

TABLE 13

Chain of Title for the Benjamin Wynn Tenancy (K-6385; 7K-C-362) and the Wilson-Lewis Farm Site (K-6414; 7K-C-375)

Transaction	Size (acres)	Date	Deed
From William Penn to Richard Wilson and Richard Williams	400	1687	Kent County Warrant
From the Province of Pennsylvania to John Houseman	400	6/25/1735	Kent County Warrant H-4-128
From John Houseman to Benjamin Chew, administrator		3/7/1754	Kent County Will K-1-98
From Benjamin Chew, administrator of John Houseman to Andrew Lackey (the Elder)	337	1/1/1765	W-1-22
From Andrew Lackey (the Elder) to Gustave Wilson via Lackey's will	291	1840	P-3-241; Kent County Will; M-1-89
From Gustave Wilson to Henry L. Wilson by order of the Kent County Orphans' Court	180	1852	S-156 (Orphans' Court)
From Lucinda Wilson, administrator for Henry L. Wilson to John Denny by order of the Kent County Orphans' Court	180	3/19/1890	F-7-63
From John T. and Margaret B. to J. Denny Moore	180	12/4/1907	L-9-323
From J. Denny and Mary Moore to Joseph P. Moore	180	8/31/1910	X-9-442
From Joseph P. and Allie P. Moore to Samuel W. Unruh	180	10/3/1912	I-10-137
From Samuel W. and Mary Unruh to Pauline Moran	180	12/1/1920	Y-11-90
From Alburn C. Moran, executive of Pauline Moran to the Farmer's Bank	180	1/16/1926	A-13-68
From the Farmer's Bank to Mary C. Unruh	180	3/10/1926	W-12-326
From William G. Bush, sheriff, to the Farmer's Bank	180	5/4/1935	Q-14-280
From the Farmer's Bank to John E. and Doris Lewis	180	9/2 9/1937	B-15-312

BENJAMIN WYNN TENANCY SITE FIELD INVESTIGATIONS AND ANALYSES

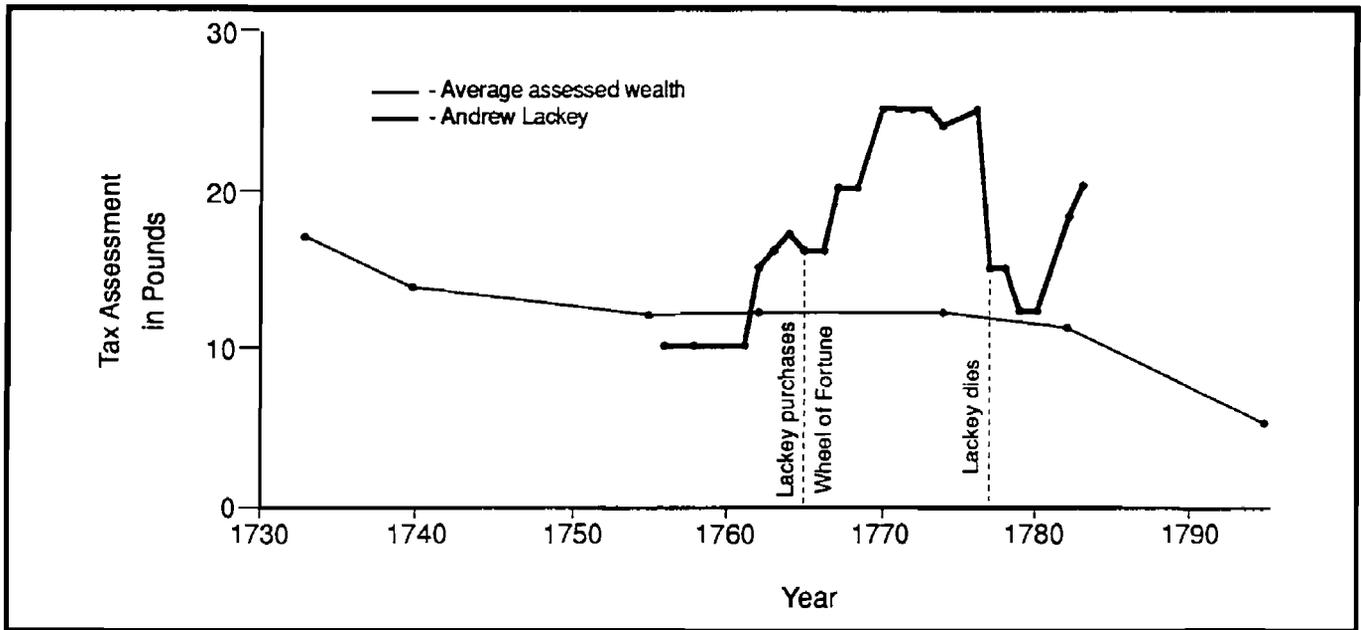
Site History

The Benjamin Wynn Tenancy and Wilson-Lewis Farm sites are located on the same 180-acre parcel on the northeast side of Lewis Drive (Kent 332; Figures 1 and 2; Plate 2). The sites, however, were not contemporaneous. The late eighteenth century occupation of the Benjamin Wynn Tenancy Site significantly predates the later, mid-to-late nineteenth century occupation of the Wilson-Lewis Farm Site. Therefore, both sites represent different occupations. The following history covers both sites and highlights the social and economic forces behind the historical changes associated with the property. A summary of the chain of title for the Benjamin Wynn Tenancy and Wilson-Lewis parcel is given in Table 13.

The Benjamin Wynn Tenancy was originally located on a 180-acre parcel bounded by Lewis Drive on the south and by Kent 331 to the west and north. The parcel was originally part of a larger 568-acre tract called "Wheel of Fortune." "Wheel of Fortune" was first warranted to Richard Wilson and

FIGURE 49

Average Assessed Wealth in Little Creek Hundred, 1732-1794



Richard Williams in 1687, but reverted back to the provincial government of Pennsylvania after both men died without heirs. John Housman then warranted and received title to the land in 1735. Housman apparently lived in the area as he appears as a witness and administrator of a number of local wills and estates. Housman, however, also owned a number of other properties in the area and it is unlikely that he was residing on the Wheel of Fortune tract. No tenants, however, are known for the property and it is likely that the property had not been occupied prior to 1735.

John Housman died in 1754. According to his will made earlier that year, Housman left all of his real and personal property to Benjamin Chew, the administrator of his will. Chew, a noted local landowner who later moved to Philadelphia, divided the Wheel of Fortune tract in 1765 when he sold 337 acres to Andrew Lackey (the Elder). Lackey's father, also named Andrew, probably came from Murderkill Hundred where he was taxed in 1730. Andrew Lackey (the Elder) appears in the tax rolls of Murderkill Hundred only once, in 1748. The second Andrew Lackey probably moved to Dover Hundred where he appears in the tax roles from 1752 to 1755. After 1755, Andrew Lackey (the elder) moved to Little Creek Hundred where he appears consistently in the tax lists from 1756 until his death in 1787.

The Lackey family in Little Creek Hundred was consistently assessed for property valued at 10 to 25 pounds through the mid-eighteenth century. This amount of property would have made them one of the wealthier families in the hundred where the average assessment between 1732 and 1794 was generally between 12 and 14 pounds (Figure 49). Lackey nearly doubled his wealth in 1765 when he purchased 337 acres of the Wheel of Fortune tract. Between 1765 and his death in 1787, Lackey owned property valued at 25 pounds, more than doubling his pre-1765 assessment.

Changes in Lackey's assessed value over time identify two periods of marked increase that probably correspond to major improvements on his farm. The first was in 1766-1767 when his wealth rises from 16 to 20 pounds. This change probably corresponds to the construction of his home and

other initial improvements to the land. The second period of improvement is between 1768-1770 when his wealth rises from 20 to 25 pounds, his greatest assessed value. He probably also constructed several tenant farms on his property including the Benjamin Wynn Tenancy.

The location of the 337-acre Lackey parcel within the original boundaries of a 1743 survey of the Wheel of Fortune tract appears in Figure 50. No structures are shown on the property. The absence of notation of structures in the documents, however, should not be interpreted as concrete evidence that no houses existed because surveys from this period typically do not show structures.

The Wheel of Fortune tract purchased by Andrew Lackey in 1765 remained in the Lackey-Wilson family until the end of the nineteenth century. Andrew Lackey (the Elder) died in 1787 and willed 208 acres to his son Andrew Lackey (the Younger) on the condition that if he died without legal heirs, the property should go to the grandson, Gustave (Gustavus) Wilson. Gustave Wilson was the son

PLATE 25
Wheel of Fortune House, 1990



of Lackey's daughter Mary and her husband Samuel Wilson. Mary Wilson, and Lackey's other daughter, Ann Wills, each received one half of the 170 adjacent acres. According to Lackey's 1787 will, each of the 85-acre parcels contained tenant farms. Mary received the land where John McCalups lived and Ann received the property where "Charles Chadwick now lives." According to a later population census, Chadwick was a black man.

The Benjamin Wynn Tenancy was located on the 208-acre parcel that Andrew Lackey (the Elder) left to his son and grandson. In 1787, the parcel was improved with at least one dwelling, the house in which the elder Lackey resided. The structure was probably brick and judging from Andrew Lackey's inventory it included an entryway, parlor, "little back room," "common room," kitchen, and two rooms over the parlor and common room. This seven-room building would have much larger and more substantial than the Benjamin Wynn tenant house. Valued at 451 pounds in 1788, the Lackey house was one of the wealthiest in Little Creek Hundred. Lackey's estate also included eight slaves, one of whom, Moses, was manumitted upon Lackey's death. The house at Lackey's "Wheel of Fortune" exists today and is approximately one mile west of the Benjamin Wynn Tenancy along Kent 88 (Plate 25).

No specific mention of the Benjamin Wynn Tenancy, however, is made in Lackey's 1787 will. This will mentions only unspecified "other Buildings and Appurtenances" in addition to Lackey's own house. One of these "other buildings" was undoubtedly the Benjamin Wynn Tenancy because of the large numbers

of diagnostic mid-eighteenth century wares, including white salt-glazed stoneware and creamware, recovered from intact features during the excavations described below. Andrew Lackey (the Younger) died in 1790, shortly after his father. The land passed to Gustave Wilson. Seven years later, still a minor, Wilson was assessed for two-thirds (138 acres) of the 208-acre parcel. The remaining 170 acres of the original 337-acre tract belonged to his mother Mary Wilson and his aunt, Ann Wills.

In 1797, the 208-acre Lackey-Wilson Farm consisted of 120 acres of cleared land and 83 acres of swamp and woodland. At 208 acres, this tenant farm was roughly the size of most other tenant farms in Little Creek Hundred (Figure 14). The farm was valued at 50 pounds an acre and Gustave Wilson was a relatively wealthy young man (Figure 12). At least three “tolerable” buildings were on the property: the house and blacksmith shop in the tenure of Benjamin Wynn and another small tenant house inhabited by a widow, Rachel Chicken. Rachel Chicken was widowed by William Strickland as well as Thomas Cahoon and at one time occupied the William Strickland Plantation Site (7K-A-117, K-6446) near Smyrna (Catts et al. 1994).

The Benjamin Wynn Tenancy is the remains of the tenant farm and blacksmith shop occupied by Benjamin Wynn in 1797. Wynn’s father, Benjamin Wynn (Sr.) was a wealthy blacksmith in Duck Creek Hundred. When he died in 1769, the elder Wynn owned 250 pounds of new iron, two anvils, coal, and blacksmithing tools valued at 16 pounds. According to outstanding debts to his estate, he also had numerous business dealings with Leipsic and Dover area farmers. His son Benjamin apparently inherited some of these tools and business connections when he moved to Little Creek Hundred to occupy the Benjamin Wynn Tenancy Site. The remaining 170 acres of the original 337-acre Lackey tract also contained houses in 1797. The 85-acre farm of Mary Wilson, the mother of Gustave Wilson, included three log houses. The log houses were in the tenure of William Bennett, Moses Simmons, a black man, and Stephen Sparkman, a mulatto. Ann Will’s 85-acre farm is not listed in the 1797 census, but also contained a tenant house. Gustave Wilson eventually inherited parts of both his mother and Ann Will’s 85-acre farms. By 1822, Gustave Wilson owned parts of all three farms. Five different eighteenth century tenants are known for the entire 338-acre Lackey property: Benjamin Wynn on Gustave Wilson’s 208 acres; Charles Chadwick on Ann Will’s 85 acres; and William Bennett, Moses Simmons, and Stephen Sparkman on Mary Wilson’s 85 acres.

The number of tenancies on the 337-acre property by 1797 shows the relatively high settlement density in this part of central Delaware between Dover and Leipsic. Almost all of this area was warranted by the first quarter of the eighteenth century, and by the middle of the century, was divided into a handful of large, named tracts. In the vicinity of the Benjamin Wynn Tenancy Site, four wealthy landowners—Andrew Lackey, Vincent Loockerman, William Gillespie, and John Chance owned almost 1800 acres. The location of Loockerman’s 400-acre “Loockerman’s Range,” John Chances’ 130-acre “Double Chance,” and William Gillespie’s 600-acre parcel in relation to Lackey’s “Wheel of Fortune” is shown in Figure 51. By 1787, at least one of these large tracts, Loockerman’s Range, was improved with a brick mansion and at least five tenant farms (Grettler et al. 1991a:224). The remains of two of these tenancies, the Loockerman’s Range Site (7K-C-365B) and 7K-C-398 have been located and are shown in Figure 51. As with “Wheel of Fortune” tract today, the only remaining eighteenth-century structure on the Loockerman’s Range property is the mansion house, presently one of the administration buildings of the Delaware State College.

Benjamin Wynn does not appear in the 1797 tax list or the 1800 population census of Little Creek Hundred. Three other tenants on the various divisions of the Lackey Farm, however, are described in the 1800 census. Charles Chadwick, the black man living on Ann Will's 85-acre farm, lived in a house along Muddy Branch with two other people, presumably his wife and child. Chadwick was probably still living on Will's property in 1800 as he is listed on the census between neighbors known to be living along Muddy Run.

The second tenant to appear in the 1800 census was Stephen Sparkman, another black man. Andrew Lackey described Sparkman as a mulatto, but the census taker described him as black. Lackey's description is probably the most correct as he must have known Sparkman personally. Sparkman lived with four other unidentified persons and was probably still living on, or near, Mary Wilson's Farm. The third Lackey tenant noted in 1800 was William Bennett. Bennett himself was between 26 and 44 years of age and lived with his wife and three girls. One of the girls was between 16 and 25 years of age and the other two under the age of 10 years. Bennett was probably still living on Mary Wilson's Farm.

The Benjamin Wynn Tenancy does not appear in any tax lists or other archival records after 1797. Ownership of the property was still in flux between Gustave Wilson and other heirs of Andrew Lackey. One oblique reference to an "old farm house in bad repair" in 1810 on 198 acres owned by Gustave Wilson may be the Benjamin Wynn Tenancy. A second possible reference to the Benjamin Wynn Tenancy may have been made in 1816 when Henry Shaw was described as renting an "old house" from Wilson. The location of this house on Wilson's vast holdings, however, is not known. The presence of pearlwares and other diagnostic ceramics from the first quarter of the nineteenth century at the site suggest that the site was abandoned ca. 1820, and these artifacts and other excavation results are described below.

Results of Field Investigations

Phase III data recovery operations at the Benjamin Wynn Tenancy Site consisted of sampling the plow zone and identifying and excavating all cultural features identified within the limits of the site determined by Phase II testing (Gretler et al. 1991b:156-76). The site was located in an agricultural field along the east side of Kent 332 (Plate 2). Plow zone testing consisted of a 25 percent random sample of 5- x 5-foot test units over the core area of the site. Specifically, Phase III plow zone testing consisted of the excavation of 86 test units over an area of 9,900 square feet area (Figure 52).

A total of 549 features was identified during the mechanical removal of the plow zone at the Benjamin Wynn Tenancy Site. All features were tested by data recovery operations. Of these 549 features, 303 were determined to be non-cultural. The remaining 246 cultural features were the primary archaeological evidence of the Benjamin Wynn Tenancy and are shown in Attachment II. A summary of the cultural features is given in Appendix IV. Phase III testing identified the remains of a house, a small blacksmith shop, two wells, and eight fencelines at the site. Only three of these fencelines, however, date to the eighteenth century occupation of the site. A discussion of the archaeological evidence for each major element of the site follows.

Benjamin Wynn Tenant House. The primary evidence of the Benjamin Wynn house consisted of a cellar hole and 32 post- and sill-related features (Attachment II; Appendix IV). The house was probably built ca. 1765 by Andrew Lackey (the Elder) or his son, Andrew Lackey (the Younger). Both men were carpenters. The Benjamin Wynn tenant house was a 24- x 30-foot structure atop a single cellar hole (Feature 107). No evidence of a dug foundation was identified and the house appears to have been laid

upon log sills. The cellar hole was located in the northwest corner of the house. A small hearth/chimney was erected along the west gable wall shortly after the cellar hole was constructed. A 8- x 24-foot shed addition along the east gable end was added shortly after the house was built (Attachment II). Including the shed addition, the first floor dimensions of the Benjamin Wynn tenant house were 38 x 24 feet (912 square feet). The Benjamin Wynn Tenancy is oriented to a slight sandy rise roughly perpendicular to present Lewis Drive. The house and the blacksmith shop were not oriented to this road. The front yard of the farm was west of the two structures.

Benjamin Wynn Tenancy - Feature 107 (Cellar Hole)

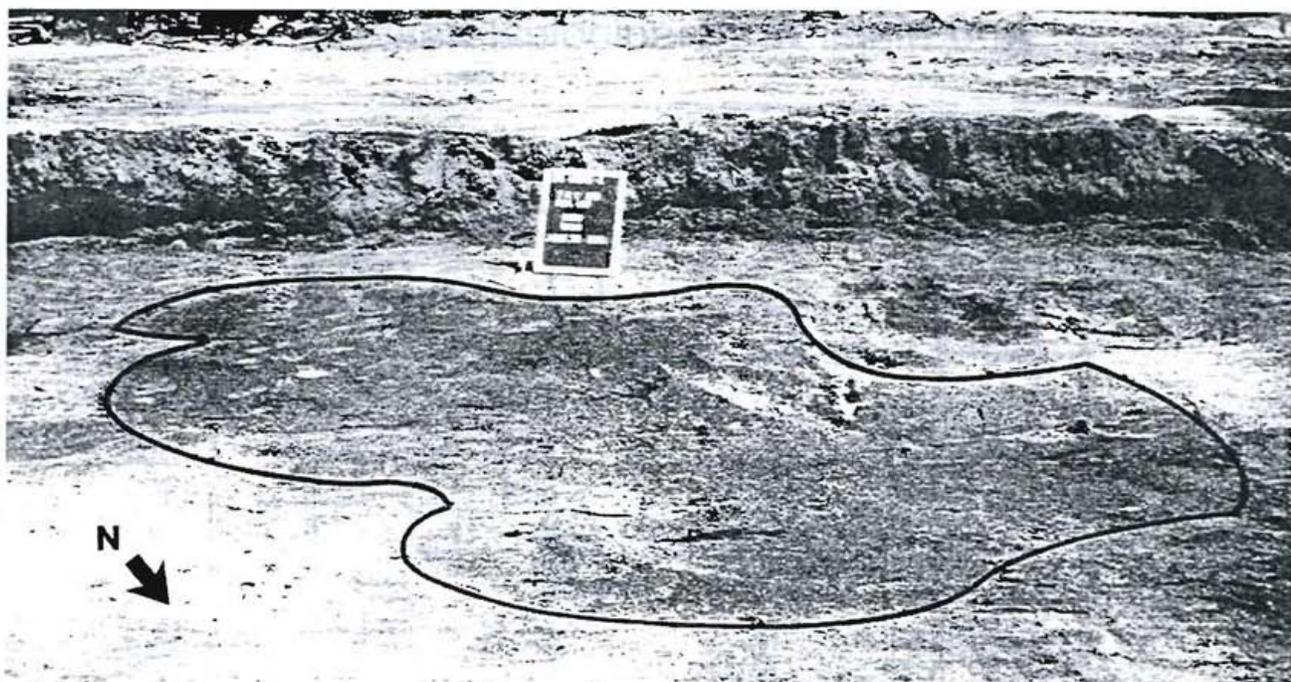
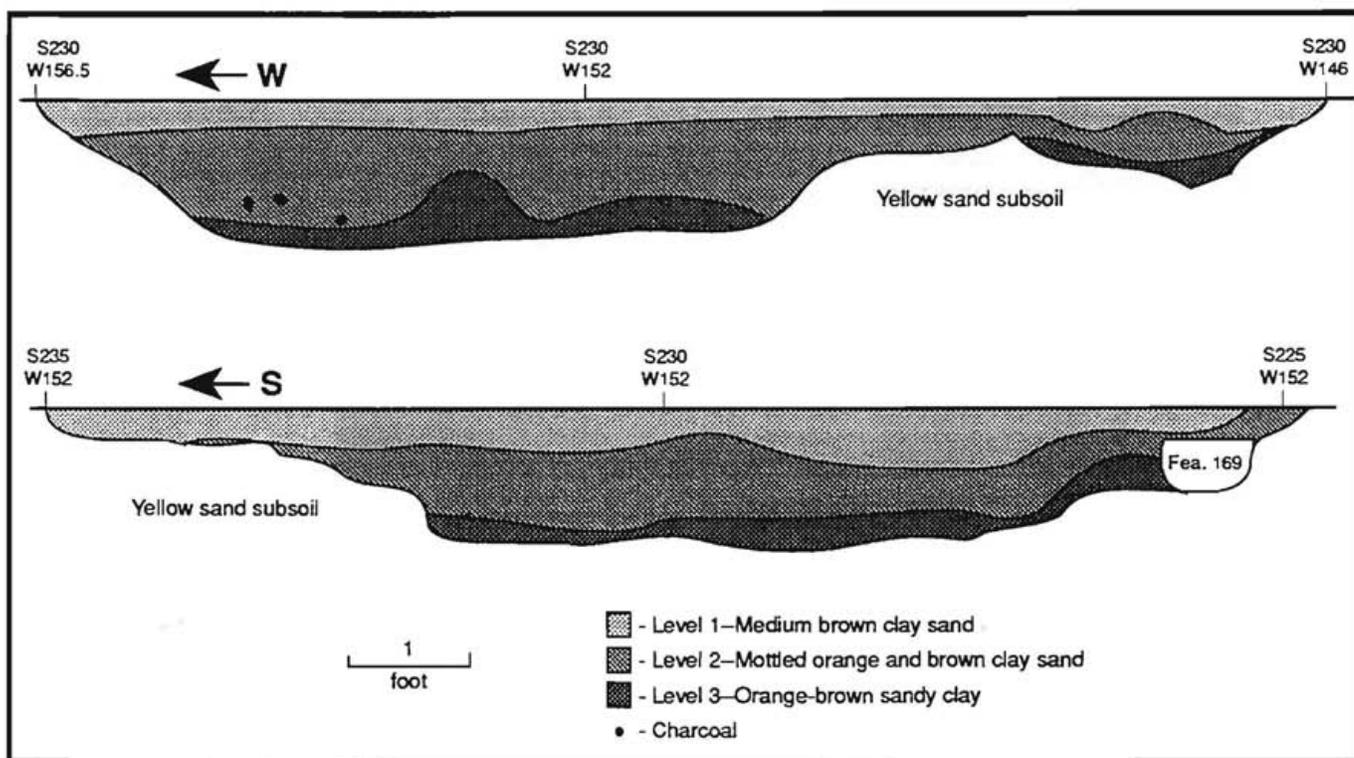


FIGURE 53

Benjamin Wynn Tenancy -
East-West and North-South Profiles of Feature 107 (Cellar Hole)



The most important of the house features was the cellar hole, Feature 107 (Plate 26). The cellar hole was first identified as a large 10- x 10-foot square stain. The surface of the feature was heavily mottled with small brick fragments, charcoal, bone, and oyster shell. The concentrations of brick and charcoal were heaviest in the northwest corner of the cellar hole along the hearth/chimney. The cellar hole itself, however, predates the hearth/chimney because five of the post holes associated with the hearth (Features 132, 386, 383, 389, and 390) were carefully spaced around the irregular edge of Feature 107. Feature 107 was excavated by quadrant and arbitrary 0.25-foot levels. Three natural strata were identified (Levels 1-3 - Figure 53) within the one-foot depth of the feature. The uppermost strata was a 0.2- to 0.4-foot thick layer of dark, highly organic brown clay and sand. This deposit represents a layer of demolition and yard debris deposited after the site was abandoned. This strata contained most of the artifacts recovered from Feature 107 and similar soils were found in the other deep features including both wells and the blacksmith shop.

