 levels. Oxen levels appear to have decreased sufficiently so that data were no longer collected by 1900. This decrease may signal the increased use of mechanized farming in the county at this time.

Horses, on the other hand, were not subject to decreases during the postbellum period (Table 6). Although total numbers decreased from 1860 to 1870 by 1,300 head, the 1880 total had rebounded to over 900 more than the 1860 baseline. Numbers increased through 1900, at which point there were over 1,600 more horses than in 1860. Beginning in 1910, and no doubt associated with the transition to mechanized farming and the use of the automobile, the number of horses began a steady decline. However, the relatively high number of horses that remained in the county after 1900 is likely associated with raising horses for the racing that took place at local tracks.

Cattle, both dairy and nondairy, declined in numbers between 1860 and 1870 (Table 6). However, dairy cattle increased rapidly, including a 50 percent increase in numbers between 1870 and 1880. Although the numbers of dairy cattle increased slightly over the next 20 years, their numbers increased significantly between 1910 and 1920, with an increase of over 40 percent. The year 1920 represented a high point in the numbers of dairy cattle, with numbers declining thereafter. The Maryland Agricultural Extension Service (MAES) notes that dairy barn and dairy house construction increased during the 1920s in Prince George's County (MAES 1928:50). Nondairy cattle continued to decrease in numbers through 1890, when the total was at approximately 50 percent of the pre-War numbers. Thereafter, aside from 1920,

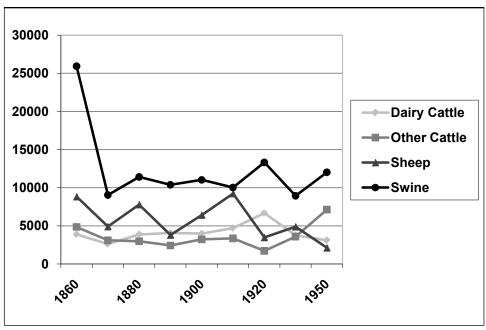


Figure 5: Comparison of numbers of livestock species in Prince George's County between 1860 and 1950 by ten-year increments

Table 7. Byproducts produced in Prince George's County between 1860 and 1950.

Census year	Milk (Gallons)	Butter (Pounds)	Cheese (Pounds)	Eggs (Dozens)	Wool (Pounds)
1860		78,629	0		27,008
1870	21,090ª	69,658	100		12,997
1880	147,192ª	126,358	1,241	144,805	36,074
1890	1,292,878	220,081	496	354,040	10,107
1900	1,674,568	215,393	51	484,240	22,292
1910	941,893	176,112	6,398	460,937	$3,005^{\rm b}$
1920	1,035,100	148,605	1,625	469,119	12,777
1930	1,699,953	125,652		1,055,192	12,511
1950	682,775ª			458,350ª	6,904

^a Amount sold, not produced.

Note: Blank fields indicate no data are available from compiled census statistics.

Source: US Department of Agriculture (2007).

^b Number of fleeces shorn.

nondairy cattle increased in Prince George's County, generally numbering between 3,200 and 3,500. Throughout this time period the importance of dairy cattle and nondairy cattle contrasts with that from pre-Civil War numbers (Table 6; Figure 5). Prior to the Civil War, nondairy cattle had been more numerous than dairy cattle. Between 1880 and 1930 this trend changed, to where dairy cattle were numerically greater than nondairy cattle in the county, outnumbering nondairy cattle by as much as 5,000 head in 1920. By 1950, this trend once again reversed, with nondairy cattle becoming much more common than dairy cattle, by 4,000 head. However, Prince George's County was never a particularly important county in Maryland in terms of numbers of cattle, whether dairy or other. Throughout the postbellum period, the number of dairy cattle in the county ranked between 13th and 16th in the state, while other cattle ranked from 11th to 16th in the state.

Although other counties in Maryland were more successful in dairybased operations, the development of dairy-based agriculture in Prince George's County can also be observed in trends in milk, butter, and cheese production (Table 7). Milk sales increased seven-fold between 1870 and 1880, and production evidenced a general increase between 1870 and 1900. Milk production decreased between 1900 and 1910 but once again increased in the next 20 years. By 1930, milk production had once again topped the previous high set in 1900. Butter production followed these same trends through 1900, after which a steady decline occurred. By 1930, butter production had slumped to near the total seen in 1880, and by 1950, no production was reported. In contrast, cheese production was never a large component of dairy farming. In all but one reporting period, 1910, cheese production was significantly less than 2,000 pounds. In fact, no cheese production was reported for 1860, prior to the establishment of dairy farms in the county, and after 1920, when this industry was in decline. The year 1910 represents a high point in cheese production, when over 6,000 pounds were produced.

