

The Architecture group was comprised of artifacts directly related to the built environment, as well as those artifacts that were used to enhance the interior or exterior of buildings. Primary types within this group were window glass, nails, bricks, and hardware.

Glass. Each fragment of flat glass was identified for tint and measured for thickness and recorded to the nearest 0.5 mm increment. The differences between window glass, mirror glass (Personal group), and plate glass (used as shelving) were in part determined by the thickness and wear of the pane. Window glass was the most ubiquitous architectural item.

DISTRIBUTION:

Window glass: 46CB41 (N=909) 46CB94 (N=1) 46CB95 (N=5) 46CB96 (N=3)
46CB97 (N=1) 46CB99 (N=8) 46CB100 (N=3)

Plate glass: 46CB41 (N=10)

Nails. Three stages were recognized in the technological chronology of nails; wrought nails, cut nails, and wire-drawn nails. Wrought nails were hand-made and were the primary type of construction fastener in the eighteenth and early nineteenth centuries. Their use ended by around 1830 with the widespread use of the square cut or machine cut nail (Nelson 1963:8). No wrought nails were recovered. The cut nail, which was introduced in approximately 1790, originally had a machine cut body with a hand made head. Not until technological advancements around 1815 had produced a totally machine made cut nail did they begin to replace wrought nails in the construction industry. The first wire-drawn nails were introduced into the United States from Europe by the mid-nineteenth century. These early wire nails were primarily used for box construction and were not well adapted for the building industry until the 1870s. Although the cut nail can still be purchased today, it was nearly universally replaced by the wire nail by the turn of the century (ibid :8).

With the exception of one unidentifiable nail recovered from 46CB96, all nails were recovered from site 46CB41. For the most part, cut nails recovered were too corroded to determine if heads were hand or machine made. Of 448 nails recovered, 126 were cut nails, 118 were wire nails, 36 were roofing nails, 1 was a finishing nail and the remaining 167 nails were unidentified. All identifiable nails were segregated by pennyweights. Table 14 shows the distribution of nails by level at site 46CB41.

Building Materials. Generally, building materials refer to all elements of building construction. For pattern analysis, window glass, nails, and hardware elements were collected. Additional building materials (e.g., bricks, limestone, mortar) were segregated by raw material type.

DISTRIBUTION:

Brick Fragments: 46CB41 (N=97) 46CB94 (N=2) 46CB96 (N=6) 46CB97 (N=4)
46CB103 (N=10)

Mortar Fragments: 46CB41 (N=8)

Table 14. Distribution of nails by pennyweight.

	2d	3d	4d	5d	6d	7d	8d	9d	10d	12d	16d	20d	Frag.
Wire			5	28	6	7	5	9	7	4			29
Cut	2	1	8	2			17	4	2	1	1	2	86
Roofing	16	2	18										
Finishing			1										

Hardware. Hardware types included all metal fittings and fasteners, excluding nails, used in construction. All fixed items such as door hinges and locks, plumbing elements, and window casements were also included. All portable hardware (e.g., elements used in the construction of household furnishings) was cataloged with the Furniture group. Items which were included in this group were recovered from 46CB41 only. These included two tacks, eight spikes, two bolts, two screws, and one hook. One porcelain tile fixture fragment was also recovered.

DISTRIBUTION: 46CB41 (N=16)

Furniture Group

This group was defined by any parts or elements of furniture and/or elements that were used to construct furniture. Ideally, all interior furnishings such as curtain hardware, locks, clock parts, picture hardware, wall paper, figurines, vases, and flower pots would be included. Only one Furniture group item, a red clay flower pot fragment, was recovered.

DISTRIBUTION: 46CB41 (N=1)

Arms Group

The Arms group was designed to encompass all forms of weaponry, including pistols, guns, rifles, and even swords and bayonets. Additionally, the shells, cartridges and flints for those weapons, and associated cleaning and storage items, would also be included. A total of four .22 caliber rimfire cartridges were recovered from 46CB41.

DISTRIBUTION: 46CB41 (N=4)

Clothing Group

This functional group consisted of all apparel and any materials used in the manufacturing of clothing, shoes, or accessories. All clothing group items were recovered from site 46CB41. Buttons dominated the assemblage, accounting for nearly 67% of the group. Two porcelain, two shell, and two white metal buttons were recovered. One round blue glass bead and two metal shoe eyelets were also identified.

DISTRIBUTION: 46CB41 (N=9)

Personal Group

The Personal group consisted of all private or individually owned items. Only five items were identified and all were recovered from 46CB41. One bakelite comb fragment, three unidentified bakelite fragments, and one bone toothbrush fragment were included.

DISTRIBUTION: 46CB41 (N=5)

Tobacco Group

This group included all smoking implements, lighting devices, tobacco containers, and accessory items utilized in both thermal and non-thermal uses of tobacco. One molded red clay pipe bowl fragment was recovered from 46CB41.

DISTRIBUTION: 46CB41 (N=1)

Activities Group

The Activities group was designed to accommodate those artifacts with known functions, but which could not be placed in additional recognized functional groups. In addition, artifacts that could be placed into more than one functional group, but not specifically into one, were placed into the Activities group.

A total of 88 debris fragments (all from 46CB41) were assigned to the Activities group. There were 74 clear lamp glass fragments recovered which comprised 84.0% of the total activity group assemblage. Other artifacts designated to this group included two porcelain doll parts, one saw fragment, one metal lid closure, two horseshoe nails, one valve cap, one gaming piece, three clay pigeon fragments, and one field tile fragment.