Beneath the uppermost layer of feature fill in Feature 107 was a 0.2- to 0.8-foot thick deposit of mottled orange and brown clay sand. Three additional circular post holes (Features 169, 172, and 173) were found when the second layer was exposed (Figure 54). Feature 169 was a large 1.4- x 1.0-foot post hole that extended only 0.4 feet into the second level of Feature 107. Features 172 and 173, however, were more substantial 1.1-foot diameter circular post holes extending 2.0 - 2.51 feet into

Feature 107. The second layer of Feature 107 contained significantly fewer artifacts than the first. Beneath this second layer was a thin horizon of orange-brown sandy clay that also contained historical artifacts (Figure 53). Except for higher concentrations of bone and shell in Level 1, the artifact assemblages of all three levels of Feature 107 were nearly identical. Sherds to a minimum of nine vessels were recovered from Feature 107 (Appendix V). The vessels ranged from an eighteenth century tin-glazed bowl (W-T-162) to nineteenth century dipt pearlware bowls (W-T-70 and W-T-94). The mean beginning date for the nine vessels is 1752. The mean end date is 1822. Despite the small sample, these dates are very close to the historically documented occupation dates of the site. These vessels are all less than five percent extant indicating secondary deposition. The terminus post quem for Feature 107 is 1795 based on the presence of two dipt bowls.

The similarity of the artifacts from the different strata of Feature 107 suggests that the bottom two layers were deposited over a relatively short period of time and then overlain by the uppermost level after a period of intensive occupation. The similarity of the feature fills and the high concentrations of structural artifacts throughout them indicate that they were deposited over a short time, probably at the end of occupation ca. 1822.

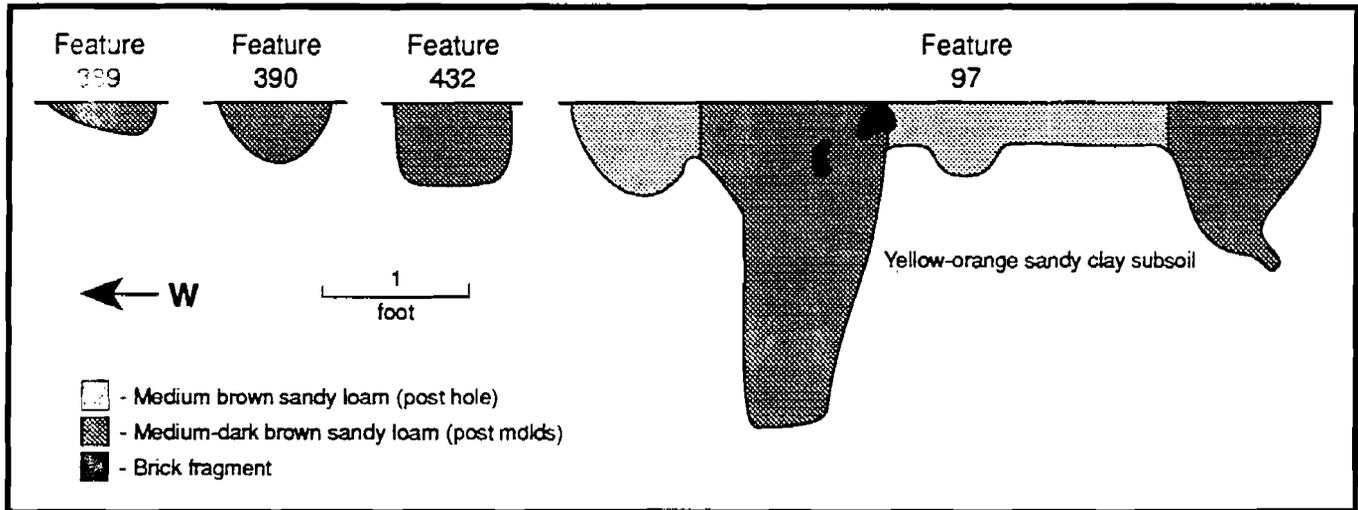
The closing profile (Figure 53) and plan view (Figure 54) of Feature 107 show a rectangular 5.0- x 6.5-foot area oriented to the northwest corner of the house. The floor of the rectangular area consistently measured 1.0 to 1.3 feet below subsoil. The alignment of the three interior posts of Feature 107 to the rectangular area suggests that this area was intentionally excavated as part of the cellar hole. Feature 107 and the lack of surrounding posts indicates the Benjamin Wynn tenant house was probably a frame or log house set upon log sills. One small portion of a sill was identified five feet west of Feature 107 at S235 W156 (Attachment II). The sill, Feature 430, would have been part of the west gable wall. High concentrations of brick were noted in both the plow zone and subsoil near the cellar hole, but the frequency of partially glazed bricks among the sample suggests the presence of a hearth/chimney rather than brick piers. No other evidence of brick, stone or wooden piers was identified.

In addition to the cellar hole and sill, eight other features from the core of the Benjamin Wynn tenant house were identified. Seven of the features were interior supports or stains located near the center of the house at S245 W148 (Attachment II). All of the features (Features 123, 124, 129-131, 147, and 257) are the remains of large, shallow rectangular or circular posts. Features 147, 130, 131, and 124 were probably supports for an interior wall that roughly bisects the house (Attachment II). With the exception of Feature 129, none of the features extended more than 0.6 feet into subsoil or showed any evidence of a prepared post hole. Feature 129 was a simple circular post hole extending to 1.3 feet below subsoil. Feature 147 was the remains of a 1.0- x 1.5-foot rectangular post mold and hole.

The location of the interior house features indicates that the Benjamin Wynn Tenancy was probably built on a simple hall-parlor plan, the most common house plan in late eighteenth and early nineteenth century central Delaware (Herman 1987b:20-21). Entrance into the house was probably through a central hall divided by Features 147, 130, 131, 123, and 124 (Attachment II). With opposing doors on each side of the structure, this interior division would have split the house into a simple hall and parlor. Access between the two rooms would have probably been through a 4.0-foot wide doorway between Features 130, 131, and 124 (Attachment II).

The remaining 31 features of the tenant house are primarily post holes associated with the hearth/chimney, internal divisions, and shed addition. The primary evidence for the hearth/chimney were 10 post-related features along the west gable wall northwest of the cellar hole (Attachment II). Seven of

FIGURE 55
 Benjamin Wynn Tenancy - Typical Profiles
 of Features Associated with West Additions to House



the posts (Features 132, 386, 383, 389, 390, 432, and 477) enclose a 4.0- x 8.0-foot area associated with the highest concentrations of brick, wrought nails, charcoal, and burnt artifacts at the site. Almost all of the artifacts came from the plow zone above these features. No evidence of a chimney base or burned earth was found because of the deep plowing of this area. Indeed, only three of the 10 hearth/chimney features contained any artifacts. This low frequency of artifacts suggests the hearth/chimney was constructed at the same time as the rest of the tenant house. No ceramic artifacts or other diagnostic artifacts, however, were recovered from any of the hearth-related features.

Except for Features 97, 172, and 429, all of the post holes of the hearth/chimney extended less than one-half foot into subsoil. The shallow features showed no evidence of excavated post holes and were round or slightly rectangular in plan view. In addition, all of the post holes of the western addition were filled with the same medium to dark brown sandy loam feature filled first encountered in the cellar hole. Typical profiles of three such small posts, Features 389, 390, and 432, are shown in Figure 55.

The two deepest features of the hearth area were Features 97 and 429 (Attachment II). Both features are located slightly northwest of the hearth area and were probably additional chimney supports. Both features extended to 2.5 feet and 2.2 feet into subsoil respectively. Only Feature 97 showed any evidence of a post hole associated with its two post molds (Figure 55). Feature 97 consisted of two posts set two feet apart in the same post hole. The proximity of these two posts of Feature 97 suggests replacement, but no stratigraphic evidence of replacement was identified, except for one small redware sherd and two brick fragments in the deepest mold, neither post mold contained any diagnostic artifacts (Figure 55). The presence of two brick fragments in the deeper post suggests it was the later post. All three post holes of Features 97 and 429, however, were tree or rodent disturbed.

The archaeological evidence of the shed addition along the east gable end consists of the remains of 10 shallow, cultural post-related features (Features 125, 128, 136-138, 142-146). The shed addition was eight feet wide and extended along the entire 24-foot width of the house (Attachment II). The addition was supported by four pairs of posts. Preservation of the posts was generally poor and only one, Feature 137, extended more than two foot into subsoil. Feature 137 was the deepest of the shed supports and extended to 2.1 feet into subsoil. Features 137 and 138 were located at the center of the

addition along its inside wall (Attachment II). These two large, circular post holes supported a 4.0-foot wide doorway between the shed and the house. The two paired features along the matching exterior entrance were Features 142 and 136, two other large post holes.

The doorway divided the shed into two 10-foot wide bays. These bays were further supported by pairs of posts at both corners. The northeast and northwest corners of the shed were supported by Features 125 and 128 respectively (Attachment II). Feature 125 and 128 were both large, rectangular post hole stains extending less than 0.3 feet into subsoil. The southeast and southwest corners of the shed addition were supported by Features 144 and 145. Very little of all four of the large, rectangular corner post holes survived, but evidence of replacement posts or additional supports were identified at the southeast and southwest corners. The shed would have faced the most active part of the yard area near the house. Part of this yard area would have been bounded by the shed and Fenceline G (Attachment II).

Artifacts were recovered from only two of the 12 shed addition features, including two rodent burrows (Features 139 and 141) near the doorway. The feature fill of all of the cultural features was the same dark brown, highly organic sandy loam encountered atop the cellar hole and throughout all of the other structural features. The low frequency of artifacts in the shed addition features is consistent with the low frequency of artifacts found in house core and hearth/chimney. Less than one-third of all of the features of these three areas contained artifacts. The consistently low density of artifacts indicates that all three parts of the house were constructed over a relatively short period at the beginning of the occupation when few artifacts were available for deposition. Unfortunately, almost all of the artifacts recovered from the house features were relatively nondiagnostic brick and nail fragments. Except for Feature 107, only one other house-related feature contained any non-redware ceramic artifacts. This feature was Feature 137, one of the of the shed addition doorway supports. Feature 137 contained one small piece of plain creamware.

Benjamin Wynn Blacksmith Shop. The primary archaeological evidence for the Benjamin Wynn Blacksmith Shop consisted of two large cellar holes (Features 78 and 81/86) located 50 feet northwest of the tenant house near S220 W190 (Attachment II; Figure 56; Plate 27). The two cellar holes contained enormous quantities of coal ash and occasional blacksmithing debris. The largest of these two cellar holes was comprised of two features, Features 81 and 86. The second cellar hole was Feature 78 (Plate 27). Both cellars were aligned on an axis slightly askew of the orientation of the tenant house. The northern edges of both cellar holes mark the location of the rear wall of the blacksmith shop.

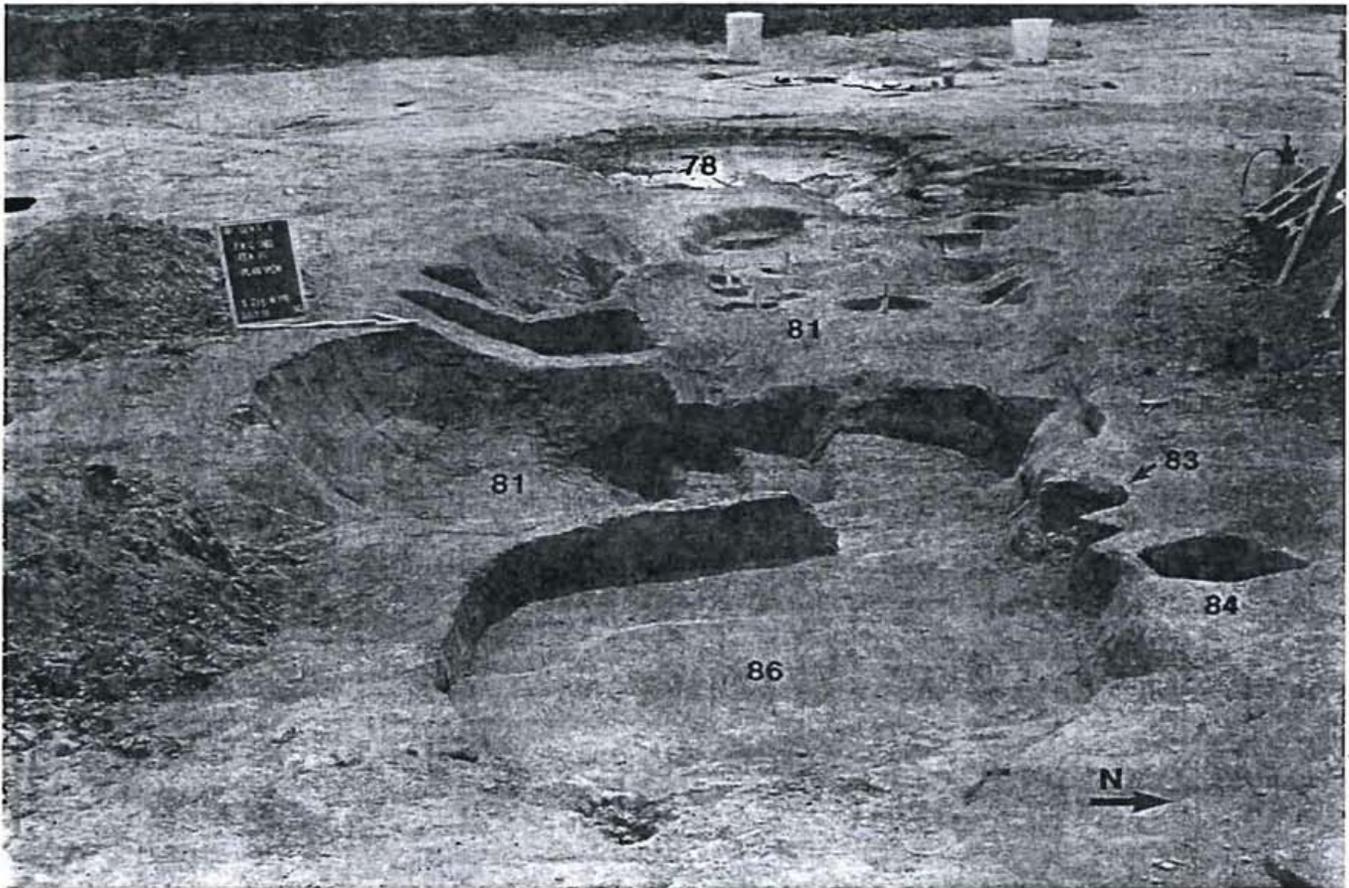
Archaeological evidence indicates that the Benjamin Wynn blacksmith shop measured 16.0 x 24.0 feet in dimension including a 8.0- x 8.0-foot square addition off the southeast wall. The shop was further divided into two eight-foot wide bays. Each of these bays ran the entire length of the building and marks the gable ends. The northernmost bay was built over the two cellar holes, Features 81/86 and 78. The second bay was probably added to the building shortly after the northernmost bay was constructed. The second bay was then expanded by a small eight-foot square shed addition along its east gable end. Including this addition, the total area of the blacksmith shop was 448 square feet. Appendix IV summarizes the features associated with the blacksmith shop.

The general construction sequence noted above is suggested by the stratigraphy and distribution of diagnostic artifacts of the two cellar holes and related structural posts. In general, the two cellar holes represented by Features 81/86 and 78 appear to have been in place before the southernmost bay and its

shed addition were constructed. Primary evidence for this sequence consisted of eight buried post-related features (Features 370-72, 523, and 525, and 527-529) within Feature 81. Overall, the features associated with both cellar holes and the northernmost bay contain fewer and slightly earlier artifacts than the features associated with the southern bay and addition as noted in the following pages.

PLATE 27

Benjamin Wynn Tenancy -
Closing View of Features 78, 81, and 86 (Blacksmith Shop)



The largest of the two cellar holes of the Benjamin Wynn blacksmith shop was represented by Features 81 and 86. Together, these two features comprised a single rectangular cellar hole nearly 20 feet long and eight feet wide (Figure 56). Features 81 and 86 were first identified as dark, highly organic stains of brown silty loam surrounded by sterile yellow-brown subsoil (Figure 56). The rectangular outline of the cellar hole was apparent. Feature 81 contained two large concentrations of coal slag and brick rubble absent from Feature 86. Three small square post holes, Features 82-84, were also visible near the eastern edge of the stain.

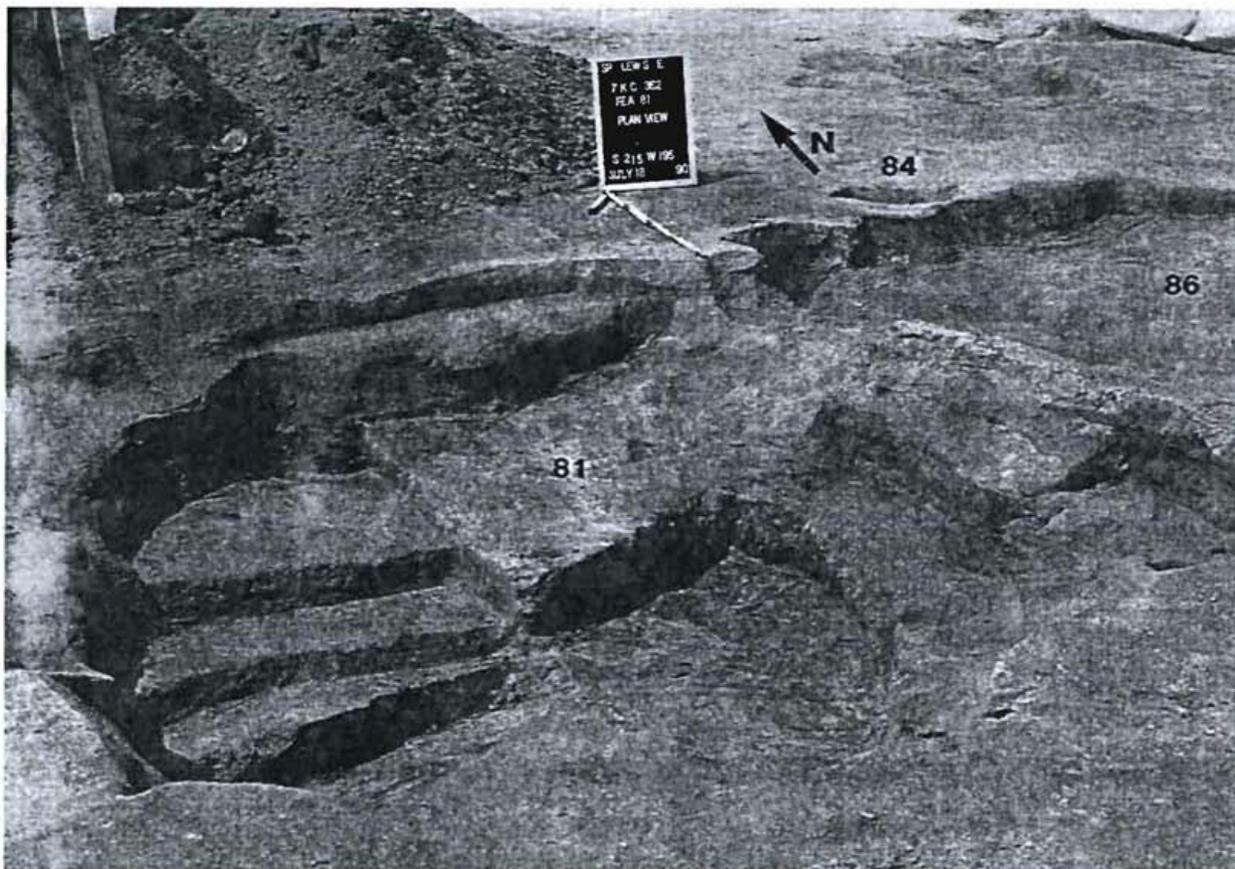
Features 81 and 86 were sectioned and excavated according to natural and arbitrary levels. Three different strata were encountered (Figure 56). The uppermost strata was a 0.2- to 0.4-foot thick layer of dark brown, highly organic sandy loam (Level 1 - Figure 56). This strata contained numerous historical artifacts including brick, bone, shell, and small coal slag fragments. This layer was identical to the uppermost level of feature fill identified over the tenant house (Feature 107) and the rest of the site. The historical ceramic artifacts recovered from Level 1 were also typical of the late eighteenth to early nineteenth century ceramic artifacts recovered from other features: locally made redwares, undecorated creamwares, scratch blue white salt-glazed stoneware, and painted pearlwares.