Sheep were a common animal in inventories of Prince George's County plantations since at least the eighteenth century and continued to be so until the beginning of the Civil War, when the county had the sixth-highest total in Maryland. Sheep not only provided a food source but, more importantly, provided fleece for spinning yarn and making cloth. The Civil War impacted sheep production in the county, decreasing the total number by 3,900 between 1860 and 1870 (Table 6) and dropping the county from 6th to 14th in the state in the number of head. Thereafter, the number of sheep in the county increased, but numbers proved to be quite variable (Table 6). The 1880 number increased to within 1,100 of the 1860 total, only to decrease quite sharply by 1890, with 5,100 less head of sheep in the county than was present in 1860. Sheep numbers increased through 1910, when there were 400 more head than in 1860, only to once again plummet through the remainder of the period under consideration. For the most part, Prince George's County ranked between 8th and 12th in terms of head of sheep in Maryland during this period.

Wool production declined sharply between 1860 and 1870, decreasing by 50 and 60 percent (Table 7). Prior to the Civil War, the county was ranked eighth in terms of wool production in Maryland, but by 1870, it had dropped to 15th. Thereafter, the amount of wool produced mirrors the trends discussed above for the number of sheep in the county. In years of decrease in number of sheep, wool production also declined, whereas when sheep numbers increased, so too did the amount of wool. However, like the trend in number of sheep, by 1950, the county was producing less wool that at any time in the postbellum period.

Swine, the last major livestock species, contrasts with most others reviewed here and depicts a rather drastic change in farming patterns between the preand post-Civil War time periods. Swine were important prior to the war, with just fewer than 26,000 head. This figure ranked Prince George's County as the third-highest producer of swine in Maryland in 1860 (Table 6). The number of swine dropped significantly after the war, with fewer than 10,000 head in 1870. Numbers rebounded slightly, although 13,300 head in 1920 was the highest total during the postbellum period (Table 6). This represents at best just less than a 50 percent decrease in overall numbers, with greater than 50 percent decreases common throughout this period when compared with the pre-Civil War benchmark of 1860. Between 1870 and 1910, Prince George's County was typically ranked between 13th and 16th in the state in terms of numbers of swine. It was not until 1920 and after that the county's rank increased to seventh in the state. Many scholars have noted that one significant difference in foodways between northern and southern states at the time of and after the Civil War was in the most significant meat species. In many areas of the north, this species was cattle, whereas in the south, hogs provided the most significant component to many diets (e.g., Mansberger 1988). The data on swine raised in Prince George's County prior to and after the Civil War suggest a major shift in the agricultural economy of the county, which could be mirrored in meat consumption patterns as well. In Agricultural Maryland (MAES 1955:20) it is suggested that the cause of this decline was that Maryland was increasingly outcompeted in hog production by Midwestern states.

The 1860 and 1870 census data are unavailable for poultry (chicken, turkey, goose, duck), the final livestock category. However, census data do indicate that a major increase in poultry, over 150 percent, took place between 1880 and 1890 (Table 6). Thereafter, although volatile, poultry numbers never decreased by more than 25 percent or increased by more than 10 percent, between any two census decades. The chickens, of course, also yielded eggs, both an important item in a self-sufficient diet and a commodity. Egg production generally increased in the county between 1880 and 1930, with a greater than 100 percent increase between 1920 and 1930 (Table 6). However, egg production declined just as sharply between 1930 and 1950.

Technological Change

Pinches (1960) provides an overview of the introduction of technological changes to agriculture during the postbellum period. Prior to the Civil War, horse-powered machines were being designed that would replace hand labor in planting and harvesting crops (see also Dieffenbach and Gray 1960). In the aftermath of the Civil War, labor shortages and high grain prices spurred the adoption of horse-powered machines, especially with regard to harvesting grains. Nationwide, this led to an increase in the number of horses and mules through World War I (Dieffenbach and Gray 1960:36; Pinches 1960).

The years after World War I yielded the next wave of technological innovation. Internal combustion engines were adapted to tractors and harvesters, and trucks became important in crop transport. This innovation was applied to the wartime production of crops in Maryland. The MAES notes that the wartime shortage of labor was met by an increase in the use of farm machinery across the state (MAES 1919:53). The number of tractors purchased in Maryland increased by 85 percent between 1917 and 1919, and the new machines became so common that the extension service set up a number of demonstration courses on their use (MAES 1919:53).

The number of tractors on farms nationwide increased greatly between 1925 and 1935, from 500,000 to 1 million during that 10-year period. Farm electrification was the next major technological change, with the numbers of farms receiving electricity increasing steadily during the 1930s. Pinches (1960:6) suggests that, by 1935, motorized mechanical farm implements and farm electrification were being widely adopted. By World War II, harvesters, tractors, mechanized wagons with unloaders, and trucks appear to have been typical mechanized machinery on Maryland farms (MAES 1948). The largest number of tractors manufactured was during the immediate post-World War II years, from approximately 1947 to 1952 (Dieffenbach and Gray 1960:38).

Prince George's County was subject to the same set of factors after the Civil War as was the rest of the nation: labor shortages and increased prices for grain. However, as discussed above, it was generally not until after 1870 that crop yields began to increase in the county. Although little specific information on the number, types, and timing of mechanized farm machinery in the county could be found, it is highly likely that it was subject to many of the same influences that were felt throughout the state and nation: increased competition from other regions, labor shortages (especially associated with World Wars I and II), technological advances, and the vagaries of the commodities markets. Such changes should be especially evident after World War I, when it appears that tractors were starting to become much more common in the county.

Today, we know that tractor size and turning radius influences field size, and we can hypothesize that a similar situation occurred during the introduction of mechanized farm equipment. Fields may have been combined or expanded to accommodate wider turning radii of tractors. Smaller fields may have been abandoned, expanded, or used for crops such as tobacco. The use of farm equipment may also have caused secondary effects, such as increased rates of erosion and decreased numbers of animals such as horses and oxen on farms. This later effect may have led to the abandonment of buildings or their reconfiguration as machine sheds.

Farms and Their Organization

Unfortunately, few of the census schedules identify the different types of farms or farming operations, in terms of an emphasis or specialization on particular crops or species of livestock, present in Prince George's County. However, the 1930 federal census does provide a level of detail on the farming operations in the county. Nine different farm types are defined: general (growing a variety of crops and raising livestock), grain, crop specialty (tobacco), truck, dairy, animal, poultry, fruit, and self-sufficient.

Of the 1,893 farms so classified, 54 percent were specialty crop (tobacco) farms. Truck farms (14 percent), general farms (12 percent), and self-sufficient farms (10 percent) were clearly in a minority. No other farm type accounted for 6 percent or more of the total in the county. Extension-service reports suggest an increase in dairy farms during the 1920s (MAES 1928). However, if true, dairy farming still did not account for more than 6 percent of the number of farms in the county. Other data, such as acreage and value of products, mirror the trends in numbers of farms by type in 1930 Prince George's County. More land was devoted to tobacco than all other farm lands combined, and the value of the tobacco crop comprised just under half of the farm-related income. Although Scharf (1892), quoted in Chapter 4, may have been correct in that the agriculture of the county had become increasingly diversified between 1860 and 1890, the 1930 data discussed here indicate that tobacco remained the single most important crop.

Bonsteel (1911:179) indicates that truck and market farms were common in the north and northwest portions of the county, while tobacco farming was prevalent from Bowie southward. Meder and Aberg (in Tanta-Cove Garden Club [TCGC] 1992:89) suggest that small farmers in the southern portion of the county also turned to what would become truck farming after the Civil War. Produce included potatoes, corn, spinach, other greens, beans, and tomatoes and was transported to Alexandria and Washington, D.C. At that time the produce was transported by cart, and fertilizer was purchased from livery stables in the city and transported by barge. Bonsteel (1911) describes both market and truck farms in Prince George's County shortly after the turn of the twentieth century. Market gardening (production specifically for a market) was concentrated near Washington, D.C., on subdivided tracts of the former plantations. Produce included radishes, cucumbers, lettuce, melons, green peas, sugar corn, and berries (Bonsteel 1911:178). Truck gardening was more common in the northern portion of the county at that time. Truck gardens

consisted of larger tracts of a single crop managed by a single farmer and sold on commission (Bonsteel 1911:179). Chief among the truck garden crops in the county were green peas, strawberries, sugar corn, Irish potatoes, and sweet potatoes.

The organization of farms is typically treated by archeologists under the rubric of "spatial patterning" or "spatial organization." Although spatial patterning in archeology can be analyzed between sites (intersite patterning), here we examine the organization of a farm as a single entity (intrasite patterning). The analysis of farm organization has been an ongoing topic of research in many states and has included contributions by cultural geographers, archeologists, historians, and landscape historians. Most often, one of two lines of research has been pursued: the examination of changes in the structure of farmstead organization through time or the examination of differences of farmstead organization across different regions of a state or nation.

Changes in farmstead organization through time are often attributed to changes in social and economic conditions, technology, and the influence of the progressive farm movement, although regional differences are often attributed to ethnic makeup or physiography between regions. Maryland in general, and Prince George's County in particular, provides an excellent opportunity to examine both avenues of research since the area witnessed significant transitions in economics after the Civil War and since the area is a quintessential border state, between Virginia to the south and Pennsylvania to the north. It also provides a contrast between the Chesapeake Bay region, with settlement since the 1600s, and those inland areas to the west that were not significantly settled until the late 1700s or early 1800s.

To the south in Georgia, Messick et al. (2001:29) suggest a continuation of the antebellum organization of farms and plantations in the contract-wage system immediately after the Civil War. In a tenant system, Messick et al. (2001:29–30) suggest that farm organization will differ between those dominated by cash renters and those dominated by share croppers or renters. In circumstances where cash renters dominate, the farm will tend to have clearly divided fields equating with a particular renter. Because renters supplied their own tools and work animals and owned their entire crop, separate outbuildings are more likely to be associated with each individual renter's house. In this sense, each renter organized their own individual, albeit rented, farm. In the share system, domestic residences may be dispersed, but since the owner supplied tools, work animals, and storage outbuildings, these tended to be clustered near the land owner's residence. In Prince George's County, as discussed earlier, share renters dominate.