Few domestic artifacts were found in the gray sand, brick, and coal slag of Level 2 of Feature 81. Compared to Level 1, only four historical ceramic sherds were found in Level 2. Three of these ceramic artifacts were refined wares: one fragment of undecorated pearlware, one sherd of Buckley earthenware, and one fragment of scratch blue white salt-glazed stoneware. The dates of these wares span the entire mid-eighteenth to early nineteenth century occupation of the site. Even fewer domestic artifacts were found in the third and deepest level of Features 81 and 86. Level 3 (Figure 56) consisted of a thin, 0.2- to 0.6-foot thick deposit of displaced red, yellow, and brown sands. The sands represented disturbed subsoil and were largely sterile. Occasional small pieces of coal slag or small, heavily corroded iron fragments were found. No historical ceramic artifacts, bone, or other domestic debris were recovered. Indeed, as noted for Level 2, historical artifact densities decreased steadily with depth below Level 1.

The sherds from the various levels of Feature 81 came from a minimum of 17 vessels (Appendix V). These vessels had a mean beginning date of 1739 and a mean end date of 1814. Seven of the vessels are various types of redware that were probably made in Pennsylvania or from local potters. Calculating the dates without the redwares yields a mean beginning date of 1734 and a mean end date of 1789. This end date suggests that Feature 81 was filled-in early in the site's history. The terminus post quem vessel for Feature 81 is a rococo shell-edged creamware plate probably post dating 1780 (W-T-68). Undecorated creamware shell-edge is rarely found in archaeological assemblages and museum collections. All of the vessels from Feature 81 are represented by only a few sherds. The small percentage of vessels extant suggests that Feature 81 was not used as a primary dump, but received secondary deposits from yard clean up.

Three large, but shallow post holes were identified in Level 3 (Figure 58). These posts predate Level 2 and were truncated by that layer. Three square post holes, Features 370-372, were found in the eastern half of Feature 81 approximately four feet west of Feature 86 (Figure 58). Features 370-372

PLATE 28
Benjamin Wynn Tenancy -
Closing View of Feature 81 (Blacksmith Shop)



measured 1.0 x 0.9 feet, but extended less than 0.4 feet into the yellow, red, and brown sands of Level 3. None of the features contained any artifacts. The size of the three post holes and their location within Feature 81 suggest that they were the remains of large interior posts. They may also have been part of a bellows or other forge furniture associated with the blacksmith shop. A profile of the east wall of Feature 81 showing the location of Feature 371 is shown in Figure 57.

Once Features 370-372 were excavated, the remainder of Level 3 was removed. The bottom of the Feature 81/86 cellar hole was then encountered at 1.9 feet below subsoil (Figures 57 and 58). The floor of the feature was flat and had been carefully excavated when the cellar was constructed. In fact, three carefully built circular steps were cut into the bottom of Feature 81. The steps were located directly below Features 370-372 (Figure 58; Plate 28). The circular stairs leading into Feature 81 were oriented towards Feature 86 to the west. The stairs were probably accessed through Feature 86 at the east gable end of the shop as the bottom of the feature was at the same level as the top stair step. Moreover, a two-foot wide gap in the subsoil between Features 81 and 86 probably marked the doorway between the two parts of the cellar (Plate 28).

In addition to the circular steps cut into Feature 81, eight small post-related features were discovered at the bottom of Feature 81. A closing plan view of Features 81 and 86 showing the location of these eight features (Features 170-71, 523-25, and 527-529, and 542) and the circular stairs is shown in Figure 58. The location of the eight post features at the bottom of Feature 81 indicates the presence of interior divisions and possibly supports. The clearest evidence of an internal division was along Features 170, 171, 527, and 529. These small posts would have divided the 24-foot length of the shop into two equal 12.0- x 8.0-foot rooms. Unfortunately, very little of any of these eight internal features remained and no artifacts were recovered from any of them. All of these features extended less than 0.2 feet into subsoil and no evidence of post holes was identified.

The presence of these interior posts and the stratigraphic distribution of historical artifacts suggests two phases of construction and occupation at the blacksmith shop. The first phase began with the excavation of the cellar and circular stairs. Three large posts, Features 370-372, were then added and the cellar hole was used for a short period, probably as a storage area for the nearby tenant house. Access to the cellar during the first period was probably through Feature 86 to the east where a doorway marked by Feature 83 was located.

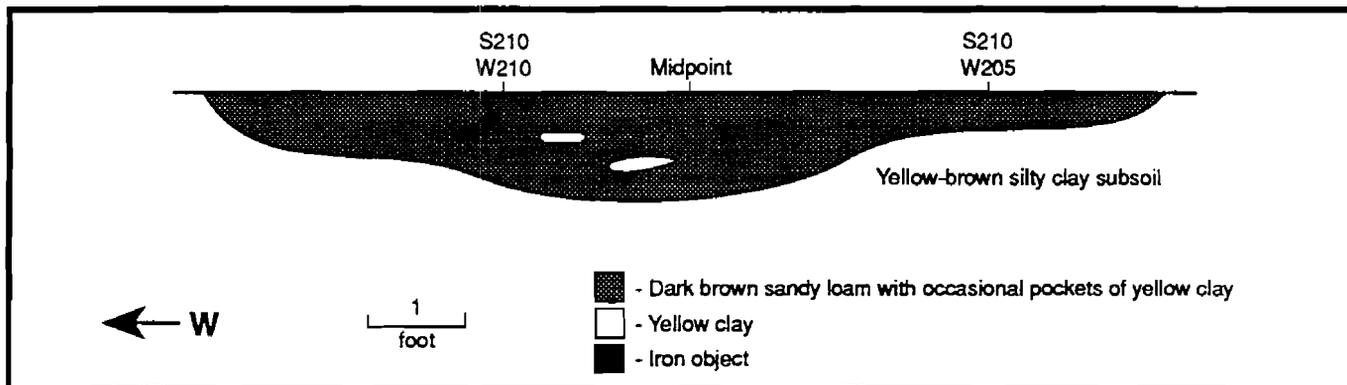
The second phase of occupation began when nearly a foot of local sands (Level 3) were deposited in the cellar hole. Ten small posts (Features 79, 170-171, 523-525, and 527-529, and 542) were then set into the new floor of the feature. The paucity of historical artifacts in these sands suggests that the second phase of use occurred relatively shortly after initial occupation of the site when there were few artifacts available for deposition. The ten posts erected during the second phase of use formed at least one interior division within the blacksmith shop. This interior wall divided the structure into two equal 8- x 12-foot rooms. Primary access to these rooms probably remained through Feature 86 to the east, although an additional doorway may have been added to the western room.

The second phase of occupation was also probably the period of greatest blacksmithing activity. The thick deposit of dark gray slag, burnt brick, and scrap iron of Level 2 deposited at the end of the period contained the greatest number of shop-related tools and debris. The presence of both eighteenth century creamwares and early nineteenth century pearlwares in this level dates this fill to the most intensive period of occupation later than ca. 1780. The end of the second phase corresponds to the destruction of the site and the deposition of the dark brown sandy loam of Level 1 over both structures and the other deep features of the site.

The second cellar hole at the Benjamin Wynn blacksmith shop was Feature 78. Feature 78 was located three feet west of Features 81/86 at approximately S210 W205 (Attachment II). Feature 78 measured 11.0 x 8.0 feet and was roughly rectangular in shape. The feature was defined by the same dark, highly organic sandy loam found in the other cellar hole and over the tenant house. Feature 78 was excavated in two arbitrary levels and only this single strata was encountered. In profile, Feature 78 extended 1.1 feet below subsoil, but showed no evidence of the carefully excavated bottom found in the larger cellar hole (Figure 59).

The artifacts recovered from Feature 78 were nearly identical to those recovered from the uppermost level of Features 81/86, the tenant house, and the other deep features at the site. Brick, slag, oyster shell, and bone were the most common artifacts recovered. These materials represent demolition debris from the destruction of the site. Also recovered from Feature 78 were 68 small scraps of round and bar iron stock. One of these fragments appears in the profile of the feature shown in Figure 59.

FIGURE 59
Benjamin Wynn Tenancy -
Profile of the North Half of Feature 78 (Cellar Hole)

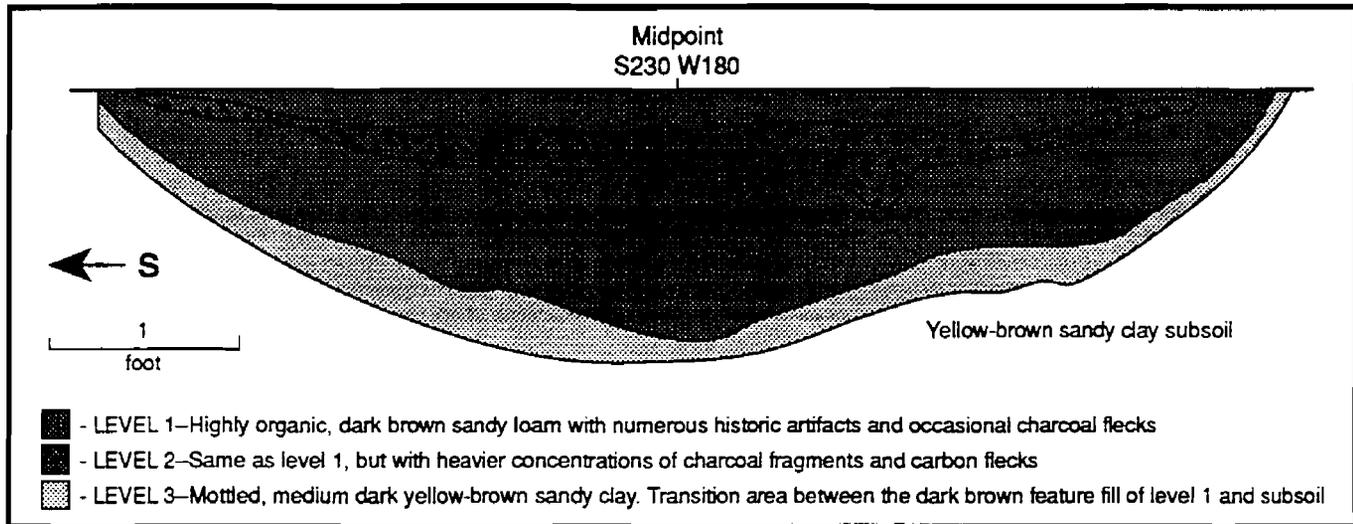


Domestic artifacts found in Feature 78 included dark green wine bottle sherds, pigs teeth, and six small white clay pipe fragments. Over 80 percent (167) of the 203 sherds from Feature 78 were locally made redwares. A minimum of 29 vessels were identified (Appendix V). The vessels had a mean beginning date of 1769 and a mean end date of 1829. Eleven of the 29 vessels were redwares. The redwares constituted all of the table and kitchen ware on the site. The mean beginning and end dates for the 13 creamware and pearlware teawares were 1776 and 1814. Two pearlware teacups, one overglaze enamel painted (W-T-113) and one underglaze blue painted both suggest a terminus post quem date of ca. 1780 for Feature 78. The vessels, like those from Feature 81, were generally less than five percent extant indicating that Feature 78 did not serve as a primary trash dump after it was abandoned, but was filled with soil containing yard scatter.

In addition to the posts inside the Feature 81/86 cellar hole, the Benjamin Wynn blacksmith shop was also supported by seven large posts. The enclosed part of the shop over the two cellar holes was supported by Features 74, 75, 77, 79, and 82-84 (Attachment II). The south wall of the shop along the adjacent open shed addition was supported by Features 480 and 112. All nine of these features were simple, square post molds that showed no evidence of prepared post holes. All of these features were between 0.2 and 1.2 feet in dimension, but were typically poorly preserved. Only three of these post holes, Features 83, 84, and 112, were more than 1.0 feet deep. No other evidence of post-in-ground construction was seen at the Benjamin Wynn blacksmith shop. The poor preservation of all of the structural posts obliterated any possible evidence of prepared post holes or the sequence of wall construction and raising.

The southern half of the Benjamin Wynn blacksmith shop was probably a shed open on three sides. The 8.0- x 24.0-foot shed would have abutted the main part of the shop to the north and would have opened to the yard area to the south. Two large post-related features, Features 480 and 112, would have supported the southern edge of the shed and were located near the southwest corner of the structure (Attachment II). Features 480 and 112 were the two largest post-related features at the blacksmith shop and their size suggests the load they supported. The post hole of Feature 112 measured 1.4- x 1.3-foot square and extended 1.9 feet into subsoil. Feature 480 was a rectangular post hole that measured 2.4 x 1.6 feet. No evidence of a post mold was found in either Features 480 or 112.

FIGURE 60
Benjamin Wynn Tenancy -
Profile of Feature 108 (Blacksmith Shop)



Only one internal feature was identified within the shed addition (Feature 116 - Attachment II). Feature 116 was the remains of a large, deep stump which may have supported an anvil or bellows located near the eastern end of the shed. Feature 116 measured 6.0 x 3.0 feet in dimension and extended 1.0 feet into subsoil. The top layer of dark brown silty loam feature fill contained large amounts of charcoal, including some fragments which were as large as two inches in diameter. Included with this charcoal were numerous small scraps of iron stock, burnt brick, nail fragments, and other blacksmithing debris.

The work area surrounding Feature 116 appears to have been expanded by the addition of a small 8.0- x 8.0-foot shed to the southeast corner of the shop (Attachment II). The small shed was defined by four square posts (Features 117, 175, 198, and 548) and three shallow daub/trash pits (Features 108, 109, and 113). Except for Feature 109, these daub/trash pits are adjacent to the addition on to the east (Feature 108) and the south (Feature 113). All three features were large, shallow clay or daub pits secondarily filled with trash and yard debris. The deepest of these features was Feature 113 which extended 1.9 feet into subsoil. Both Features 108 and 109, however, were less than 1.25 feet deep. All three features were roughly oval in both plan view and profile. A profile of Feature 108 is shown in Figure 60.

The secondary deposits of trash and yard debris in Features 108, 109, and 113 date to the period of most intensive blacksmithing activity during the tenure of Benjamin Wynn ca. 1797. As first identified in Feature 108, all three daub/trash pits contained a simple internal stratigraphy consisting of a single deposit of dark brown, highly organic sandy loam (Level 1 - Figure 60). The feature fill was identical to the soils found in the other deep features at the site.

The fill of Features 113 and 108 also contained a thin lens of darker soil heavily mottled with charcoal. These concentrations appeared from approximately 0.2 to 0.4 feet below subsoil and were especially pronounced in Feature 108 (Figure 60). These charcoal deposits probably relate to the use of a forge near Feature 116 and distinguish Features 108, 109, and 113 from the other trash pits found at the site. The visibility of this thin lens of charcoal-laden feature fill varied considerably between the three daub/trash features. Equally variable was the thin lens of mottled yellow-brown sandy clays observed along the bottom of all three features (Level 3 - Figure 60). This level represents a transitional layer of sandy clays stained with organic materials leached from the dark brown feature fill above it.

The artifacts recovered from Features 108, 109, and 113 were consistent with the assemblages recovered from the two cellar holes of the Benjamin Wynn blacksmith shop, Features 81/86 and 78 (Appendix I). The dark brown sandy loam feature fill of Features 108, 109, and 113 contained 128 small fragments of round, bar, and sheet iron stock. Most of the iron fragments were very small and heavily corroded. The largest of the raw iron fragments was a four-inch long piece of 1/4- x 3/4-inch bar stock from Feature 113. One piece of bar stock also showed evidence of being cut on an anvil. Numerous small coal, coal ash, and brick fragments from all three features are additional evidence of blacksmithing activity. Feature 109, located inside the small 8.0- x 8.0-foot addition consistently contained the greatest concentrations of shop debris and the least amounts of domestic refuse of all three daub/trash features associated with the Benjamin Wynn blacksmith shop. This difference between shop and domestic refuse is additional evidence of a shed addition over Feature 109.

Domestic artifacts recovered from Features 108 and 113 include fragments of window glass, olive bottle glass, shell, and bone. As with the glass and shell, all of the bones were small, poorly-preserved, and relatively nondiagnostic. Part of a bone-handled two-tined fork was found in Feature 108. This artifact was one of only three cutlery pieces found at the site. Two-tined forks were common throughout the eighteenth and early nineteenth centuries (Noel-Hume 1978; Picard 1990). The bone handle on the fork had a rudimentary pistol grip and one side was decorated with five irregularly spaced, crudely carved diagonal grooves.

A total of 292 ceramic sherds was recovered from Feature 108 and 113. The sherds came from a minimum of 57 vessels (Appendix V) which represent almost a quarter of the vessels recovered from the site. Three of those vessels (W-T-44, W-T-47, and W-T-85) have sherds from both features; therefore, the beginning mean and end dates for both features are very close. The mean beginning dates of Features 108 and 113 are 1755 and 1750.5 respectively. The end date for Feature 108 is 1827 and that of Feature 113 is 1827.5. Unfortunately, these date ranges cover the whole period of occupation of the site. An even-scalloped pearlware shell-edged muffin plate (W-T-84) from Feature 108 suggests it was filled-in sometime after 1800. The most datable vessels from Feature 108 are the 17 creamware and two pearlware tea, table, and kitchen wares. Given a ratio of eight creamware vessels to every pearlware vessel, it would appear that Feature 108 was filled between the end of the Revolutionary War and ca. 1800. No pearlware was recovered from Feature 113. The plates include Staffordshire style combed slip, feather edge, royal pattern, two types of shell-edge as well as Pennsylvania slip wares. The mix of types and patterns suggests trash accumulated from several different tenant families.

As a blacksmith, Benjamin Wynn appears to have been engaged primarily in repairing agricultural equipment and possibly manufacturing small items from the round and bar stock fragments found at the site. No nail rods, horseshoes, or evidence of other blacksmithing activities were recovered. Indeed, only three blacksmithing tools were found at the site. Together with the very small size of the various

fragments of scrap iron, this paucity of tools indicates that tools and raw materials were carefully conserved. Recent research by Catts et al. (1994) on eighteenth and early nineteenth century blacksmith shops in New Castle County found that most rural blacksmiths specialized in repairing equipment rather than manufacturing. For example, more than half (52%) of a sample of 240 business transactions from a major blacksmith in northern Delaware were repairs to plows, carriages, carts, axes, and other agricultural tools. This blacksmith, John Vining, kept detailed records for his shop in New Castle Town from 1787-1803. Only a quarter (24%) of his business was manufacturing new bolts, nails, spikes, hooks, hinges, and other small fasteners. The remaining quarter (24%) of Vining's income came from shoeing animals.

The amount of manufacturing by Vining also reflects his urban setting. Almost all the items that he manufactured were iron fasteners of various kinds and small architectural elements. Such items found a ready market in New Castle Town. Benjamin Wynn worked in a much more rural area and probably did not have the same urban market opportunities as Vining. Thus, Benjamin Wynn probably relied even more heavily on the seasonal demands of repairing tools and shoeing animals, although no farrier's tools or debris were found. A simple emphasis on repairing activities is most consistent with the meager material remains of the Benjamin Wynn blacksmith shop.