De Cunzo (2001-2002:95) also notes changes between postbellum farm organization and those of the early 1900s in nearby Delaware. Those farms initiated either just before or after the war tend to have smaller farm yards,

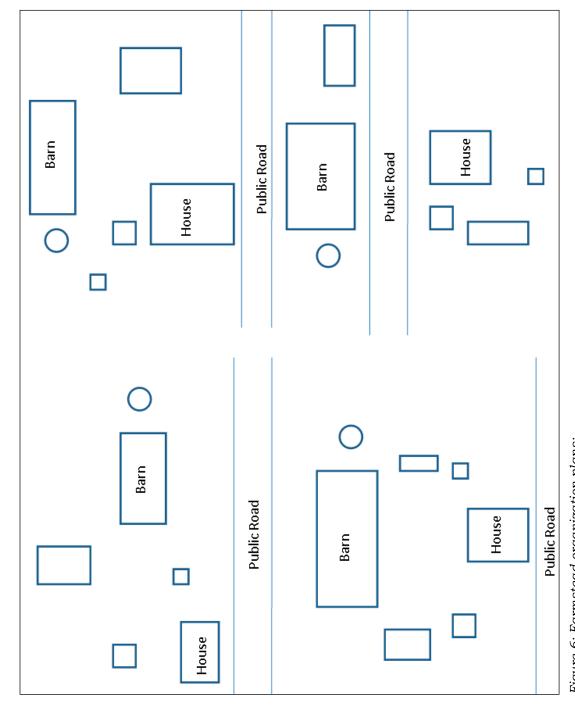


Figure 6: Farmstead organization plans: Upper left, linear; Upper right, linear square; Lower left, hollow square or courtyard; Lower right, bisected.

many of which are configured to hide from public view the areas of farm operations. Through the next 50 or so years, farm yards increase in size, and areas of farm operations are visible to the public. Often a lane is used to separate the domestic yard from the farm areas. Catts (2001-2002:148) also suggests that in the Mid-Atlantic states, debris disposal is found at an increasing distance from the farm house and domestic yard during the last half of the nineteenth century. Disposal methods included burning trash, disposal in ravines and gullies, and burying trash (Messick et al. 2001:64).

A number of different models or types of farm organization patterns have been proposed. In a study of New York farmsteads, Louis Berger & Associates (1994) identified four basic farmstead plans: linear, linear square, hollow square or courtyard, and bisected (Figure 6). In the linear plan, the house and barn parallel the main roadway. In the linear square plan, the barn is located to the rear of the house to form an L-shaped arrangement. In the hollow square or courtyard plan, the house, barn, and outbuildings form four sides to enclose a courtyard. Finally, in the bisected plan, a public road separates the house from the barn. Such well-defined farmstead plans are often thought to have been influenced by the progressive farm movement (Bullion 1988; Fisher 2000; McMurry 1988).

Contrasting with these highly organized patterns is that which is typically associated with the Upland South. The Upland South is viewed as a cultural tradition peculiar to white, yeoman farmers of Scotch-Irish descent. Otto and Anderson (1982) include Maryland as part of this overall tradition, with the caveat that the pattern does not include coastal plain areas, such as Prince George's County. Internal farmstead patterning consists of:

- A disordered cluster of buildings with outbuildings arranged around the house as determined by the owner's changing conception of convenience; outbuildings including the privy, storage sheds, chicken coop, smokehouse, and the like are close to the house and form a central core; larger outbuildings, such as barns, animal pens, and sheds, are beyond the central core; the central core of buildings are often associated with trash deposits
- Separate house and outbuildings serving a number of functions

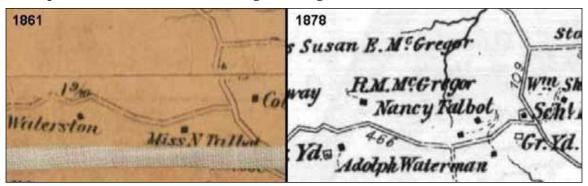


Figure 7: The Nancy Talbot farm in 1861 and 1878 showing structural additions.

- Houses facing probable paths of human approach
- Fields or pastures irregularly arranged, often following topographic features

Turning to Prince George's County, relatively little has been written on farmstead organization during the postbellum period. The physical record, however, provides both problems inherent in such analyses as well as potential rewards. By the time of the postbellum period, the county had been settled for over 160 years, with many of the plantation houses, agricultural outbuildings, and possibly overseer's houses and slave quarters remaining in use after the war. Comparison of the same plantation/farm between the 1861 Martenet map and the 1878 Hopkins map often reveals the addition of numerous buildings, including residential structures (Figure 7). Such structures could be newly constructed tenant houses that reflect the changing labor conditions or former slave quarters used in 1878 as tenant houses.

Unfortunately, Figure 7 also reveals that these mid- to late-nineteenth century maps do not provide the level of detail needed to characterize postbellum farmstead organization. Archeological fieldwork provides one method, and perhaps the most important method, for studying postbellum farmstead organization in Prince George's County. It is also not uncommon to this day to come across former plantation houses and outbuildings in rural portions of the county. This is to say, that in one sense, thepostbellum settlement patterns associated with Prince George's County farms did not arise within an unpopulated landscape. However, the documented division of plantations and the rise of tenancy did necessitate the construction of new legal, agricultural, and social landscapes, creating a palimpsest effect of the old and new. To what extent do the models of farmstead organization, from New York, the Upland South, Georgia, or Delaware, as discussed above, apply to Prince George's County, and perhaps more importantly, is there any value in pursuing such a line of research?

Although it is beyond the scope of this context to fully analyze postbellum farmstead organization in Prince George's County, a few examples can be provided that illustrate the problems and potential discussed above (Figure 8). Site plans for two extant properties, Montpelier of Moore's Plains (MIHP PG:79-2) near Upper Marlboro and the Benjamin Mackall House and associated property (MIHP PG:86A-22) near Croom exhibit organizations that appear accretional in nature (Figure 9). In both instances, the antebellum house is retained, and barns are scattered in clusters across the property. Tenant houses are added, at some distance to the owner's house. In many respects, the organization of these two properties, both antebellum and postbellum, appears to be more closely aligned with an Upland South pattern. Evidently, this form of organization also was used at farms that entirely postdate the war. One example of this is at Joy's Fortune (MIHP PG:78-37) near Westphalia (Figures 8 and 10). The extant structures at this property all date from the late 1800s to early 1900s, and little archival evidence is available that would suggest the presence of structures or occupants on this property immediately prior to the

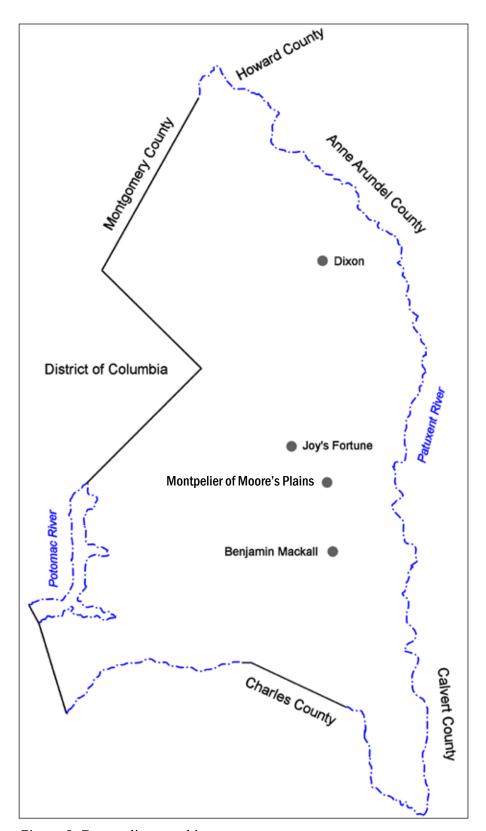


Figure 8: Farms discussed in text.

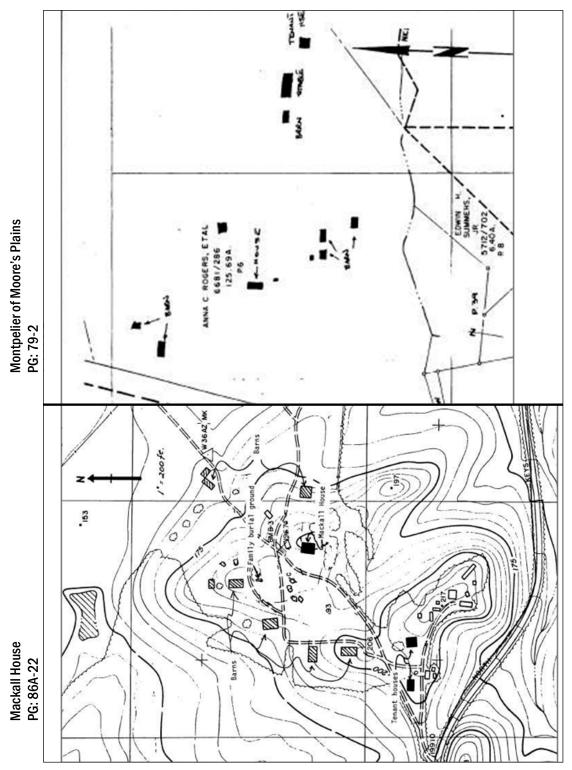


Figure 9: Site plans of Mackall and Montpelier of Moore's Plains farms discussed in text.