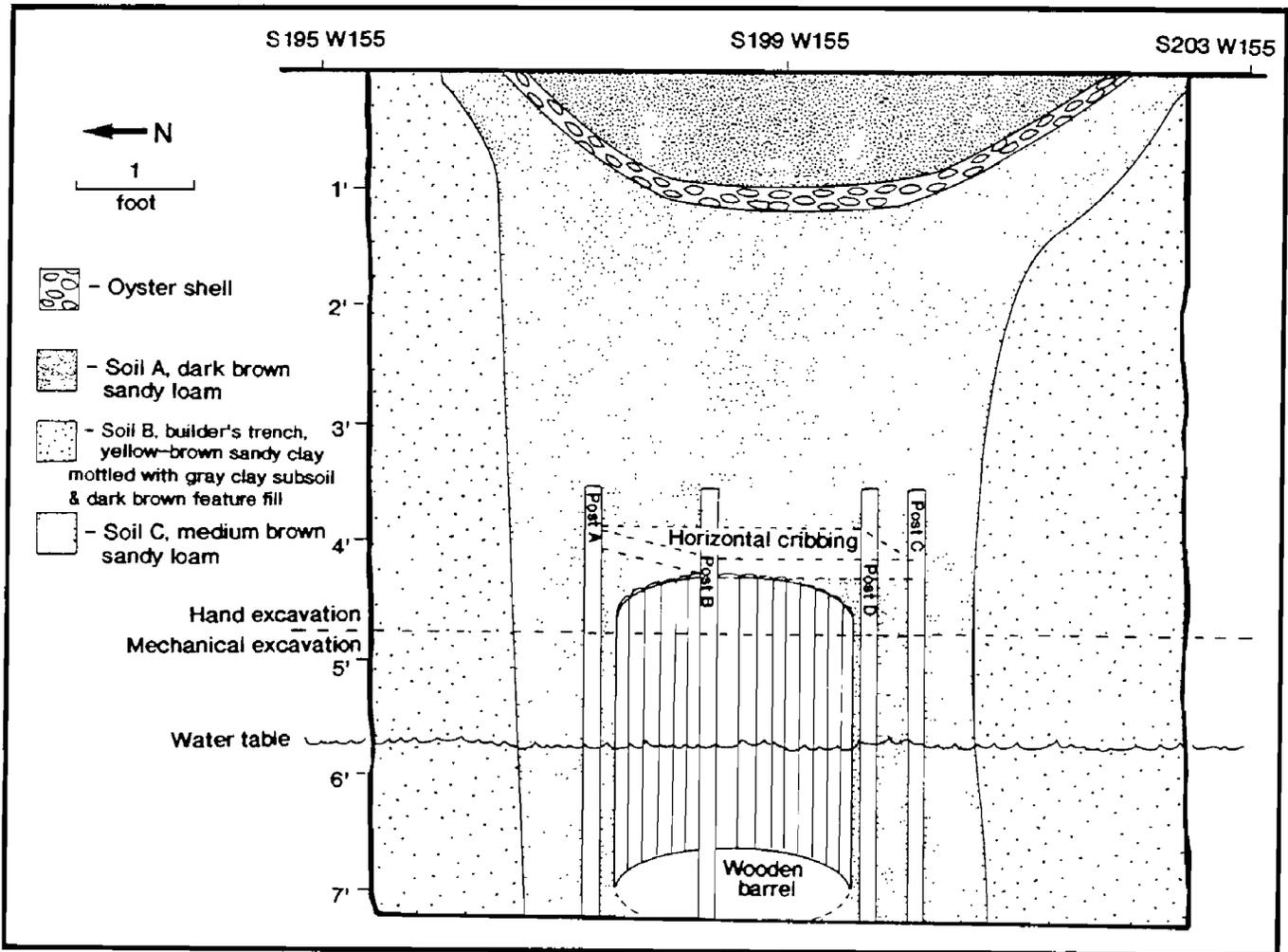
Wells and Associated Features. Two shallow wells were identified and excavated during Phase III operations at the Benjamin Wynn Tenancy Site. The first and oldest well excavated was Feature 80 (Attachment II). The builder's trench (Soil B) around the well contained sherds from a minimum of 13 vessels indicating that some trash had accumulated on the site before that well was excavated (Appendix V). The second well was Feature 94. Both of these wells are located between the tenant house and blacksmith shop at S200 W196 (Feature 80) and S210 W170 (Feature 94 - Attachment II). Both wells were located in the northern yard defined by Fenceline F to the east and Fenceline H to the west. The results of the investigation of each well will be presented next.

Feature 80 was first identified as a 7.3- x 6.8-foot dark stain 20 feet north of the tenant house cellar hole, Feature 107 (Attachment II). Feature 80 was hand excavated in natural and 0.4-foot arbitrary levels to its bottom at 6.7 feet below subsoil. A backhoe was used to enlarge the excavation and ensure the safety of the workers. At the bottom of the well, remnants of well cribbing and a barrel were recovered. No evidence of a well curb or other structure over Feature 80 was found.

The remains of the well shaft of Feature 80 contained two layers of dark, highly organic sandy loam (Soils A and C) surrounded by a builder's trench of yellow-brown sandy clay subsoil mottled with dark brown feature fill (Soil B - Figure 61). Soils A and C marked two deposits within the well shaft. Soil B was a yellow-brown sandy clay subsoil disturbed during the construction of the well shaft. The stratigraphy of the well shaft was equally simple. Soils A and C of the well shaft were separated by a 0.2- to 0.4-foot thick layer of oyster shell (Figure 61). This thin layer of oyster shell occurred in a cone-shaped deposit extending to 1.2 feet below subsoil. Above the shell was Soil A, a dark, highly organic brown sandy loam identical to the feature fill found atop the other deep features at the site, including the cellar holes of the tenant house and blacksmith shop. Soil C, found below the shell, was a lighter, slightly less organic medium brown sandy loam similar to Soil A. Ceramic artifacts from Soils A and C of the well shaft of Feature 80 cross-mended with a number of vessels from other features, including Features 57, 60, 61, 78, 81, 94, 108, 113, and 200 (Figure 62).

FIGURE 61

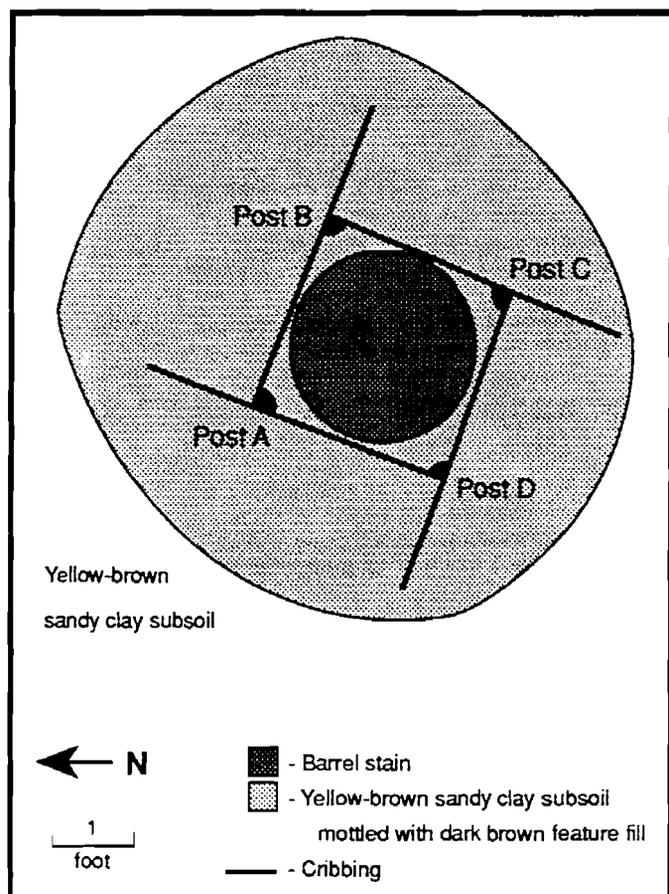
Benjamin Wynn Tenancy - Profile of Feature 80 (Well)



Intact vertical well cribbing was encountered at 4.8 feet below subsoil (Figure 61). This cribbing consisted of four 3.5-foot long triangular timbers set into the corners of a 2.5-foot square. A plan view of the well at 4.8 feet below subsoil showing these four vertical cribbing posts is shown in Figure 63. Each hewn post was made from a split rail. The three faces of each triangular post measured 0.5 x 0.55 x 0.6 feet in dimension.

A backhoe was then used to enlarge the excavated area around the well to allow the well cribbing to be removed intact. After approximately one foot of dark sandy loam feature fill (Level C) was removed from around the four vertical posts, the remains of four horizontal wooden spindles nailed to the four vertical posts were discovered. Each of the four spindles were four-inch wide (0.25-foot) boards approximately five feet long. Each board was nailed to the four vertical posts with large wrought nails and extended 1.5 feet beyond the square well shaft into the builder's trench (Soil B - Figure 63; Plate 29).

FIGURE 63
 Benjamin Wynn Tenancy -
 Plan View of Feature 80 (Well)
 at Five Feet Below Subsoil



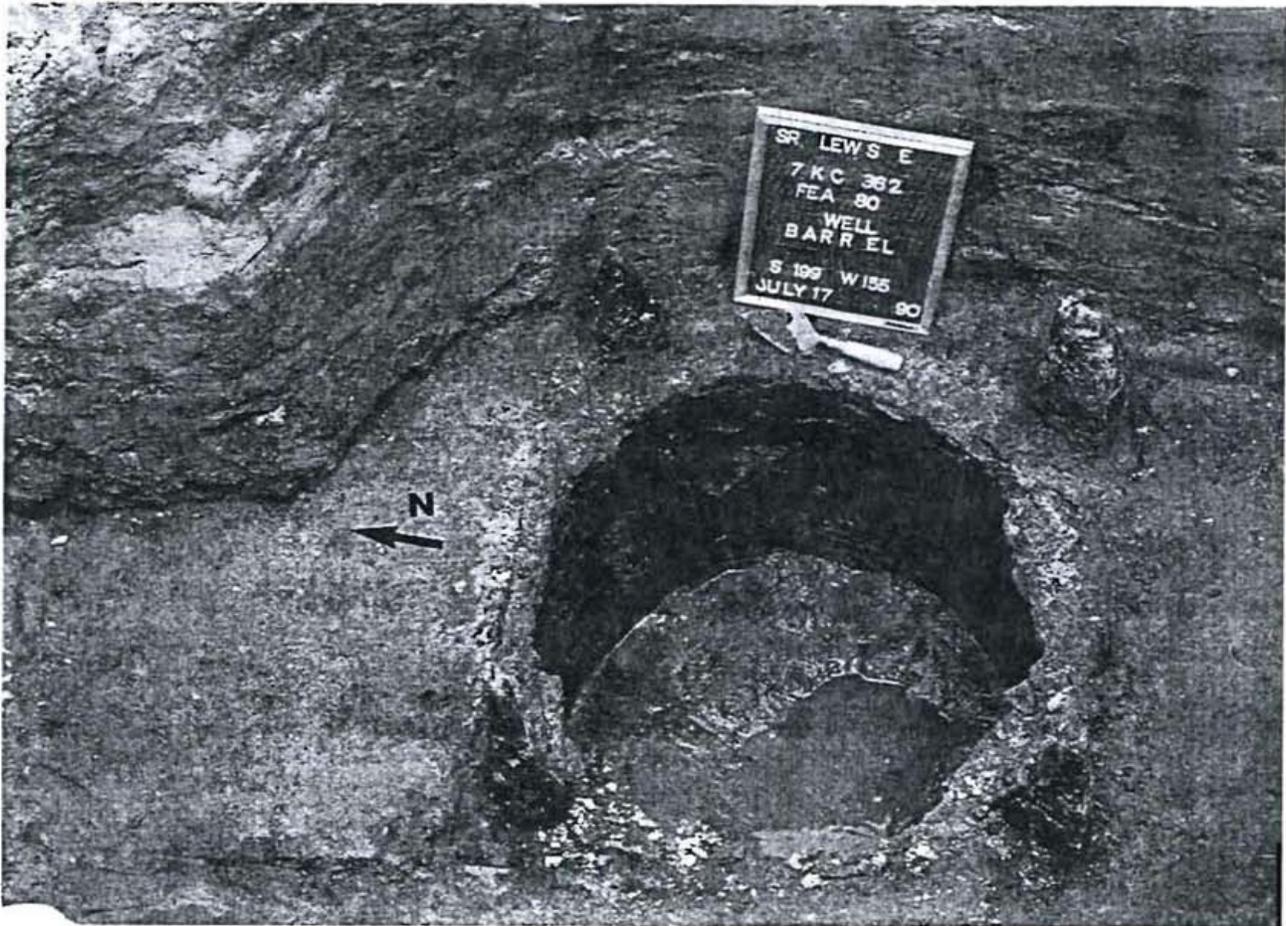
The remains of a large wooden barrel inside the square well shaft were then uncovered just below the four long, horizontal spindles. The barrel measured approximately 2.3 feet in diameter and was located in the center of the 2.5-foot square well shaft. The bottom of the barrel rested on the very bottom of the well at 7.3 feet below subsoil. The barrel itself was 2.4 feet high. The location of the barrel in relation to the four vertical posts and the builder's trench (Soil B) is shown in Figure 63. Part of the barrel and the wet, highly organic sandy silt inside it also appears in Plate 29.

A total of 28 barrel staves was recovered from the barrel at the bottom of Feature 80. The staves were numbered with incised Roman numerals, I to XXVI. The staves were only one inch thick suggesting that the barrel was relatively lightly constructed and intended for grain rather than heavy liquids. Further evidence of the light construction can be seen in the shallow croze groove around the interior rim of the barrel (Plate 30). The croze is a groove around the interior rim of a barrel that accepts a lid. Heavier barrels tend to have deeper, square cut crozes capable of accepting heavy lids. The shallow, simple "V" shaped croze of the Feature 80 barrel is typical of lighter, less substantial barrels. No evidence of repairs, metal hoops, cooper's nails, or other fittings were found. Deterioration along the bottom half of the barrel indicates that the historical water line was 5.8 feet below subsoil or approximately 6.8 feet below ground surface (Figure 61).

Feature 80 was filled in three main episodes. Each episode marks an important change in the site history and corresponds to the vertical distribution of historical artifacts. The displaced subsoils of Soil B were deposited when the well was initially constructed. Soils C and then A were then deposited into the well shaft after the well was abandoned. Based on this overall sequence, the artifacts of the builder's trench, Soil B, would be older than the artifacts of the two well shaft deposits. Between these two well shaft deposits, the artifacts of Soil C should be older than those of Soil A above it (Figure 61).

The builder's trench (Soil B) of Feature 80 contained sherds to a minimum of 13 vessels suggesting that the well was dug sometime after the site was occupied (Appendix V). The *terminus post quem* vessel from the builder's trench fill was a dark creamware hollowware vessel (W-T-125). This darker creamware vessel was probably produced between 1762 and the 1770s when a lighter version began to replace it. While dark creamware was first produced in England in the early 1760s, it did not begin to be imported into the American market until the late 1760s (Miller, Martin, and Dickinson n.d.).

Benjamin Wynn Tenancy - Feature 80 (Well)

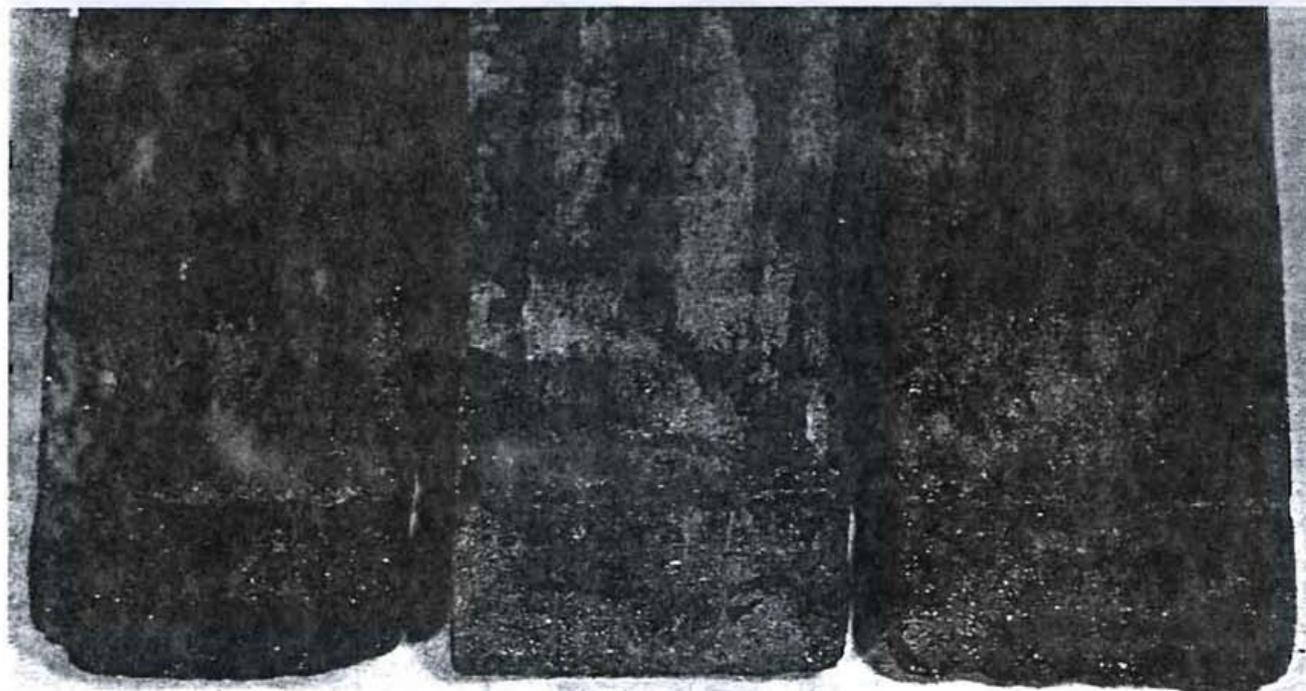


The mean beginning and end dates for the 13 vessels from the builder's trench of Feature 80 are 1734 and 1809 (Appendix V). Given the small size of the sample, it is not surprising that the date range is so great. Furthermore, most of the vessels were represented by one or two sherds and were thus less than five percent extant. The small size of most of the sherds suggest that they represent yard scatter.

The second distinct archaeological context within Feature 80 was the well shaft fill, Soil C (Figure 61). Sherds to a minimum of 13 vessels were recovered from the fill of the well shaft (Appendix V). The *terminus post quem* for this fill was a light colored creamware teapot (W-T-73) probably made after 1770. This vessel, however, could easily have been imported as late as 1810. Four vessels from the well shaft also had sherds from the sill of the builder's trench (W-T-150, W-T-64, W-T-35, and W-T-161). No other cross-mends were identified, however, and the sherds may actually fit with different vessels.

The mean beginning and end dates for the 13 vessels from in the well's shaft are 1749 and 1821 (Appendix V). The mean dates are 12 to 15 years later than the builder's trench. These dates, however, cover the whole period of the site's occupation and given the small size of the sample, are not very

Benjamin Wynn Tenancy - Barrel Staves from Feature 80 (Well)



2 inches

useful. The vessels from the shaft's fill, like those from the builder's trench fill, are less than five percent extant. The low proportion extant indicates that the well was not used as a trash dump after it was abandoned, but filled with soil containing yard scatter.

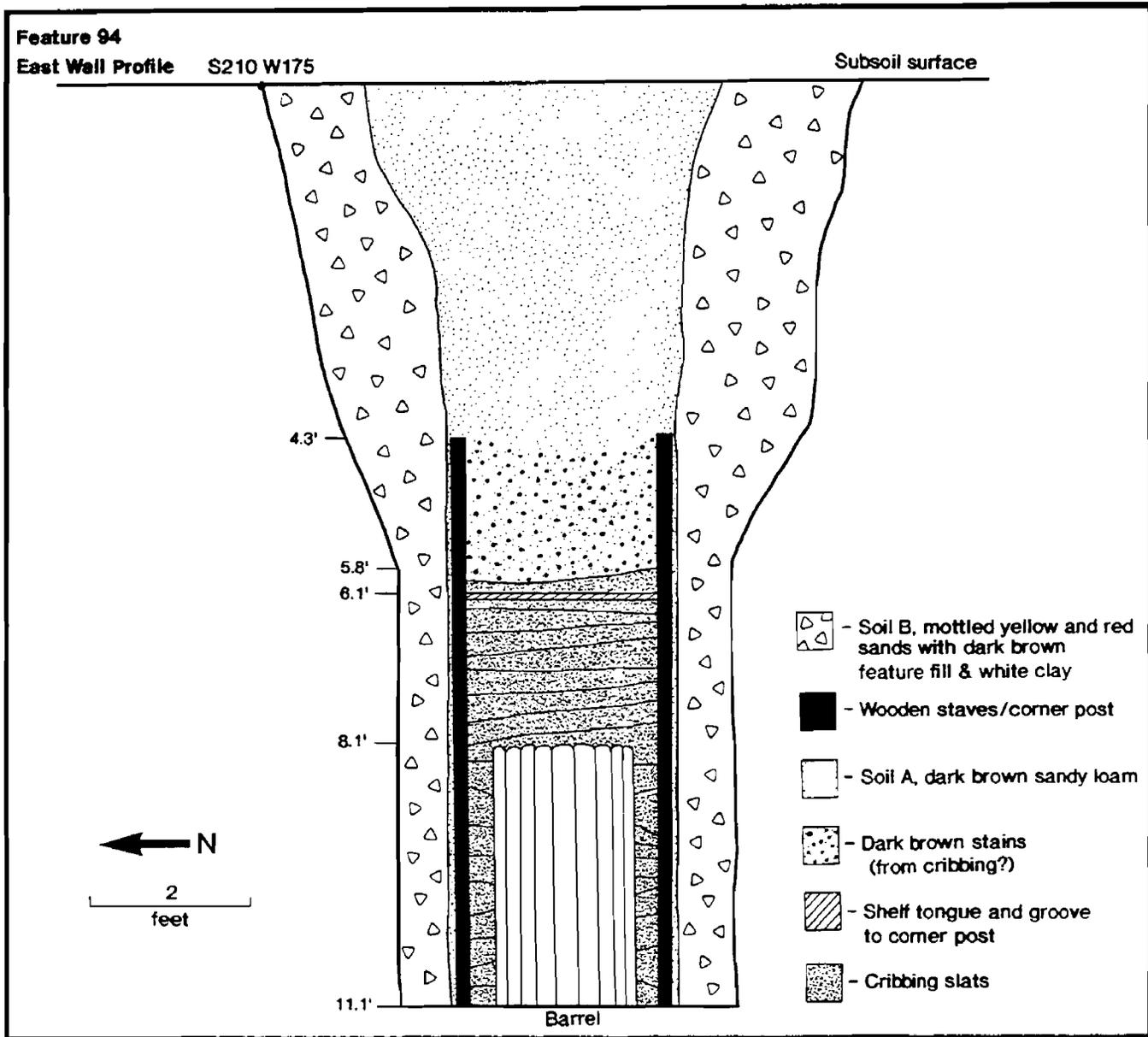
The third distinct context in Feature 80 was Soil A (Figure 61). Soil A capped the well shaft fill and was separated from the well shaft by a thin layer of oyster shells. A total of 17 minimum vessels was identified in Soil A. All of these vessels were also less than five percent extant. The terminus post quem vessel for this context is an enamel painted dark creamware cup (W-T-122). This cup most likely dates to the 1770s. The mean beginning and end dates for Soil A are 1742 and 1815, once again almost covering the whole period of the site's occupation (Appendix V). As all three soil contexts from Feature 80 contain creamware, but not pearlware, this well was probably dug in the 1770s and filled-in sometime before 1790.