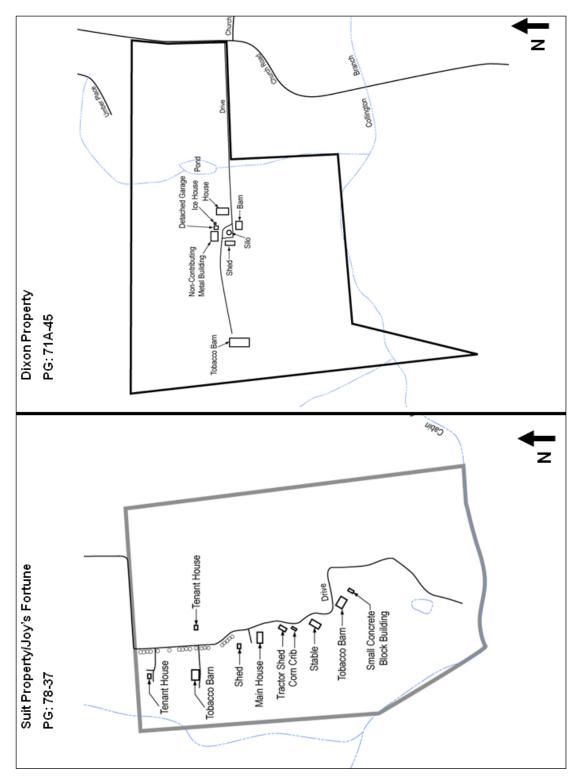


Figure 10: Site plans of Suit/Joy's Fortune and Dixon farms discussed in text.

Civil War. A central access road was constructed along a ridge crest that divides the property east and west, and numerous residential and farm buildings were constructed along this road. The owner's house was placed near the center of the property, while two tenant houses were located to the north. Aerial photographs from 1938 suggest the surrounding fields were divided between the two tenant residences. The Joy's Fortune organization appears to indicate that even newly constructed farms could be organized in a manner similar to that described for the Upland South pattern. One final example appears to contravene this trend. The Dixon property (MIHP PG:71A-45) near Bowie is a farmstead that was also constructed after the Civil War (Figure 8). It dates to the early 1900s and appears to have been organized as a variant of the hollow square or courtyard plan (Figure 10).

Clearly, elements that are consistent with the Upland South model of farm organization appear to be present in Prince George's County, but examples that are more similar to plans associated with either northern farms or farms constructed along progressive lines are also present. This variation suggests that the county may provide fertile grounds for the investigation of factors such as race, education, geography, cultural affiliation, and physiography on farmer's or rural residents' view of appropriate or proper organization of farm life during the postbellum period.

Agricultural Property Types

The archeological signature of agricultural properties can be divided into three general categories: structural remains, either with above-surface ruins or consisting solely of subsurface features; landscape features (roads, tree lines, fields); and trash disposal areas, again, either above-ground (often called a surface dump) or below ground (trash midden). The most typical specific property types that have been associated with agricultural properties and potentially can have an archeological signature.



Hamilton meat house (PG: 74B-7)



Blythewood ice house (PG: 78-13)

- Domestic residences and yards:
 A portion of the farmstead, can include residence of owners, tenants, or paid workers and may be associated with a yard defined by fences, roads, and outbuildings
- **Cellars:** Below-ground storage areas, often for comestibles to be consumed by the farm occupants; often have an impervious floor (brick, stone, or cement) and can be located below a domestic residence, a summer kitchen, or can be freestanding; freestanding cellars often constructed into the side of a hill; the term root cellar can be used to define a smaller, inground, expediently constructed, storage area
- **Smoke houses:** A small structure in which meats, such as hams, were dried and cured to preserve the meat and enhance its flavor; firebox is present and windows are generally absent; stone and brick construction typical, although wood-frame smoke houses are associated with Dutch ethnicity (Noble 1984)
- **Wells:** A pit or hole excavated into the earth to reach a water supply, often covered by a well-head structure to prevent accidental entry; well-head often had a gable roof, and the entire structure may be made of wood, brick, stone, concrete, or concrete block; mechanical pumps also are used to raise water, and these are often placed on a wooden platform (Noble 1984)



Warington tobacco barn (PG: 73-6)



Seton Belt tobacco barn (PG: 74A-14)



Hamilton dairy barn (PG: 74B-7)

- **Cisterns:** Water storage facility; can be in-ground feature, often lined with an impervious or semi-impervious material to prevent water loss, or cylindrical aboveground structure made of metal or wood
- **Ice houses:** Rectangular woodframe structures (some cylindrical stone and brick forms are known), typically well-insulated, with the foundation below the ground surface; filled with ice during the winter and used to insulate the ice through the year
- **Privies:** Typically a small woodframed structure (brick examples are also known), some with an associated below ground pit, others with an above-ground removable box; most often found to the rear of domestic structures
- Garages: Associated with the rise of the automobile in the 1900s; typically found near domestic structures
- Gardens: Vegetable gardens
 were often an important part of
 farm life, allowing the families
 to maintain some level of self sufficiency; often located near
 domestic structures
- **Barns:** Large utilitarian outbuildings that vary by use, region, and ethnicity; in Maryland, were used as general purpose storage buildings, to store and dry tobacco (tobacco barns), and to house and milk cows, among other functions; typically of pole and wood-frame construction



Typical corn crib



Blythewood shed (PG: 78-13)



Ashland stable (PG: 79-11)

• **Silos:** Typically cylindrical structures used to store and cure silage; first constructed in Maryland in 1878; did not become common until after circa 1900 (Noble 1984); include wood frame, metal, masonry, cement, and ceramic-block construction

- **Windmills:** A wind-powered pump often set on a tall metal skeleton with blades and vanes; derived from European wind-driven gristmills and began to appear during the middle 1800s (Noble 1984)
- **Granaries/cribs:** Storage facilities for grain and corn; often small rectangular structures, most are raised off the ground surface by series of piers to prevent the produce from becoming wet; corn cribs can have openings between slats to allow the ears to dry.
- **Sheds:** A wide variety of sheds was constructed within most farms and included wood-frame, metal, and cement-block construction, among others; used for storage and other activities; used for storage, including wood and machinery
- **Spring houses:** Small structures erected near a spring to protect waters from pollution and to store dairy and other farm products in a cool environment (Noble 1984); floor is always made of an impervious material such as stone, brick, or cement, while the structure itself can be wood frame
- **Stables:** A typically woodframe structure with stalls and associated enclosure in which horses are housed

- Milk houses: Rectangular structure with gable roof made of wood frame and concrete block and used to store milk; located near dairy barns and had cooling, storage, and washing facilities
- Chicken coops, Sheep folds, and Pig pens: Small rectangular sheds that may be associated with a fenced-in pen; sheep folds may be larger barn-like structures with two floors; ground floor included enclosures for the sheep while the second floor stored hay and feed
- Fences, walls, hedges: Features used to define property boundaries, fields, animal enclosures, and yards on farms; fences can be wood, and barbed wire and metal fencing became common during the late 1800s and 1900s; walls typically made of stone, often removed from the surrounding fields, while hedges are screens of trees or shrubs
- Trash disposal areas: Locations where domestic and farm-related refuse was deposited
- Roads: Transportation routes that often linked residences to main roads and to outlying fields; can include dirt two-track roads and graveled roads

Research Topics and Questions

As suggested in the introductory chapter, the necessity of archeological research at late nineteenth- and twentieth-century agricultural sites, farmsteads for the most part, has been a topic of debate between archeologists, historians, cultural resource managers, and the public. Slowly, a consensus is being reached on the rationale for conducting the investigations, methods to be employed, and the research potential of these agricultural sites. Such concern and dialogue have been evidenced by recent symposia and their published counterparts, including the special issue of Northeast Historical Archaeology titled Historic Preservation and the Archaeology of Nineteenth-Century Farmsteads in the Northeast (2001-2002), Methodological Approaches to Assessing the Archaeological Significance of Historic Sites, published as an issue of Historical Archaeology, and Historical Archaeology on Southern Plantations and Farms, also published as an issue of Historical Archaeology (Lees and Noble 1990; Orser 1990). This interest in, or concern about, postbellum farmsteads has continued, with recent symposia held at the transportation review board meetings in 2006 and at the 2007 and 2008 meetings of the Society for Historical Archaeology.

Many archeologists, cultural resource managers, agency personnel, and historic preservation specialists have accepted the importance of investigating these agricultural sites for two reasons. First, for most of the history of the United States, and until fairly recently in many areas, the majority of the population was engaged, directly or indirectly, in agriculture. In that sense, the history of agriculture is entwined with the history of the United States. Second, the investigation of these sites can allow researchers to understand the development of certain key themes not only in agriculture, but in American society as a whole, such as the impact of market economies, new technologies, and race and ethnicity (Baugher and Klein 2001-2002; Catts 2001-2002; Klein et al. 2001-2002).

Scharfenberger and Viet (2001-2002) make the point that although historians can and do study many of these phenomena on national and regional scales, it is archeology that can study these phenomena on an "individual basis." Additional reasons have also been identified, such as that many of the late nineteenth- and twentieth-century agricultural sites have importance and value to local residents, and that such sites can help our present, urban and technologically oriented population connect with the rural, agrarian roots of our nation's past (Baugher and Klein 2001-2002; McCann and Ewing 2001-2002).

Although the specific field methods to be employed are seldom identified, the authors of works in the references cited above are unanimous in their opinion that truly successful investigations of these agricultural sites need to be based on the synthesis of both the archeological data and historical research. Numerous authors also identify the focus of much prior research on the domestic farm household as being detrimental to the study of agricultural

sites. Many commentators stress the need for the implementation of research methods that examine the function of farms, namely, to farm. Beaudry (2001-2002) calls for the concept of farms as feature systems based on Hardesty (1988) and Adams (1990). A farm as a feature system incorporates farm outbuildings, fences, roads, drainage and irrigation systems, water storage facilities, crop or livestock land, areas for storage, as well as the domestic household, among the more prominent subsystems (see also De Cunzo 2001-2002).

Commentary on the investigations of late nineteenth- and twentieth-century agricultural sites also stresses the need to address "questions that count" (Deagan 1988:10; Lees and King 2007a, 2007b; Little 2007; Noble 2007; Purser 2007; Singleton 1990:24). Important for the current document, one line of reasoning asserts that the identification of "questions that count," as well as assessing site significance, is to be found through the historic context process. The call for addressing the significance and research potential of latenineteenth and twentieth-century agricultural sites through the historic context process has spawned an influx of state and regional contexts on this topic (e.g., Freeman et al. 2001; Messick et al. 2001; Terrell 2006). To a limited extent, the current chapter can be added to this list. Below is a list of potential questions that can be addressed through the investigation of postbellum archeological sites in Prince George's County. No doubt, additional questions can be added, and the results of future research will generate additional questions as well.