Vessels from the three fill levels of the well are so similar that they can be considered as one unit. The teawares, with the exception of a redware cup (W-T-201), are refined English wares. The 14 teaware vessels have mean beginning and end dates of 1745 and 1788. The beginning date predates the occupation of the site, however, the end date is probably close to when the well was abandoned and filled. White salt-glazed, scratch blue, and creamware were the dominant teawares.

A total of 10 tableware vessels was recovered from the three fill levels of the well. Nine of the vessels were redware plates or platters. One feather edge creamware plate was found. The feather edged plate would date anytime from 1770 to ca. 1800. Locally made redwares dominated both the kitchen and tableware assemblages. Five of the nine kitchenware vessels were redware. The others were single delft, Staffordshire type slip ware, agate ware, and creamware vessels. Again, these wares

FIGURE 64

Benjamin Wynn Tenancy - Profile of Feature 94 (Well)



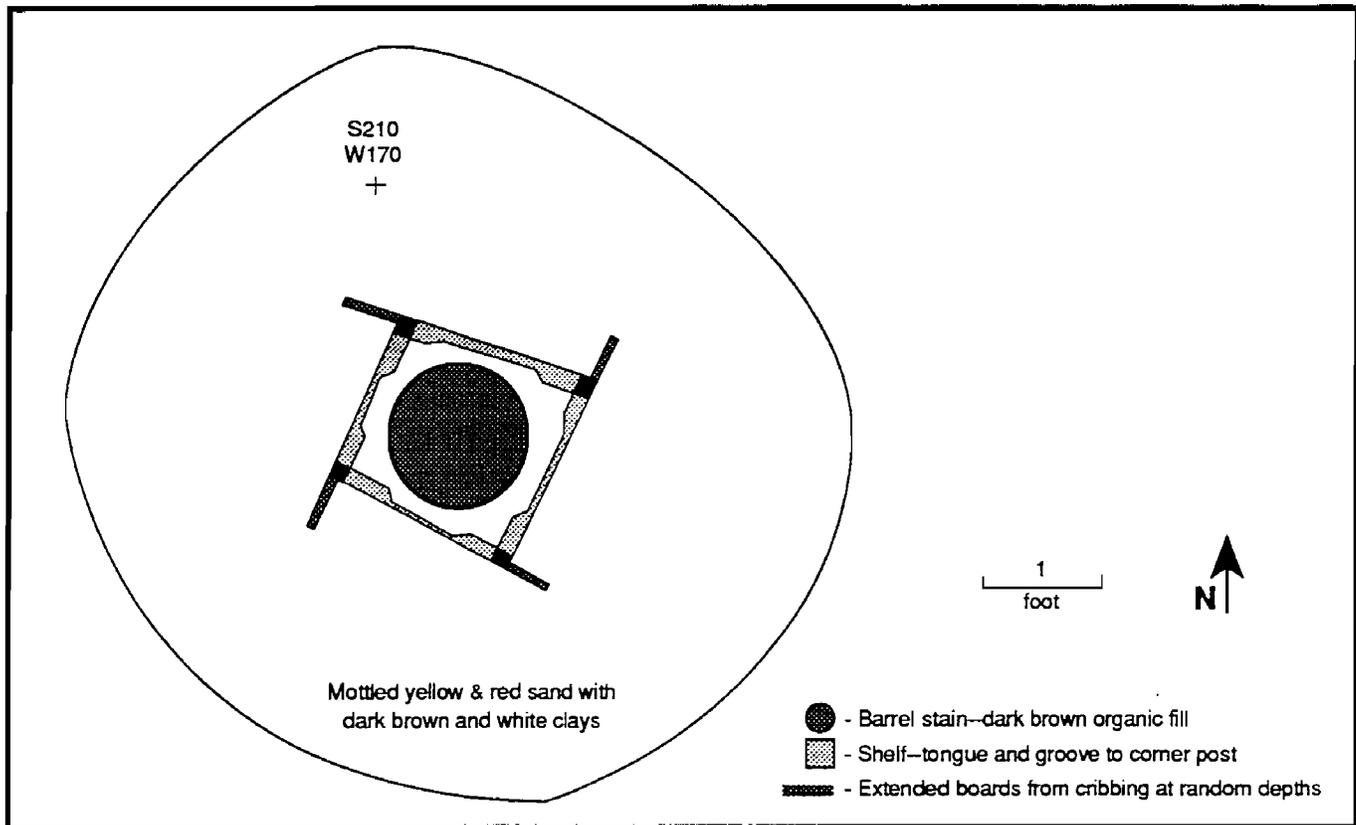
are not very useful in dating the assemblages as redwares are difficult to date. Storage and dairy wares were all redwares. Locally made redwares were clearly very important in supplying everything but the teawares for the occupants of the site from the 1760s until the early nineteenth century.

The second well identified at the Benjamin Wynn Tenancy was Feature 94. Feature 94 is the later of the two wells at the site and was located nearer to the house and blacksmith shop than the earlier well, Feature 80 (Attachment II). More specifically, Feature 94 was located approximately 10 feet northwest of the tenant house and 12 feet northeast of the blacksmith shop at S210 W170.

Feature 94 was first identified as a six-foot diameter dark stain surrounded by sterile, yellow-brown sandy clay subsoil. Seven large post holes were found associated with the well: Features 87-93 (Attachment II). These post-related features were the remains of an approximately 10- x 10-foot well curb or cover and will be discussed later. The west half of Feature 94 was excavated in 0.4 foot levels down to 4.7 feet below subsoil where *in situ* well cribbing similar to that found in Feature 80 was encountered. The east half of Feature 94 was then excavated in the same arbitrary levels as the west half. Hand excavation of both halves stopped at 4.7 feet and a backhoe was used to excavate the remaining part of the well.

The overall stratigraphy of Feature 94 (Figure 64) was similar to that of the other well, Feature 80. Feature 94 consisted of a square well shaft (Soil A) surrounded by a builder's trench of displaced yellow-brown sandy clays mottled with darker feature fill (Soil B - Figure 64). The well shaft was defined by dark brown, highly organic sandy loams (Soil A) identical to those found in the other well and deep features at the site. In fact, a number of historical ceramic artifacts from the well shaft of Feature 94 cross-mended with ceramic artifacts from other features, including the tenant house and blacksmith shop cellar holes (Figure 65). No oyster shell or other soil deposits such as those found at Feature 80 were found in Feature 94.

FIGURE 66
 Benjamin Wynn Tenancy -
 Plan View of Feature 94 (Well) at Five Feet Below Subsoil



The first evidence of well cribbing was identified at 4.3 feet below subsoil (Figure 64). These remains consisted of the stains of four large, square corner posts set into a 1.5-foot square well shaft. Intact portions of all four hewn posts were encountered at 4.7 feet below subsoil. Also identified at this level were the remains of four large horizontal spindles forming a large box around the four vertical posts. Each of these spindles measured between 2.0 and 2.2 feet in length and extended beyond the vertical posts in a “pinwheel” pattern identical to that of the earlier well, Feature 80. This cribbing appears in the plan view of Feature 94 at 5.0 feet below subsoil shown in Figure 66. The four “pinwheel” spindles were attached to the four vertical posts with hand-wrought nails. These spindles, however, were otherwise very poorly preserved and no other architectural features could be identified. The spindles appeared to be at least four inches (0.3 feet) wide and less than two inches thick. As with the other well, the “pinwheel” extensions on these spindles probably served to center the well shaft when the builder’s trench was back filled.

Except for the four corner posts, no other evidence of wooden cribbing was encountered down to 5.8 feet below subsoil. At this depth, the remains of 19 horizontal wooden planks between the vertical posts were encountered. These planks extended to the bottom of the well at 11.1 feet below subsoil. Unfortunately, little remained of these planks beyond simple linear stains (Figure 64). The only

intact remains of this cribbing were four intact boards at a depth of 6.1 feet and occasional small fragments near the four corner posts. The four intact boards formed an interior shelf within the 2.0-foot square well shaft (Plate 31). Each board was two feet long and one-half foot wide. Each end was attached to the four corner posts with simple mortise-and-tenon joints. No Roman numerals or other evidence of construction sequence was located on any of the planks. The remaining split planks forming the well shaft were also not marked. The width of each of these simple boards varied from three to six inches (0.25 - 0.5 feet). Each plank was 2.0 feet long. None of the planks extended beyond the four corner posts and no evidence of the "pinwheel" configuration was located.

The feature fill of the well shaft was not stratified (Figure 64). At 8.1 feet below subsoil, the top of a small wooden barrel was located inside the two-foot square well shaft. Surrounding the barrel was the same dark brown sandy loam feature fill seen throughout the well shaft (Soil A - Figure 64). Beyond the well shaft, the builder's trench (Soil B) narrowed to only four feet in diameter. The barrel at the bottom of Feature 94 was similar in construction to the one recovered from the earlier well, Feature 80. The dark brown sandy loam feature fill of the well shaft was slightly darker and moister inside the barrel, but no evidence of internal stratigraphy within the well shaft was identified. The lowermost portion of the barrel was poorly preserved. Only one complete barrel stave was recovered. Judging from the fragments recovered, however, the barrel originally measured approximately 2.5 feet high and 2.0 feet in diameter. The barrel was constructed of radically-split white oak staves. Both the interior and exterior of the staves were roughly shaped with an axe. The only complete stave was 2.8 feet long, 0.40 feet wide at its maximum, and 0.23 feet thick. These dimensions are consistent with the other fragments recovered. Portions of a shallow, 3/4-inch deep croze similar to that found in the barrel of Feature 80 was also identified. The shallow, V-shaped croze indicates that the Feature 94 barrel was another small, lightly constructed container. Faint, but illegible graffiti was seen on the exterior of one fragment. The exterior of another fragment was inscribed with "X1," "W8," and "Y6." No other markings were found.

The artifacts recovered from Feature 94 clearly identify it as the later of the two wells at the site. A total of 2,293 artifacts was recovered from all levels of Feature 94 (Appendix I). The artifacts came from two contexts: the dark brown sandy loam of the well shaft (Soil A) and the yellow-brown sandy clays of the builder's trench (Soil B - Figure 64). As no internal stratigraphy was identified in either soil, the artifacts from both contexts can be used to date two periods of activity at the site. First, artifacts from the builder's trench, Soil B, can be used to date the construction of the well. Secondly, artifacts from the well shaft can be used to date the filling in of the well near the end of occupation.

The yellow-brown sandy clays of the builder's trench contained a total of 108 artifacts. Both domestic and structurally related artifacts were recovered from the builder's trench indicating that this well was dug after the site had been occupied for a period and artifacts were available for deposition. Structural remains included 575 grams of brick, mortar, and five small window glass fragments. Four small, nail fragments, probably wrought or cut, were also recovered from the builder's trench. These artifacts, however, may relate to the well cribbing.

Nine small fragments of bone were also recovered from the builder's trench of Feature 94. The remains came from 0.8 - 1.2 feet and 1.6 - 2.0 feet below subsoil. In contrast, no faunal remains were found in the builder's trench of the earlier well, Feature 80. Unfortunately, all of the bone remains were

Benjamin Wynn Tenancy - Feature 94 (Well)



small and poorly preserved from the builder's trench of Feature 94. All nine fragments appear to be from mammals, probably swine. No butcher marks or other diagnostic elements were identified on any of the fragments.

Sherds from a minimum of 15 vessels were recovered from the builder's trench (Soil B) of Feature 94, the second well (Appendix V). The mean beginning date of these vessels was 1759 and the mean end date was 1819. Seven of the 15 vessels from the builder's trench were refined teawares. The mean beginning and end dates for these wares from the builder's trench are 1767 and 1809 respectively. In comparison, the mean beginning and end dates of the builder's trench of the first well, Feature 80, were 1734 and 1809.

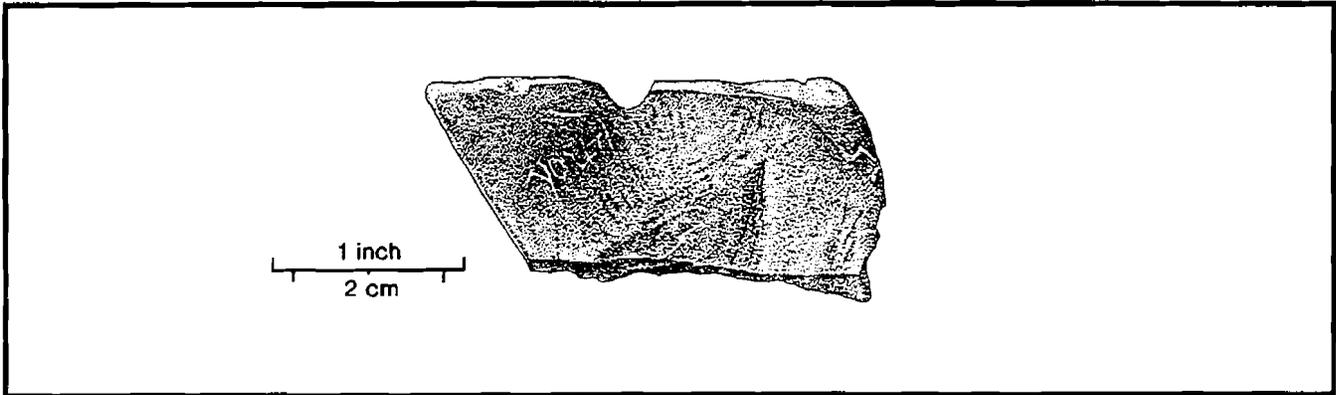
A dipt pearlware bowl decorated in a common cable style (W-T-94A) provides a terminus post quem for the builder's trench for Feature 94. The bowl dates to after 1795, when Feature 94 was dug to replace the earlier well. Seven of the 15 vessels from the builder's trench of Feature 94 are light-colored creamware and two are pearlware which accounts for 60 percent of the vessels. The ratio of creamware to pearlware also suggests a date from the 1790s. Two of the vessels from the builder's trench cross-mend to the well shaft (W-T-86 and W-T-35, Appendix V). These cross-mends suggest that the soil for both the builder's trench and the final filling of the well came from yard scatter around the site. The mean beginning and end dates for the vessels from well shaft fill are close to the dates of the builder's trench assemblage. The mean beginning dates and end dates for the 37 vessels from the well shaft fill were 1762 and 1825. The same dates for the 13 teawares in this sample were 1763 and 1809.

The terminus post quem for the well shaft fill of Feature 90 is the same dipt pearlware bowl that was the terminus post quem for the builder's trench (W-T-94A). However, the sherds that are attributed to the bowl from the two contexts do not physically mend, so they could be two different bowls. A second dipt pearlware bowl from the well fill indicate a post 1795 fill date (W-T-70). A blue painted pearlware saucer done in a chinoiserie style dates the fill to ca. 1780-1810. Creamware comprised 41 percent of the well shaft vessels. Almost 11 percent of the vessels are pearlware. Three white salt-glazed stoneware vessels (18% of all vessels) were found in Feature 80. Only one such vessel (3%) was found in Feature 94. The ratio of creamware to pearlware and white salt-glazed stoneware for Feature 94 indicate that this well was filled-in in the first two decades of the nineteenth century. This date is consistent with the known end of occupation of the site ca. 1820. The vessels from the builder's trench and the well fill also represent secondary fill as almost all of them are less than five percent extant.

A range of domestic artifacts including four fragments of olive bottle glass, bone, walnut and hickory nut hulls, and a pewter spoon fragment were also recovered from the well shaft of Feature 94. The spoon fragment was part of the handle of a small child's or salt-cellar spoon. The handle was unmarked except for a single "x" on the under side.

Swine, cow, and sheep/goat remains were the most common faunal artifacts found in Feature 94. A total of 52 diagnostic faunal remains, primarily teeth, was recovered. Preservation, however, was generally poor and only one artifact, a fragment of a cow scapula with numerous butchering marks was recovered.

FIGURE 67
Benjamin Wynn Tenancy -
Engraved Slate Fragment from Feature 94 (Well)



One of the most interesting artifacts recovered from the well shaft of Feature 94 was a small fragment of slate found between 1.2 and 1.6 feet below subsoil. This fragment appears to be part of a roofing slate etched with graffiti. On one side of this 1.0-inch wide by 2.5-inch long slate were etched “youth” and part of a capital “W” on the other side (Figure 67). The meaning of “youth” is not known, but the capital “W” may stand for “Wynn,” one of the tenants of the site.

Soil samples taken from both the well shaft and the builder’s trench were analyzed to recover small seeds, faunal remains, and other artifacts and botanical remains. Samples were taken from every level, but no significant differences in the vertical distribution of artifacts and food remains from Feature 94 were observed. Small fish bones and scales were the most common artifacts recovered from Feature 94. Each 40- to 60-pound soil sample from each 0.4-foot level contained between 50 and 200 fish scales and bones. All of these remains, however, were very small and poorly-preserved. The small size and general shape of the scales and bones suggests that they came from small freshwater fish, probably perch, catfish, and shad. No further identification is possible.

Floral remains recovered from Feature 94 give additional evidence of foodways and local vegetation. One squash seed, 15 tomato seeds, and one grape seed were the only domestic plants identified. The remains of three other edible species were identified: hickory, pecan, and wild raspberry. The only other identifiable floral remains from Feature 94 were the remains of four common field weeds: purslane, stinkgrass, pokeweed, and goosefoot. All of these floral remains came from inside the barrel at the bottom of the well. The presence of these floral remains in this context was probably due to the protected, continually moist environment within the barrel.

Other artifacts recovered from the protected context of Feature 94 included 10 small fragments of leather, five steel pins, and four small lead shot. All of the leather fragments came from inside the barrel, but none of them were identifiable. The pins and molded shot came from the well shaft (Soil A).

Three small post holes were also associated with the Feature 94 well. The three features, Features 91-93, were located a uniform two feet south and west of the well (Attachment II). The presence of these features suggests that the well was covered or protected by a small structure or well-curb.

Fencelines. Eight separate fencelines, Fencelines A-H, were identified at the Benjamin Wynn Tenancy Site (Attachment II). Three of these fencelines (Fencelines F, G, and H) date to the earliest period of occupation at the site and mark significant yard and activity areas associated with the tenancy and blacksmith shop. One additional fenceline, Fenceline E, may also date to this period. Appendix IV summarizes the features associated with Fenceline E. The remaining four fencelines (Fencelines A, B, C, and D) are later nineteenth century fencelines associated with the primary occupation of the site. Each group of fencelines will be discussed separately.

The earliest fencelines at the site were Fencelines F, G, and H. These three fencelines are the remains of post-and-rail and staked-and-ridered worm fences oriented to the tenant house and blacksmith shop. Post-and-rail fences were comprised of horizontal rails attached to vertical posts set into the ground. Staked-and-ridered worm fences were comprised of rails laid horizontally at intersecting angles. "Stakes" were then added at the intersection for strength. Additional horizontal rails, "riders" were then added atop the stakes to provide even more support. Both early types of fencing were common in central Delaware and have been identified at other eighteenth and early nineteenth century farms (Scholl, Hoseth, and Grettler 1994; De Cunzo et al. 1992; Grettler et al. 1991a).

A summary of the features associated with Fencelines F, G, and H is presented in Appendix IV. These fencelines mark the boundaries of two activity areas north and south of the tenant house and blacksmith shop. Both yard areas were defined by their location relative to the tenant house and blacksmith shop and by the presence of related features and activity areas. The northern yard area was the locus of most intensive domestic activity. Both wells (Feature 80 and 94) and three large trash deposits (Features 60, 61, and 96) were located in this area. The northern yard was bounded on the east by Fenceline F and bounded on the west by Fenceline H (Attachment II).

Fencelines F and H are both the remains of staked and ridered worm fences. Approximately 35 feet of Fenceline F remains (Attachment II). Fenceline F was oriented north-south, perpendicular to the tenant house 10 feet to the south and the blacksmith shop 40 feet to the southwest. Six simple, square and round post holes, Features 67, 70, 85, 98, 99 and 102, comprised Fenceline F (Attachment II). One small trash pit, Feature 100, was also associated with Fenceline F.

The southern end of Fenceline F was probably marked by Feature 101, a large tree located 10 feet north of the tenant house. The placement of the posts indicates that they were the stakes supporting the corners of a worm fence. As summarized in Appendix IV, the posts of Fenceline F generally extended less than 1.2 feet into subsoil and contained few artifacts. This low frequency of artifacts is consistent with the other early fencelines at the site constructed when few artifacts were available for deposition. One post hole (Feature 85), however, contained a wrought nail, four redware sherds and one debased scratch blue white salt-glazed stoneware fragment (MCD 1749). Feature 85, was located near the northern end of Fenceline F. Although the nail and white salt-glazed stoneware sherd are typical mid-eighteenth century artifacts, they both came from a rodent-disturbed area of the features. In profile, all of the features were simple oval or square shovel-dug post holes. No evidence of post molds was identified for any of the posts and the feature fill for each was the same dark brown sandy loam found elsewhere over the site.

Fenceline H marks the western edge of all of the yard areas. Fenceline H is located 10 feet west of the blacksmith shop and is oriented to that building (Attachment II). This fenceline is approximately 60 feet long, including a short perpendicular span at the northern end of the fence at S175 W200. As with Fenceline F, Fenceline H was a worm or Virginia rail fence constructed in eight- to 10-foot long panels supported by additional posts or stakes at the intersection of each panel. The two features are square post holes located between the northwest corner of the blacksmith shop and the center of Fenceline H at Feature 482 (Attachment II). Features 67 and 71 were probably part of a gate between Fenceline H and the blacksmith shop. Only three features of Fenceline H contained any artifacts, additional evidence of the early construction of this fenceline. Of these three features, however, none contained any artifacts more diagnostic than the small sherd of locally-made redware found in Feature 72.

The southern yard area of the Benjamin Wynn Tenancy Site was partially defined by Fencelines E and G. This area south of the two structures appears to have been less intensively utilized than the northern yard. Fenceline G is the remains of a 30-foot long post-and-rail fence 40 feet south of the tenant house (Attachment II). This fenceline is parallel to the house and was intersected by a later fenceline, Fenceline D.

Only one of the five square and round posts of Fenceline G contained any artifacts. This feature, Feature 354, contained one small piece of coal slag. The features of Fenceline G (Features 167, 354, 359, 436, and 437), however, were poorly preserved. With the exception of Features 167 and 354, less than 0.4 feet of each of the features of Fenceline G survived. The profiles of these simple, shovel-dug features of Fenceline G were identical to those of Fenceline H and F.

One additional fenceline, Fenceline E, may date to the initial occupation of the site. Fenceline E was aligned along a similar orientation to the tenant house as Fenceline G, but not enough evidence of Fenceline E survived to clearly identify it as one of the initial fences at the site. Fenceline E is located 140 feet south of the tenant house and blacksmith shop and was approximately 85 feet long (Attachment II). If Fenceline E was part of the original fences at the site, it would probably have marked the southern boundary of the Benjamin Wynn Tenancy yard. Only seven features of the fenceline, however, survived. The seven post-related features of Fenceline E were Features 412-414, 419, 459, 462, and 472 (Attachment II; Appendix IV). As with the other early fencelines, only two of these features, Features 459 and 462 contained any artifacts. Feature 459 contained one small brick fragment and Feature 462 contained one small unidentified historical ceramic fragment. While this low artifact density may relate to the early construction of Fenceline E, it may also simply reflect the remoteness of the features from the core of domestic activity.

The remaining four fencelines identified at the Benjamin Wynn Tenancy were later post-and-rail fences constructed after the site was abandoned. These fencelines, Fencelines A-D (Attachment II), date to at least the second quarter of the nineteenth century and were not oriented to the tenant house and other early features. These fencelines were also defined by the presence of mid-nineteenth century ceramic artifacts, including whitewares and white granite ware. Fencelines A-D enclose an area approximately 150 x 200 feet in size. The tenant house, blacksmith shop, and related features are located inside this area near the western end of Fenceline D at S280 W210.

A summary of the features associated with Fencelines A-D is given in Appendix IV. All of these later fences are oriented to existing Lewis Drive (Kent 331) and not to the tenant house and blacksmith shop. The results of soil chemical and plow zone artifact analyses, noted below, indicate that the 150- x 200-foot area enclosed by these four later fencelines was used as pasture or animal pen after the Benjamin Wynn Tenancy was abandoned.

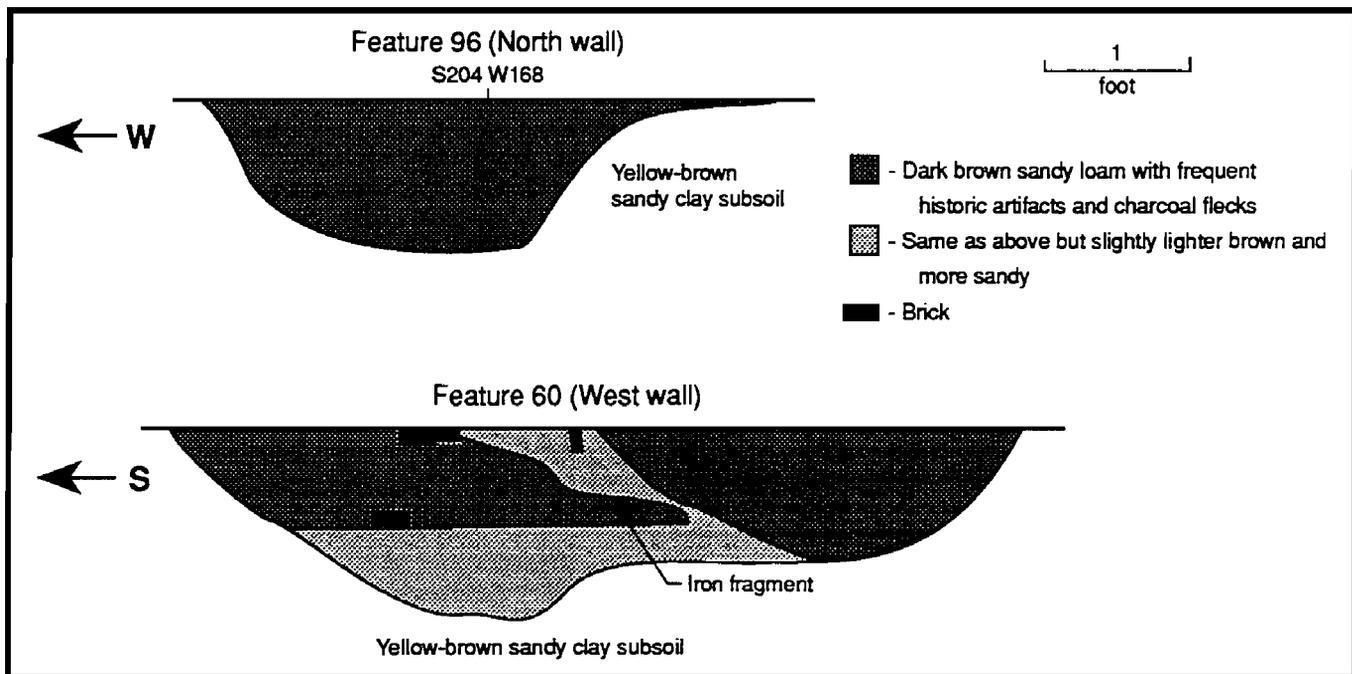
Benjamin Wynn Tenancy - Feature 323 (Post Mold)



In profile, all of the 61 posts of Fencelines A-D were remarkably similar. Except for the occasional round or rectangular post, all of the post-related features of these four fencelines were simple, square post holes (Plate 32). The interval between the posts of these fencelines was also a uniform 10 feet. Evidence of prepared post holes was found in eight of the 61 features of Fencelines A-D. Fenceline D contained six of these features: Features 340, 349, 369, 373, 504, and 505 (Attachment II). No diagnostic historical artifacts, however, were recovered from these six post holes or the two identified in Fencelines A and C.

FIGURE 68

Benjamin Wynn Tenancy - Profiles of Features 96 and 60 (Trash Deposits)



While the specific date of construction of Fencelines A-D is unknown, the four fencelines were clearly constructed after the site had been occupied and probably even abandoned. Historical artifacts including slag and structural debris from the structures was found in over half (52%) of the features of Fencelines A-D. The high percentage of post-related features with artifacts can be compared to Fencelines F-H where only eight of the 22 features contained any artifacts. The presence of mid-to-late nineteenth century whitewares and other ceramic artifacts in some of the posts of Fencelines A-D also clearly dates these fences to the initial period of occupation. The mean ceramic date of all non-redwares recovered from these four fencelines was 1809.4.

Trash Deposits. Seven trash deposit features were also identified at the Benjamin Wynn Tenancy. The two largest of these features, Features 108 and 113, were associated with the blacksmith shop and have already been discussed. The five remaining trash features, Features 57, 60, 61, 96, and 100, were smaller deposits located north of the tenant house and blacksmith shop in the yard area bounded by Fenceline H to the west and Fenceline F to the east (Attachment II). A summary of all seven trash-related features at the site, including Features 108 and 113, is given in Appendix IV.

The profiles of Features 57, 60, 61, 96, and 100 were also distinctly irregular and each feature showed no evidence of intentional excavation (Figure 68). All five features appear to have been shallow, natural depressions filled with trash and demolition debris over a relatively short period. These depressions may have been enlarged or partially excavated, but generally they were irregular and amorphous.

The feature fill of Features 96 and 60 consisted of simple, unstratified deposits of medium to dark brown sandy loam (Figure 68). Identical fill was recovered from all of the other deep features at the site. Numerous ceramic sherds from all seven trash features also cross-mended as shown for Feature 57 in Figure 69. Moreover, all seven of these trash pits were shallow. Except for Features 57 and 113, all of the trash deposits extended less than 1.9 feet into subsoil (Appendix IV).

A wide range of late eighteenth to early nineteenth century historical artifacts was recovered from Features 57, 60, 61, 96, and 100 (Appendix I). The most common artifacts were small ceramic, nails, brick, oyster shells, bone, and olive bottle glass fragments. All of the artifacts were small and poorly preserved. Occasional coal slag and scrap iron stock from the blacksmith shop were found in Features 60 and 61, but only rarely in the other, outlying trash deposits.

The shallowness of these trash deposits and the correspondingly poor artifact preservation precludes detailed artifact analyses. The most diagnostic artifacts recovered from these trash features were late eighteenth and early nineteenth century ceramic artifacts. The most common wares were

TABLE 14

**Benjamin Wynn Tenancy - Comparison of
Ceramic Minimum Vessels from
Features 57, 60, 61, 100, 108 and 113 (Trash Deposits)**

Feature number	Number of vessels	TPQ Artifact	TPQ date	Percent extant	Attributed begin date	Attributed end date
57	10	creamware, feather edge	1770	7%	1757	1831
60	7	creamware, light	1770	8%	1750	1843
61	5	creamware, feather edge	1770	20%	1749	1813
100	1	china glaze	1775	2%	1775	1810
108	45	pearlware, edged	1800	8%	1755	1827
113	12	creamware, light	1770	9%	1750	1827

Key: TPQ- Terminus Post Quem- the most recent artifact in the context

TABLE 15

**Benjamin Wynn Tenancy - Frequency of
Cross-mends Among Major Trash Deposits**

	Trash Deposit Features					Well Features	
	57	60	61	108	113	80	94
Trash Deposit Features							
57	•	2	1	2	0	1	1
60	2	•	0	2	0	1	1
61	1	0	•	2	1	1	0
108	2	2	2	•	2	4	10
113	0	0	1	2	•	1	0
Well Features							
80	1	1	1	4	1	•	5
94	1	1	0	10	0	5	•

coarse, locally-made redware kitchen and dairy wares. Other wares included creamware and pearlware tea and tablewares. A detailed summary of the 23 minimum vessels from Features 57, 60, 61, and 100 is given in Appendix V and Table 14. As can be seen in Table 14, all of these trash pits have nearly identical date ranges and ceramic types. Less than 10 percent of each vessel survived. This very poor preservation of the minimum vessels indicates that these trash features were filled with secondary deposits of yard scatter. Moreover, these secondary deposits were probably made at the same time as every one of the trash deposits has a least one ceramic cross-mend to another trash deposit (Table 15).

Additional Features. Fifteen isolated fence posts and 44 possible post features not clearly associated with any known structures or cultural features were also identified during Phase III excavations. Most of the features were located south of Fenceline D and at least 50 feet south of the core area (Attachment II). Typical of these features was Feature 425, located at S406.4 W139, which was a large round post hole that extended 1.1 feet into subsoil and contained no historical artifacts. No evidence of a privy was identified at the site.

Of the 549 total features identified at the site, over half (55%) were non-cultural. Of these 303 non-cultural features, 195 (64%) were the remains of trees, 20 (7%) were rodent burrows, and 88 (29%) were of unknown origin. The distribution of these non-cultural features was largely random over the entire site. Tree-related features, however, tended to be concentrated southeast of the tenant house in a broad 150- x 100-foot band perpendicular to the tenant house and blacksmith shop (Attachment II). These trees may have been part of an orchard, a common feature of early Delaware farmsteads (Herman 1987b). Rodent burrows such as Features 9 and 58 were occasionally identified along known fencelines, but in general, rodent burrows were not associated with any known structures or activity areas.

One prehistoric feature, Feature 201, was excavated. Feature 201 was located at S137 W133 and was defined by a circular 2.2- x 2.0-foot stain. The feature was completely excavated and extended down 0.7 feet into subsoil. The feature was rounded in profile and contained only one artifact, a small argillite flake. No projectile points, ceramic artifacts, or other diagnostic artifacts were found. The cultural association of this feature is unknown, although the presence of argillite suggests that it may date to the Woodland I Period (3,000 B.C. - A.D. 1,000) when argillite use was more common than during other time periods.

Artifact Analyses

Ceramic Assemblage. A total of 218 minimum ceramic vessels was recovered from feature contexts at the Benjamin Wynn Tenancy Site (Appendix V). These vessels came from unstratified contexts and represented the entire period of occupation from ca. 1765 to ca. 1820. They were also very poorly preserved with only very small portions of the vessels extant. The identified vessels provide a rather small sample of almost four vessels per year of occupation.

The mean beginning and end dates of the ceramic minimum vessels were nearly identical to the known dates of occupation. The minimum vessel dates were calculated in two ways. First, using all 218 vessels and second, by using only the 118 refined earthenwares in the collection. The mean beginning and end dates of the 218 vessels were 1754 and 1825. The same dates for the 118 refined wares were 1759 and 1805. The close correlation between the ceramic dates and known occupation indicates that the minimum vessel sample represents what was used at the site and was not skewed toward any particular period of occupation. Changes in the ceramic consumption patterns at the site, however, were difficult to determine because of the large numbers of tenants who occupied the site. Thus the ceramic and glass assemblages are more analogous to a small town dump than the consumption pattern of a single family.

Although no single family assemblage could be discerned, one overall pattern in ceramic consumption suggesting a high degree of food preservation and self-sufficiency could be determined. This pattern was based on a functional analysis of all minimum vessels according to six major groups. These groups were tea, table, kitchen, toilet, dairy, and storage wares. Dairy and storage wares, typically the most difficult to date, consisted of five redware milk pans, 11 redware crocks, seven redware jugs, and one American salt-glazed stoneware crock. While the occupants of the site clearly produced dairy products for home consumption and probably the market, these unrefined wares suggest a high level of food preservation and self-sufficiency.

TABLE 16
Benjamin Wynn Tenancy - Market Basket
Comparison of Ceramic Minimum Vessels

	Teaware %	Tableware %	Kitchenware %	Toilet ware %	Number
1783 Market Basket	68	22	8.5	1.4	5,058
1806 Market Basket	53	27	19	1.6	39,018
1824 Market Basket	60	30	10	---	1,475
Benjamin Wynn Tenancy (1760-1810)	42	26	28	0.5	188
Cannon's Point Slave Cabin (1790-1860)	24	41	32	3.6	110

Functional analyses of the refined tea, table, kitchen, and toilet wares provide a better picture of overall consumption patterns at the Benjamin Wynn Tenancy Site. Recent work towards establishing standards for a typical “market basket” of ceramics available at local stores was used to compare site-specific assemblages against overall community patterns. Miller (1991) has described a number of community consumption patterns from 1783 to 1856. These patterns are described as percentages of tea, table, kitchen, and toilet wares available to local consumers. The ceramic consumption patterns of the various tenants occupying the Benjamin Wynn Tenancy Site are visible when compared by functional types to what was available locally. Table 16 compares the percentage of tea, table, kitchen, and toilet wares at the Benjamin Wynn Tenancy Site to market basket information from 1783, 1806, 1824, and the Cannon’s Point slave cabin (Otto 1977:99-101).

The percentage of table and tea wares from the Benjamin Wynn Tenancy Site is similar to the market basket assemblages for 1783, 1806, and 1824 (Table 16). Significantly fewer teawares, however, were found at the Benjamin Wynn Tenancy Site. Kitchenwares, on the other hand, were between one-and-a-half to three times more common at the Benjamin Wynn Tenancy Site than the market basket assemblages. The high proportion of kitchen to tea wares at the Benjamin Wynn Tenancy Site is more similar to the Cannon’s Point slave cabin than the market basket assemblages. The similarity between the Cannon’s Point and Benjamin Wynn Tenancy Site assemblages is significant. As will be noted later, the food bone from the Benjamin Wynn Tenancy Site was for the most part chopped up into small pieces suggesting that stews, soup, and other one-pot meals may have been common at the site. Thus, the food ways of the tenants may not have been much different from those of the slaves at Cannon’s Point. Both the Benjamin Wynn Tenancy Site and Cannon Point slave cabin had significantly fewer teawares to tablewares than contemporary market basket assemblages. The tenants living at the Benjamin Wynn Tenancy Site had 1.7 teawares to every tableware, and at Cannon’s point, the ratio of tea to tablewares was only 0.6 to one. While the occupants of the Benjamin Wynn Tenancy Site appear to have a lower ratio of teas than the samples represented by the market basket, they appear to have had a considerably higher ratio of teas than the slaves from Cannon’s Point, Georgia. If, however, the slaves were using wooden or pewter plates, the ratio of teas to plates would be even lower.

The earliest teawares at the Benjamin Wynn Tenancy Site were enamel painted white salt-glazed stonewares. These wares include three saucers (W-T-10, W-T-63 and W-T-89), two cups (W-T-90 and W-T-103) and a hollowware which probably was a teapot (W-T-11). During the early period of the site's occupation these wares would have been stylish and fairly expensive. None of these vessels appear to match suggesting that they were individual purchases or vessels broken by different occupants of the site over time.

Fourteen of the remaining 15 white salt-glazed teawares are all scratch blue. Again, none of these vessels appear to come from the same set. Both the enameled and scratch blue teas probably were in use from the initial occupation of the site ca. 1765 to the 1770s when they began to be replaced by creamware teas. Two Staffordshire style combed slip ware cups (W-T-2A and W-T-160) were also recovered. However, it is difficult to know whether the vessels were teacups or mugs. Creamware composed nearly half (47.1%) of the teawares from the Benjamin Wynn Tenancy Site. Creamware teawares were in turn replaced by blue painted pearlware. These pearlwares probably did not show up on the site until after the Revolutionary War.

What is missing from the teaware assemblage of the Benjamin Wynn Tenancy Site is also significant. Only one Chinese porcelain saucer was found. This single saucer is unusual for a site occupied into the first decade of the nineteenth century when such wares were common and relatively cheap. Transfer printed wares are also conspicuously absent. While these were available from the late 1780s, they would have cost four and five times the price of plain creamware (Miller 1991:18).

Six teapots were found at the Benjamin Wynn Tenancy Site. The two earliest teapots were made of Jackfield (W-T-45) and enameled white salt-glazed stoneware (W-T-11). The four remaining teapots consisted of creamware (W-T-73), black-glazed English redware (W-T-194A), engine-turned red earthenware (W-T-106) and American Rockingham (W-T-18) vessels. The Rockingham teapot probably postdates the site. The four later wares were probably lost by different families and were not part of a replacement series.

Tableware, unlike teaware was a basic necessity. During the period this site was occupied, tableware was commonly available in wood, pewter, and ceramics. Pewter was more expensive than creamware and most other English earthenwares, but it was more durable and retained a residual value as scrap metal (Martin 1991). The relatively high percentages of tableware from the Benjamin Wynn Tenancy Site suggest that pewter was probably not used extensively by the tenant households occupying the site. A tin-glazed plate (W-T-13) and Staffordshire style combed slip ware plate (W-T-61) appear to be among the earliest tableware at the site. Unfortunately, it is not possible to date the Pennsylvania red slip wares with any degree of accuracy. Given that redwares comprise over 65 percent of the tableware assemblage, they were probably the dominant type for the entire period of occupation.

Another early ceramic type on the site were three plates and two muffin plates of feather edged creamware. Feather edge decoration was first produced on white salt-glazed stoneware before its introduction onto creamware. Creamware feather edge was almost certainly being produced before this site was occupied and appears to have been produced until at least the late 1790s. One plate of creamware shell-edge in a rococo style, (W-T-68) without any rim color, was also recovered. Shell-edged creamware is not very common, and it is even rarer without color. This plain creamware plate probably was produced between 1775 and 1780 (Miller and Hunter 1990:114).

One sherd to a blue shell-edged pearlware plate with an even scallop (W-T-84) probably represents one of the last plates from the site. The main period of production for this type of shell-edge was from ca. 1802 to 1832 (Miller 1989). The remaining two refined ware plates were royal pattern creamwares. These wares were produced from the mid-760s into the early nineteenth century. The creamware and pearlware plates and muffin plates comprise nearly a third (31%) of the tableware assemblage. There does not appear to be a replacement of redware, and the mix of wares probably represents simply the individual preference of the various tenants. None of the plates appear to match each other close enough to have been purchased as a set.