Crops and Livestock

- To what extent did market conditions, capital, or new technologies influence production choices?
- How did farmsteads adapt to changing economic circumstances?
- Did economic downturns create an increase in self-sufficiency?
- Are changes in market integration discernable at sites?
- Is there evidence of crop experimentation or change?
- Were certain ethnic groups more likely to participate in such experimentation or changes?
- Can the effects of such experimentation be measured in terms of either short- or long-term effects?

Farm Organization

 Does the labor arrangement between owner and tenant/laborer affect the spatial arrangement of the farm? Of structures located on the farm? Of residential structures on the farm?

- Is the spatial organization of farms consistent with any of the proposed models? Are different models employed? If so, are the models of organization employed based on differences in race or economic status?
- Does farm organization change after the Civil War? What is the effect of plantation subdivision on farm organization?
- Are tenant structures separated on the basis of race?
- Is there a change in trash disposal on the farm during this period? Are trash dumps located further from residential areas? Is trash increasingly disposed of in ravines? When did burning trash first become a widespread disposal method? Is trash disposed of in purposefully excavated holes?
- Are organizational differences based on crops or livestock?
- Do farms exhibit a differentiation between public, agricultural space and separated, enclosed, private space?
- How does market access influence household purchasing decisions?
- Is ethnicity reflected in site structure, materials, technology, or production orientation?
- How did ethnic groups respond to discrimination and marginalization?
- Were traditional behaviors retained?
- Can ethnicity be determined by purchasing decisions or access to goods, or other factors?
- Are policies and advisories by agricultural institutions reflected in the archeological record?

Mechanization

- How does mechanization affect the owner/tenant relationship? Is this reflected in the organization of the farm?
- Does farm organization change with the advent of trucks and automobiles, and if so, how?
- Does mechanization affect organization of the farm? Field organization? Placement, number, and organization of structures?
- Did mechanization increase productivity and wealth?
- Did mechanization replace old technologies and can a diffusion of technologies be documented?

Labor

- Is there evidence for a so-called agricultural ladder (the philosophy that hard work would allow labors to be tenants and tenants to become owners) in Maryland? If so, did it originate during the postbellum period?
- Do individuals strive for self-sufficiency in order to climb the agricultural ladder?
- Is there a difference in foodstuffs between individuals at different levels of the agricultural ladder? If so, do foodstuffs also differ by race or only by ladder position?
- Did emancipated slaves stay on as tenants or laborers on farms? If so, did the pre-war social organization within the slave community continue after the War?
- Are there differences in the most commonly used type of postbellum labor organization in Prince George's County?
- In some areas, material differences between black and white owners and tenants have been identified. In these instances, the material culture of black owners is more similar to white tenants than it is to white owners or black tenants. Does this pattern exist in Prince George's County?
- Are antebellum slaves quarters reused as postbellum tenant structures?
- Did the transition to part-time farming affect farm organization? Were other activities incorporated into the farmstead?
- To what extent were tenants or workers integrated into owners' households? How did that influence the social organization of the farm?
- Did labor and farm organization change through time with the increase of industrialization? Were concepts such as factory discipline incorporated into the farm?
- Did tenants or workers lives improve through time? What were those improvements and to what can they be attributed?
- Can archeological investigations identify individual contributions to farm labor by gender? If so, can these patterns discern major task or occupational differences? Did these patterns change through time and in response to integration into market economies and economic downturns?
- Did households attributable to different labor categories (e.g., owner, tenant, wage laborer) identify their status with material items? If so, how do they differ?

- Is there evidence of social distancing, and if so, how is this evidenced?
- Can patterns of health be identified, and if so, is labor class an important factor?

Data Requirements

- **Archeological:** Features with depositional integrity and a wide variety of identifiable associations; deposits with sufficient quantity and variety of materials to support statistically valid analyses; features such as foundations indicating spatial organization or sheet refuse indicative of activity areas or landscaping remnants; family burial plots; specialized activity areas such as outdoor ovens, kitchen gardens, smokehouses, cellars/cold storage areas
- **Primary Documentary Sources:** Census, agricultural census data; tax assessment; probate; newspapers; vital statistics and legal records; personal papers; oral histories; photographs; financial records (lease, rent, chattel mortgage); maps; church, school, or fraternal organization membership lists and records
- **Contextual Sources:** Social history; contract reports on similar property type; gender-based studies of agricultural history; relevant historical and anthropological literature; oral history
- **Artifacts:** A range of artifacts attributable to modified South (1977) categories from identifiable contexts (feature or midden); an adequate quantity of distinctive artifacts to support interpretations
- **Ecofacts:** Faunal analysis: wild versus domestic species; preference in species or meat cuts; floral analysis: botanical remains (seeds, pits, pollen, kernels) indicative of diet; special studies: parasite analysis