A total of 53 kitchenware vessels was identified at the Benjamin Wynn Tenancy Site. Most of the kitchenwares were bowls, pitchers, and mugs. The Staffordshire potters commonly referred to these forms as “mugs and jugs ware.” “Jugs” refers to pitchers. Mugs and jugs ware included bowls. All of the kitchen hollowwares continued to be wheel thrown long after most types of tableware were being press molded. Differences in the way the wares were produced resulted in differences in the way they were decorated. Bowls, mugs, and jugs were also counted by the “potters’ dozen” which varied in quantity according to the size of the vessel. Bowls, for example, commonly came in sizes ranging from nine to 36 per dozen (Miller, Martin, and Dickinson n.d.).

While bowls were being used to serve as well as prepare food, they are not commonly listed in dinnerware sets from the eighteenth and nineteenth centuries. Support for kitchenware as a functional category comes from the many archaeological assemblages for which average cream color index values have been computed for plates, cups, and bowls. In most studies, the average cream color index value for bowls is lower than that for plates or cups (Adams and Boling 1991:73-74). The bowls from the Benjamin Wynn Tenancy Site seem to follow this pattern of cheaper bowls composed of plates and cups. While the assemblage is too early to compute cream color index values, the fact that just over 70 percent of the kitchenware vessels are Pennsylvania redwares suggests that the index value of the bowls would be lower than both tablewares and teawares from the site.

There is a slight problem with classification of some of the bowls. Pennsylvania style redware plates, for the most part, do not have marleys and have a more shallow concave shape with glazing only on the inside surface. With small diameter vessels, the division between what constitutes a bowl and what is a small plate can be arbitrary. How deep are bowls compared to plates? Unfortunately we do not know how the people who produced and used the vessels classified them. Given this problem, there is a chance that some of the vessels classified as bowls could be tablewares. This taxonomic problem cannot be solved on a single site, but must be solved through a systematic study of redware.

Given that almost 70 percent of the kitchenwares at the Benjamin Wynn Tenancy Site were redware, it would appear that redwares were probably used by most tenant families. The one delft bowl (W-T-12) probably was a punch bowl and should not be with the kitchen group, but does not fit tableware either. This same argument could be made for a single German salt-glazed stoneware mug (W-T-1). These vessels could be described as tavern ware, but given a limited number of vessels, they were left with the kitchenware. Production of both delft and German stonewares was falling off when this site was first occupied suggesting that both bowls were probably some of the first vessels brought to the site.

Four of the plain redware bowls (W-T-40, W-T-46, W-T-51, and W-T-110) are similar to some of the waster bowls excavated from the Green pottery, a local redware pottery manufactory in nearby Smyrna, Delaware (Varisco, Grettler, and Miller 1992). The Green Pottery began producing wares in 1770. The proximity of Green pottery to the Benjamin Wynn Tenancy Site could account for the large number of redware vessels at the Benjamin Wynn Tenancy Site.

Four of the creamware bowls recovered from the site (W-T-72, W-T-72A, W-T-78, and W-T-134) are undecorated which is typical for bowls and other creamware utilitarian wares. By the end of the eighteenth century, creamwares would have been the cheapest refined wares available. The latest datable bowls on the site are four pearlware dipt bowls (W-T-29, W-T-94A, W-T-70, and W-T-164). Dipt wares were first produced in the late 1780s, but did not become common on American sites until the 1790s. They were the cheapest refined ware bowls with color decoration.

Sherds to a black glazed redware chamber pot (W-T-29) represent the only toilet ware vessel recovered from the Benjamin Wynn Tenancy Site. This lack of toilet wares, however, is not surprising as toilet wares in the market basket surveys from 1783, 1806, and 1824 ranged from none to only 1.6 percent (Table 16).

Glass Assemblage. Only 27 minimum glass vessels were recovered from the Benjamin Wynn Tenancy Site. Three of the bottles (W-T-G-20, W-T-G-27, and W-T-G-29) are machine-made and one is a panel bottle (W-T-G-25). The four bottles post-date the occupation of the site and were not analyzed further. The remaining 23 vessels are 18 bottles, three pieces of tableware, and fragments from two lamp chimneys. None of these 23 vessels could be dated precisely. The mean beginning and mean end dates of all 18 early bottles were 1766 to 1845. This period is longer than the site was occupied and reflects our inability to date dark green bottle glass.

Half of the 18 bottles are round dipt, mold blown dark green English wine bottles. Such wine bottles were most common from the last half of the eighteenth century into the 1830s. An additional square, dark green "gin" bottle (W-T-G-22), was also found. Gin bottles are another long lasting form. As these dark green bottles are very difficult to reconstruct and are so similar to each other, the minimal vessel count is probably under-estimated. The remaining eight glass bottles from the site were mold-blown, round, general utility bottles. The smaller bottles probably contained medicines, although the average vessel here is less than eight percent extant.

None of the bottles from the Benjamin Wynn Tenancy Site have embossed lettering identifying their contents. Mold-blown bottles with embossed letters became more common after the 1820s, after this site was abandoned. In short, the recovered bottles reveal little about the occupants of the Benjamin Wynn Tenancy Site other than that they drank alcoholic beverages and took medicines. All of the glass containers were small-mouth bottles rather than jars. Jars did not become common until after the development of the Mason jar in 1858. The occupants of the site relied more on redware jugs and crocks as storage vessels than glass vessels. The use of glass bottles increased after the American glass industry expanded following the War of 1812.

The three glass tableware vessels from the Benjamin Wynn Tenancy Site indicate that glass tableware was not used extensively. The lack of glass tableware is consistent with the known tenant status of the occupants. One of the tumblers (W-T-G-28) is blown out of colorless non-lead glass dating to post 1864, after the site was abandoned. The other two vessels (W-T-G-23 and W-T-G-24) were made of lead glass, the dominant type for English table glass for this period. Not enough of these vessels, however, were recovered to tightly date them. Lamp chimneys were also notable by the low quantity recovered. Minimal vessel counts of lamp chimney glass, however, is very difficult unless one has recovered sufficient rims to make clear separations.

Architectural Artifacts. Architectural artifacts were by far the most common artifacts recovered from the Benjamin Wynn Tenancy Site. Of a total of 29,035 artifacts recovered from plow zone and feature contexts, 68 percent (19,683) were small brick, nail, window glass, and other architectural artifacts (Appendix I). Overall preservation of these artifacts was poor, even in feature contexts where small brick and nail fragments were the most common architectural artifacts found. The distribution of brick and glazed brick from all contexts were concentrated near the blacksmith shop indicating the presence of a small forge or work area. These brick fragments, however, were too small and too poorly preserved to determine method of manufacture, mortar stains, or other diagnostic features.

A total of 164 diagnostic nails and nail fragments was recovered from feature and plow zone contexts. Most (68%) of the nails were cut nails. Wrought nails were the next most common nail type and comprised 29 percent of all diagnostic nails. Not surprisingly, only seven (3%) later mid-nineteenth century wire nails were found at the site. The distribution of nails in both the plow zone and feature showed no evidence of nail manufacture at the site. The only other identifiable metal fasteners at the site were two wrought iron spikes from one of the wells, Feature 94, and a single recent steel bolt from the plow zone.

Very small fragments of mortar and plaster were also occasionally found near the tenant house and blacksmith shop. The fragments were extremely poorly preserved and usually appeared as occasional soft, slightly sandy streaks in the plow zone and feature fill. Occasional flecks of oyster shell could be seen in both materials and it is likely that both were made from local materials. None of the mortar or plaster fragments had been burned, contained any identifiable horse or hog hair binders, or were diagnostic in any other way.

Floral and Faunal Remains. Floral and faunal remains were generally poorly-preserved at the Benjamin Wynn Tenancy Site. With the exception of a few deep features, floral and faunal materials were rarely found. The analysis of these materials was undertaken in three parts. First, all diagnostic bone and teeth from all contexts were analyzed. Second, all oyster shells from feature contexts were analyzed according to seasonal and environmental factors. Third, the floral remains from selected deep features was analyzed for dietary and environmental patterns.

The first analysis of all faunal remains identified a total of only 989 faunal remains from all of the feature contexts at the Benjamin Wynn Tenancy Site. Of these total remains, only 672 (68%) fragments were identifiable. The relatively small collection of diagnostic bone reflects the overall

TABLE 17
Benjamin Wynn Tenancy - Minimum Number of Individuals
(MNI) of Identifiable Faunal Remains

	Number of Identifiable Bone and Teeth	Percent of Total Identifiable Bone and Teeth	MNI
DOMESTIC SPECIES			
Cow	156	23	2
Pig	120	18	4
Horse	99	15	2
Sheep/Goat	26	4	2
Dog	23	3	1
Bird	17	2.5	2
Total	441	65.5	13
WILD SPECIES			
Raccoon	2	<1	1
Snapping turtle	228	34	1
Fish	1	<1	1
Total	231	35	3
TOTAL (ALL SPECIES)	672	100	16

poor preservation of organic materials from the site, and the small number of deep features where delicate faunal remains could be preserved. Only five features contained significant amounts of bone: Features 60, 61, 80, 94, 107, and 108 (Attachment II). Only the two wells, Features 80 and 94, contained significant faunal remains (368 and 114 fragments respectively). The two wells, three trash pits (Features 60, 61, and 108), and the cellar hole (Feature 107) contained 92 percent of all identifiable faunal remains.

All of the faunal remains from Features 60, 61, 80, 94, 107, and 108 came from identical dark brown sandy loam feature fills. Ceramic cross-mends between all four features indicate that these unstratified deposits were deposited simultaneously towards the end of occupation ca. 1800. Thus, the faunal remains from the Benjamin Wynn Tenancy Site represent the foodways of multiple tenants occupying the site for at least four decades from ca. 1765 to 1810.

The results of the minimum number of individuals (MNI) for the entire site is presented in Table 17. Due largely to poor preservation, only 16 minimum individual animals were identified. Twelve of these animals were domestic species: four pigs; two each of cows, horses, birds, and sheep/goats; and one dog. The remaining three wild species consisted of one snapping turtle, one raccoon, and one fish, probably a catfish. The remains of 22 large mammals, probably either cow or horse, were also recovered from the site.

TABLE 18

Benjamin Wynn Tenancy - Diagnostic Pig Remains by Feature

Feature number	Remains	Number	Comments
27	molar	1	
52	molars	3	
60	glenoid	1	
	molars	3	
	phalanx	1	
	scapula	2	
	ulna	1	
61	molars	4	
	phalanx	1	
78	molars	5	
80	alveolar	2	
	fibula	1	
	femur	1	cut marks
	glenoid	1	
	innominate	1	
	mandible	6	
	ribs	4	
	scapula	7	
	molars and tusks	10	
86	femur	1	
	molars and tusks	5	
94	molars and tusks	15	
	phalanx	1	
	scapula	7	
	ulna	1	
100	mandible	4	
	molars	3	
107	femur	3	knife marks
	molars	2	
108	fibula	2	
	humerus	1	
	molars	7	
	tibia	1	
202	molar	1	
203	molars	8	
Total:		117	

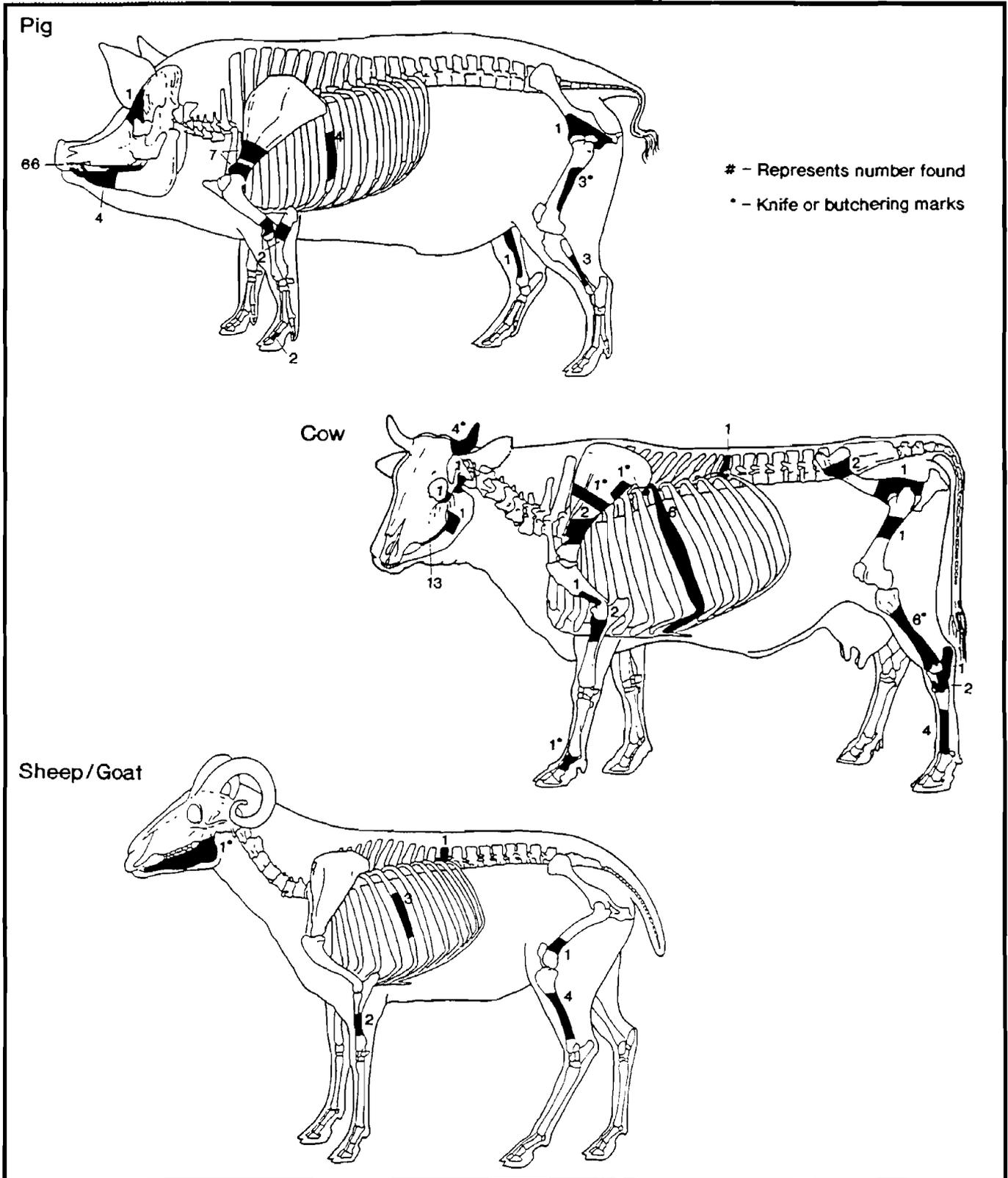
Swine were the most common large animal identified at the Benjamin Wynn Tenancy Site. A total of 123 diagnostic fragments of pig remains from 13 features was recovered (Table 18). Two trash deposits, Features 60 and 61, and the two wells, Features 80 and 94, contained almost two thirds (60%) of these diagnostic remains. The frequency and location of all diagnostic swine remains on a typical pig carcass is shown in Figure 70. The two most common pig remains were teeth (57), and upper and lower jaw fragments (six). The two next most common remains were leg bones and scapula from front hams (12 bones) and hindquarter hams (eight bones). Cut marks were found on two femurs from hindquarter hams (Figure 70). No other cut marks were found on any of the pig bones, including any of the bones from the skull. No juvenile remains were identified.

Cows were the next most common large animal represented at the site. A total of 170 diagnostic remains from nine features was recovered. Three-quarters (79%) of all diagnostic cow remains came from the two wells, Features 80 and 94. At least two minimum individuals, including one juvenile, were represented in the sample (Table 17). As with swine and the other animals, the minimum number of individuals analysis probably underestimates the actual number of animals processed and consumed at the site. The location and frequency of these identifiable cow remains on a typical carcass is shown in Figure 70. Portions of all the major body parts were recovered, including horns, jaws, vertebrae, ribs, and long bones. As with swine, the range of body parts recovered indicates that animals were butchered, processed, and consumed on site. Knife, saw, cleaver, and other butcher marks were found on 23 identifiable fragments. Butcher marks were most common on the skull, scapulas, ribs, and long bones (Figure 70).

FIGURE 70

Benjamin Wynn Tenancy -

Frequency of All Diagnostic Pig, Cow, and Sheep/Goat Remains



A total of 26 identifiable sheep and/or goat remains from at least two individuals was identified at the site (Table 17). All of these remains came from the two wells and Feature 108, one of the trash deposits associated with the blacksmith shop. Sheep and goat remains, particularly fragmentary ones, are nearly indistinguishable and no further identification was possible. However, most of these fragments, especially the 15 with butchering marks probably came from sheep as they are more commonly eaten than goats. The range of goat/sheep remains included one mandible with butchering marks, four tibias, one femur, and three ribs (Figure 70). This range of body parts again indicates that these animals were processed and eaten on site and that a range of meat cuts, primarily stews and roasts, were used. No juvenile remains were identified.

The remaining identifiable faunal materials recovered from the Benjamin Wynn Tenancy Site were the remains of three and perhaps four edible wild species and two horses. At least three wild animals were consumed at the site: one raccoon, one fish, and one snapping turtle (Table 17). The fibulae of at least two unidentified species of bird, perhaps wild duck, were also identified. The raccoon was represented by a single skull fragment found in Feature 108. The turtle came from Feature 60, although other turtle shell fragments possibly representing another individual were found in the two wells, Features 80 and 94. The single identifiable fish remains included part of the skull of a small fish, probably a catfish, from Feature 80. Although no butcher marks were found on any of these wild remains, all of these animals, except for perhaps the raccoon, were probably eaten. The raccoon may represent an animal trapped primarily for its fur rather than its meat.

The two horses and the dog identified from Features 80, 107, and 108 probably represent accidental or intentional burials. The presence of horse remains in Feature 107, the cellar hole of the tenant house, indicates that this feature was filled at the very end of the site. This evidence is consistent with the presence of mid-to-late nineteenth century pearlwares, whitewares, and white granite wares from the plow zone above the feature and the uppermost level of feature fill.

The second group of faunal analyses undertaken sought to identify seasonal and environmental patterns from the oyster shells recovered from features. Three features contained the significant amounts of well-preserved oyster shell: a well (Feature 80), one of the trash pits (Feature 60), and the cellar hole of the tenant house (Feature 107). These three features contained 70 percent of the oyster shell recovered from the site and almost all of the larger, more diagnostic fragments.

The results of the oyster shell analysis of Features 60, 80, and 107 indicate that the oysters consumed at the Benjamin Wynn Tenancy Site came from nearby shallow, moderately saline mud flats where relatively large numbers of oysters occurred (Table 19). Most of the oysters (81%) were harvested during the fall and winter. Fewer than one-fifth of all oysters (19%) were harvested during the spring and summer. Moreover, ceramic cross-mends among all three features indicate that all of these oysters came from contemporary mid-to-late eighteenth century deposits. The approximate date of these oyster deposits based on associated historical ceramic artifacts was ca. 1760-ca. 1800.

Salinity regimes were determined from the proportions of small and large parasite boreholes. Almost all (99.5%) of the 418 oysters from Features 60, 80, and 94 of the Benjamin Wynn Tenancy Site came from low salinity environments (Table 20). The remaining 0.5 percent came from high salinity regimes and no oysters came from moderate or very high salinity environments.

The frequency of oysters from low salinity environments at the Benjamin Wynn Tenancy Site is consistent with other sites along the Delaware River (Table 20). At these other sites, the frequency of oysters from low salinity environments ranged from 42.8 percent at Block 1191 in Wilmington (Beidleman, Catts, and Custer 1986) to 96.6 percent at the William Strickland Plantation Site in nearby Smyrna, Delaware (Catts et al. 1994).

TABLE 19
Benjamin Wynn Tenancy - Oyster Seasonality

Feature number	Fall	Late Fall/ Early Winter	Winter	Late Winter/ Early Spring	Spring	Summer	Unknown
1	---	---	---	---	---	---	2
49	---	---	---	---	---	---	1
52	---	---	---	---	---	---	1
57	3	4	---	---	---	---	1
60	9	2	13	---	6	2	50
61	1	---	1	1	1	---	3
80	33	34	86	2	21	15	124
81	2	---	---	---	---	---	24
85	---	---	---	---	---	---	1
89	---	---	---	---	---	---	1
94	2	1	3	---	---	---	15
97	---	---	---	---	---	---	2
107	7	3	7	---	---	---	103
108	5	5	3	---	3	1	60
113	---	---	---	---	---	---	2
203	---	---	---	---	---	---	1
Total	62	49	113	3	31	19	391
Average	22%	17%	42%	1%	11%	7%	

TABLE 20
Salinity Frequencies on Oyster Shells from Historic Sites
Along the Delaware River and Bay

Site	Low (%)	Moderate (%)	High (%)	Very High (%)	Number
Webb's Landing (1690-1720)	90	10	---	---	42
Strickland Plantation (1740-1760)	96.6	2.5	0.9	---	238
Wynn Tenancy (1760-1810)	99.5	---	0.5	---	421
Rising Son Tavern (1780-1860)	77.6	17.1	2.2	2.9	134
Darrach Store (1790-1840)	75	20	5	---	100
Wilmington Block 1191:					
Feature 13 (1780-18250)	52.4	5.9	7.1	34.5	84
Feature 11 (1790-1825)	42.8	3.6	15.7	37.8	140
Feature 14 (1790-1820)	52.2	4.5	18.2	25.1	88

A slight trend towards increasing use of more saline environments is evident from Table 20. While sites occupied before ca. 1790 received 75 - 99.5 percent of their oysters from low salinity regimes, only half (42% - 52.4%) of the oysters from post-1790 contexts came from environments with similar salinity. This difference was probably due to a combination of factors. First, the difference in average salinity may have been due to environmental changes in local oyster fisheries. Second, this increasing salinity may reflect increasingly commercial oystering after 1790. This second factor may be especially true for the urban sites, such as those from Block 1191 in Wilmington, where commercial harvests of oysters from deeper, saltier marine environments may account for the differences in salinity regimes over time.

The final group of ecofact analyses involved floral and faunal remains recovered from soil samples taken from selected deep features. Overall preservation of such fragile organic materials, however, was not good and the Benjamin Wynn Tenancy features generally contained few seeds or other small ecofact remains.

Preservation was best in Feature 57, one of the trash pits, and Feature 90, a well and the seeds were noted in the earlier feature descriptions. Twelve peach pit fragments and one whole black walnut were also recovered from Feature 80, a well.

Personal and Tobacco Artifacts. In addition to the artifacts from specific features already discussed, a number of additional diagnostic personal and tobacco artifacts were recovered during data recovery excavations. Preservation of these artifacts varied considerably over the site and generally the best preservation occurred in the deepest features, especially the two wells (Features 80 and 94) and one of the trash deposits, Feature 108.

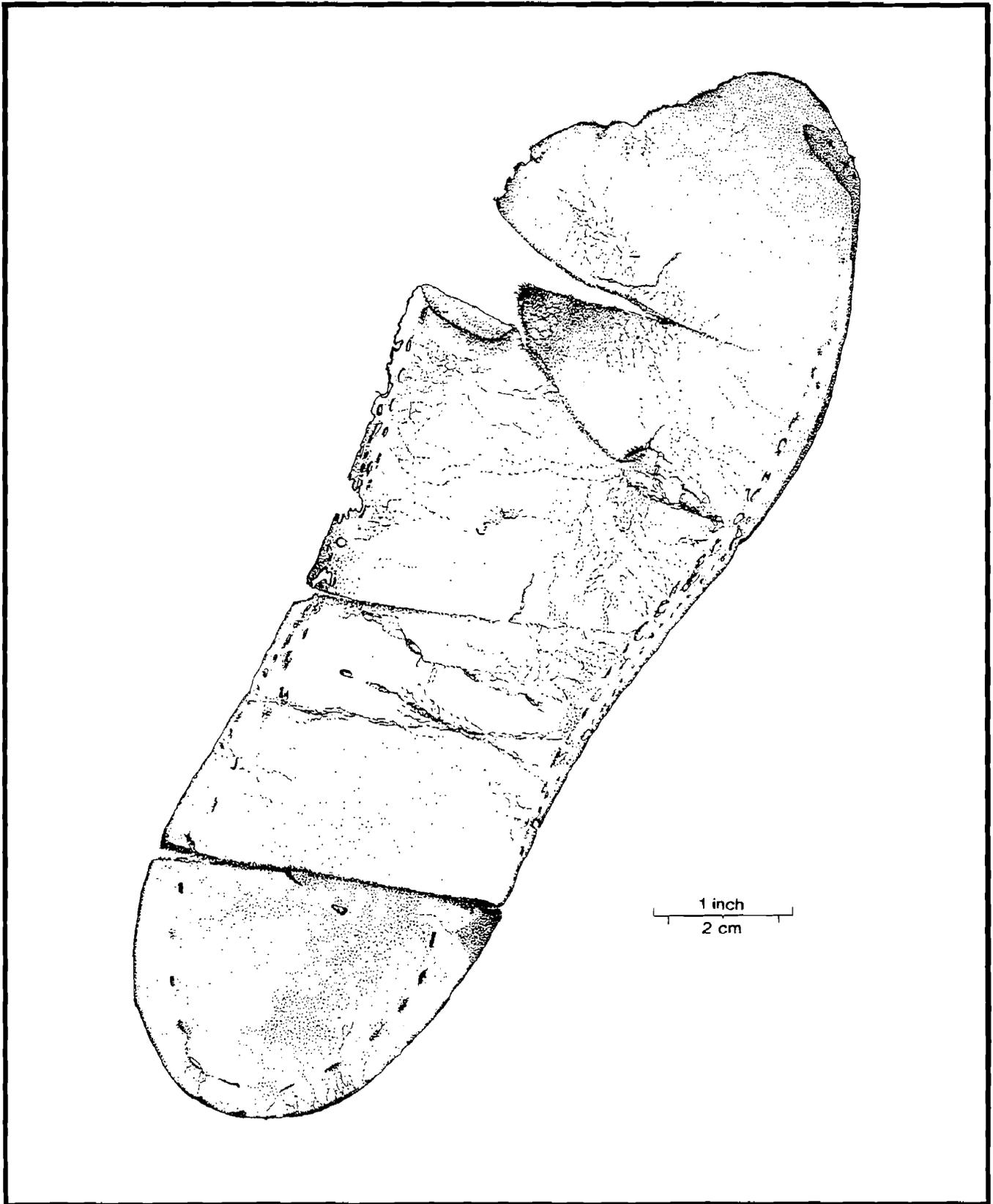
Other personal artifacts recovered from the site included a spoon, four diagnostic buttons, three copper alloy straight pins, and fragments of at least two men's shoes. All of these artifacts except for one spoon and two buttons came from the two wells. The spoon came from a natural tree stain, Feature 200, 80 feet north of the house. This nearly complete, but heavily plow damaged and worn spoon was a nickel silver table spoon made by the Luther Boardman and Son company of East Haddam, Connecticut. Boardman and Son mass-produced these spoons and other tableware between 1840 and ca. 1905 (Woodhead 1991:32; Demeter 1980:111). The spoon was stamped "L. BOARDMAN & SON A1// NIC___ SILVER." Although this artifact post-dates the primary occupation of the Benjamin Wynn Tenancy Site, it helps to date the post-occupation fertilization and cattle-penning over the entire site.

The four diagnostic buttons and button fragments recovered from the Benjamin Wynn Tenancy Site dated from the mid-eighteenth to early nineteenth centuries. Two buttons came from Feature 94 and one came from Feature 49, a post hole not associated with any known fence line. The fourth button came from the cellar hole of the blacksmith's shop, Feature 107. The two earliest buttons came from the well (Feature 94) and Feature 107. Both of these buttons were large copper alloy cast and spun coat buttons (Noel-Hume 1978:Button Type 7). Both buttons were heavily worn and date from ca. 1726-1776 (Noel-Hume 1978:91). The two remaining buttons from the well (Feature 94) and Feature 49 post hole were small, stamped copper alloy buttons with a separate, soldered shank and a drilled eye (Noel-Hume 1978:Button Type 27). Both of these buttons came from coats or vests and date to the first half of the nineteenth century.

A shoe fragment recovered from the later well (Feature 94) is shown in Figure 71. This fragment was part of a hand-stitched midsole of a man's right shoe. This midsole was found inside the first barrel in the well and probably dates to pre-1840 (Anderson 1968). Several other thick scraps of crudely cut leather, probably intended to repair soles, were also recovered. All of these leather fragments were cut with a knife and the midsole showed a great deal of wear. The wear on the midsole was heaviest along the interior edge of the sole from the heel to the ball of the foot (Figure 71). Grew and de Neergaard (1988:109) have identified similar wear with severe bunions and hammertoes.

FIGURE 71

Benjamin Wynn Tenancy - Shoe Fragment from Feature 94 (Well)



A total of 69 white clay pipe fragments was recovered from feature contexts at the Benjamin Wynn Tenancy Site. The majority of these fragments were small, unmarked, and relatively nondiagnostic bowl fragments. Almost 70 percent of these fragments came from one of the trash deposits (Feature 108) and the two wells (Features 80 and 94). All 48 of the pipe fragments from these three features came from similar dark brown sandy loam deposits. Moreover, all three of these features contained ceramic sherds that cross-mended. The remaining 30 percent of the pipe fragments came from two other trash deposits, Features 60 and 61, and from widely scattered rodent, tree, and possible post hole contexts.

Of the 48 white clay smoking pipe fragments recovered from Feature 108 and the two wells, only three stems and two marked bowl fragments were recovered. All five of these fragments came from the well shafts of Features 80 and 94. The bore diameter of the three fragments was 4/64-inch, the smallest and typically the latest bore diameter. According to the Harrington-Binford formula, 86 percent of all 4/64-inch pipe stems date between 1750 and 1800. This date is consistent with the known mid-to-late eighteenth century occupation of the Benjamin Wynn Tenancy Site.

One of the two marked bowl fragments was marked "TD." Unfortunately, "TD" is one of the most common marks on mid-to-late eighteenth century pipes. The identity of manufacturer who's initials are "TD" also remains unknown (Walker 1977:1746-7; Cook 1989:198). Similarly marked pipes have been recovered from mid-to-late eighteenth century contexts at the Caleb Pusey house in southeastern Pennsylvania (Alexander 1976:3-4) and the Lowell Boott Mills in Massachusetts (Cook 1989:198-99). The other marked bowl contained only part of a maker's mark, a capital "T" of unknown association.

Soil Chemical Analysis

The chemical analysis of soils from the Benjamin Wynn Tenancy Site was undertaken to identify specific activity areas within the site. Soil samples taken systematically from the plow zone and subsoil of the entire site at 10-foot intervals over the 105- x 90-foot core area. Systematic soil samples were also taken at 20-foot intervals over the rest of the site. Unfortunately the most important result of soil analyses over the entire site was to identify a high degree of post-occupational contamination over the entire site. The area of greatest contamination was the northern half of the site, including the core area. This contamination was caused by subsequent nineteenth and twentieth century animal penning and agricultural fertilization. Soil pH and potassium, the two most sensitive indicators of such contamination are extremely high for both the subsoil and plow zone contexts north of the S300 line (Figure 72). Similar high amounts of plow zone calcium, and magnesium indicating extensive artificial fertilization were also identified (Figure 73). Consequently, no further analysis of soil chemical distributions is possible.

Plow Zone Artifact Distributions

Evidence of intra-site activity areas at the Benjamin Wynn Tenancy Site was determined by plotting the distribution of artifacts collected during plow zone sampling. The distributions of 21 artifact categories in three major groups were plotted for the 87 random test units excavated in the core area of the site (Figure 52). These three major groups—architectural, ceramic, and non-ceramic domestic artifacts—relate directly to major archaeological features and activity areas. Computer-generated distribution maps were prepared for each of the 21 artifact categories (Figures 74-78).

The distribution of architecturally-related artifacts confirmed the location of the two major structures indicated by subsurface features. The architectural group consisted of eight different artifact categories: total architectural artifacts, total nails, wrought nails, and coal slag (Figure 74), glazed brick, unglazed bricks, cut nails, and window glass (Figure 75). Figure 74 shows the distribution of all architecturally-related artifacts over the core area of the Benjamin Wynn Tenancy. The density of these artifacts remained relatively high over the entire area, although a series of slight peaks oriented to both structures was identified. Total nails were similarly distributed (Figure 74).

The overall distributions of specific architectural artifacts were oriented to the two structures. The two most diagnostic artifact distributions were wrought nails and coal slag (Figure 74). The distribution of wrought nails, the earliest nails at the site, showed four clearly defined peaks associated with the gable ends of the tenant house and blacksmith shop (Figure 74). The two concentrations associated with the blacksmith shop were located along the east gable end at approximately S220 W185 and S205 W180. The other two high densities of wrought nails associated with the tenant house were centered over the cellar hole and hearth/chimney area along the west gable end at S230 W155 and the shed addition at the east gable end at S255 W140.

The second most diagnostic architectural artifact distribution was coal slag. When mapped by weight, the distribution of slag clearly identifies a work area associated with the blacksmith shop near the southern and eastern sides of the building (Figure 74). The location of this work area is consistent with the archaeological evidence of an open shed addition along the south wall of the blacksmith shop and another small addition housing the forge along the east gable end. The primary locus of blacksmithing activity thus appears to have been along the southern and eastern part of the blacksmith shop and the adjacent yard area between the shop and the tenant house. One much smaller concentration of slag located north of the shop near Fenceline H (Figure 74) indicates the disposal of shop waste along the edge of the eighteenth century yard area.

The distributions of cut nails, window glass, unglazed, and glazed brick fragments (Figure 75) showed consistently less significant variation than wrought nails and coal slag. In general, high densities of each of these artifacts occurred over each structure with secondary concentrations near the two wells and Fencelines F and H. Plow zone unglazed brick and glazed brick densities showed two other concentrations along the southern edge of the core area at the S265 line (Figure 75). The high density of brick, especially unglazed brick in this area near the blacksmith shop, corresponds to the area of concentrated coal slag and the probable location of the forge. The origin of a third area of high glazed brick density near the northern edge of the core area, however, is unknown.

The second major group of artifacts analyzed from the plow zone sample was historical ceramic artifacts. A range of historical ceramic artifacts were recovered from the core area and computer-generated maps for eight artifact types were generated: total ceramic artifacts, redwares, tin-glazed, and white salt-glazed stonewares (Figure 76), creamwares, pearlwares, and post occupational ceramic artifacts (Figure 77). These ceramic categories will be presented according to their general chronology of manufacture: early- to mid-eighteenth century tin-glazed earthenwares and white salt-glazed stonewares, mid-to-late eighteenth century creamwares, early nineteenth century pearlwares, and finally, post-occupational whitewares, yellowwares, and white granite wares.

The distributions of total plow zone ceramic artifacts and redwares shown in Figure 76 clearly identify the core area as the primary locus of domestic activity. Within the core area, the highest densities of redwares and all other ceramic artifacts were greatest near the tenant house. As expected, the distribution of the earliest ceramic artifacts centered on the tenant house and its closest fenceline, Fenceline F (Figure 76). The overall densities of tin-glazed earthenwares and white salt-glazed stonewares, however, were consistently over the core area. For example, the highest densities of white salt-glazed stonewares were recovered along the north wall of the tenant house and Fenceline F and very little tin-glazed earthenware was found south of the house and blacksmith shop (Figure 76).

The distribution of later eighteenth and nineteenth century ceramic artifacts, however, reveals a much different pattern. Beginning with the distribution of mid-to-late eighteenth century creamwares (Figure 77), consistently higher densities of ceramic artifacts are recovered south of the house and blacksmith shop than north of it near Fenceline F. High densities still occurred over both structures, but the highest concentrations of later wares occurred south of the tenant house and blacksmith shop. The distribution of nineteenth century ceramic artifacts also clearly reflects this shift in disposal patterns (Figure 77). The overall density of the later wares, however, was generally less than earlier wares. Pearlware densities in particular are consistently higher south and west of the tenant house than north of it (Figure 77). Pearlwares also peaked near the southeast corner of the tenant house at S265 W160 where no subsurface features were identified.

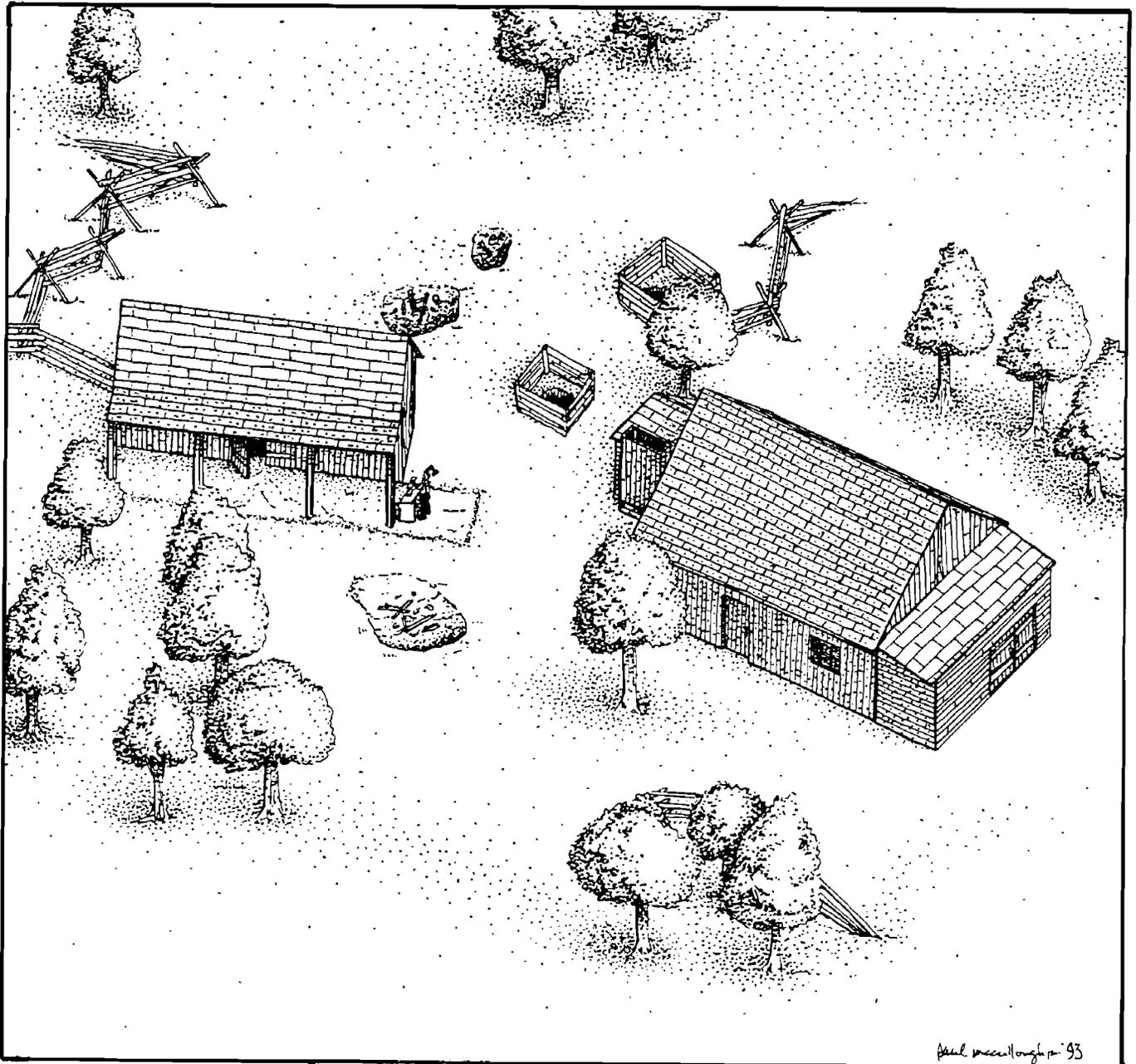
The distribution of post-occupational ceramic artifacts is shown in Figure 77. These ceramic artifacts consisted of mid-to-late nineteenth century whitewares, white granite wares, yellowwares, locally-produced Phoenixville majolica (MCD 1880), and Fiesta ware. As expected, a relatively low density of these later wares was identified over the entire site. One slight peak was identified near the northwest corner of the tenant house. This peak is consistent with the known occupation of the site and the degree of post-occupational agricultural activity over the site indicated by soil chemistry.

The third major group of artifacts analyzed from the plow zone sample included domestic glass and white clay pipes. Computer-generated frequency and density maps were prepared for four categories of artifacts: total domestic glass (Figure 77), bottle glass, household jar, table, and lamp glass, and white clay pipes (Figure 78). The overall density of each of these categories was low, reflecting the relative paucity of such artifacts over the entire site. In general, the highest densities of these domestically-related artifacts occurred over the two structures. The distributions of total glass (Figure 77), household glass, and pipe fragments (Figure 78) also showed equally high concentrations in the yard area between the two structures and to the north along Fenceline F. These deposits represent simple yard scatter and casual trash deposition along the edge of the immediate house yard. Both patterns are consistent with the known domestic occupation of the tenant house and the presence of nearby large, deep features, including both wells. Higher densities of household glass and clay pipe fragments north rather than south of the tenant house may indicate that they were deposited during the earliest period of occupation with the white salt-glazed stonewares, tin-glazed earthenwares, and other early- to mid-eighteenth century ceramic artifacts.

In conclusion, the distribution of plow zone artifacts over the core area of the Benjamin Wynn Tenancy Site identify a major shift in activity areas at the site. As evidenced by the distribution of mid-eighteenth versus late eighteenth and early nineteenth century ceramic artifacts, the primary locus of activity appears to have shifted from north of the tenant house to south of the house nearer to the blacksmith shop. This shift towards the common yard between the house and the blacksmith shop occurred between the mid-to-late eighteenth century, probably ca. 1790 after creamwares became popular and widely available in central Delaware. This shift towards the blacksmith shop is consistent with the known occupation of Benjamin Wynn and the archaeological evidence of the two shed additions and forge along the south side of the shop.

FIGURE 79

Artist's Reconstruction of the Benjamin Wynn Tenancy, ca. 1797



Summary

The Benjamin Wynn Tenancy Site was a tenant farm and rural blacksmith shop occupied from ca. 1765 - ca. 1820. An artist's reconstruction of the Benjamin Wynn Tenancy Site ca. 1797 is shown in Figure 79. The remains of a wooden tenant house, blacksmith shop, two wells, and several trash pits and fencelines were identified. At least one of the tenants, Benjamin Wynn was a blacksmith serving the surrounding agricultural area. Additional analyses of the distribution of plow zone artifacts confirmed the location of specific structures and identified additional patterns in farmstead layout, activity areas, and trash disposal patterns. Figure 80 shows the yard proxemics of the Benjamin Wynn Tenancy Site.

Two major activity areas were defined through archaeological features and artifact densities at the Benjamin Wynn Tenancy. The largest area was an area of domestic activity surrounding the tenant house north of the blacksmith shop. This area contained the highest densities of domestic artifacts. The second activity area was the primary locus of blacksmithing-related activities. This shop-related area centered on the blacksmith shop itself and was also defined by evidence of a forge and high densities of iron slag in both the plow zone and features. Neither activity area changed over time.