DISTRIBUTION: 46CB41 (N=88)

Miscellaneous Group

The Miscellaneous group was reserved for those items for which function could not be determined. Characteristically, the artifacts that were placed in this group were unidentified, unidentifiable, or raw materials. Unidentified artifacts were fragments that had definite shape and form, but were neither recognizable as individual objects or as components or elements of a known object. Unidentifiable artifacts were objects for which no form or function could be determined. Raw materials, combustion by-products, twentieth century debris, unmodified stone, and non-cultural faunal and floral remains were also placed in the Miscellaneous group.

Forty-nine artifact fragments could not be assigned to functional groups. The majority, nearly 42%, consisted of unidentified or unidentifiable metallic objects of either iron/steel or non-iron/steel. Nearly all were corroded beyond recognition. Additional items included one unidentified plastic item, two diminutive glass tube fragments, seven coal fragments, fourteen cinders, and three globules of talc. With the exception of three unidentifiable metal

fragments recovered from 46CB96, all other items included in this group were recovered from 46CB41.

DISTRIBUTION: 46CB41 (N=46) 46CB96 (N=3)

Discussion. The following discussion, organized by research topics, focuses on artifact patterning, chronology, and socioeconomic status/consumer choice. The historic artifact assemblage recovered from the Jenkins House site (46CB41), and to a lesser extent 46CB103, figures prominently in the discussion which follows because of the quantity and quality of the artifacts recovered (Tables 15 and 16). It does not include the other historic components investigated (46CB94, 46CB95, 46CB96, 46CB97, 46CB99, and 46CB100) due to the very small artifact samples recovered.

Artifact Patterning

Jenkins House site (46CB41).

South (1977) formulated a hypothesis which separated historic site assemblages into two artifact frequency patterns (Table 17). These two pattern sets, the Carolina Pattern and the Frontier Pattern, were intended to be utilized to compare sites which had common cultural habits or customs. South (1977) segregated artifacts into functional groups by which they could be compared. The Carolina pattern is characterized by a high percentage of Kitchen group artifacts with Architectural Group percentages being lower but still strongly represented. In contrast, the Frontier Pattern is characterized by a dominance of Architectural Group artifacts followed by a secondary prevalence of Kitchen group artifacts. South (1978;1979) changed the name of the Frontier Pattern to the Architecture pattern after he recognized that the pattern not only reflected a cultural tradition, but also that architectural artifacts seemed to be associated with the foundations of colonial structures. As Wesler (1984) has noted, this simple name change actually represents an important change in perspective. He suggests that this shifts the pattern recognition technique from being a means for inter-site comparisons to one for significant intra-site comparisons of functional distinctions within a site.

The following discussion will focus on applying South's (1977) pattern recognition technique on an intra-site basis. Table 18 compares functional pattern percentages for auger holes, test units and the site total. Of the four units which were situated in the kitchen-area, two (E20\N72 and E20\N76) revealed significantly higher Architectural group artifacts than Kitchen group artifacts while the remaining two units (E20\N80 and E19\N80) contained almost equal proportion of artifacts relative to both functional groups. Each of these units were either above or within the boundaries of the original kitchen foundation structure which was revealed during excavation. Their proximity to the kitchen-area accounts for a larger number and varying percentages of Kitchen group artifacts within this area. The unit next to the foundation for the law office did not display any significant functional pattern variation to the units in the kitchen-area. The unit which was flush with the back of the house displayed the highest percentage of Architectural group remains which was consistent with our expectations for a "builder's trench" test unit. Overall, the site assemblage fit within the range for South's (1977) Architec-

Table 15. Distribution of artifacts at the Jenkins Site by artifact groups.

<u>Kitchen Group</u>		<u>Furniture</u>	
<u>Ceramic</u>		Flowerpot fragment	1
Porcelain	2	Total	1
Stoneware	22		
Ironstone	2	<u>Arms</u>	
Pearlware	3	Rimfire Cartridges .22	4
Whiteware	200	Total	4
Yellowware	5		
Buff-Bodied Earthenware	2		
Unidentifiable	1	<u>Clothing</u>	
Subtotal	237	Porcelain Buttons	2
		Shell Buttons	2
<u>Glass</u>		White Metal Buttons	2
Container, Blown in mold	1	Round Blue Bead	1
Container, Hand-turned lip	8	Metal Shoe Part	2
Container, Machine made	3	Total	9
Container, Non-Machine made	1		
Pharmaceutical Container	1	<u>Personal</u>	
Molded/Pressed Tableware	20	Bakelite Comb/Brush	1
Thermally Altered	23	Plastic Toothbrush Fragments	3
Miscellaneous	13	Bone Toothbrush Fragments	1
Container Glass	344	Total	5
Unidentified Glass	6		
Subtotal	420	<u>Tobacco</u>	
		Molded Red Clay Pipe Bowl	1
<u>Plastic</u>		Total	1
Storage	1		
Subtotal	1	<u>Activities</u>	
		Porcelain Doll Parts	2
<u>Biological</u>		Clear Lamp Glass	74
Bone	1195.0 gms	Saw Fragment	1
Total	658	Lid Closure	1
		Horseshoe Nails	2
<u>Architecture</u>		Valve Cap	1
Tiles	1	Gaming Piece	1
Window Glass	909	Clay Pidgeons	3
Plate Glass	10	Field Tile Fragment	1
Finishing Nails	1	Total	88
Roofing Nails	36		
Common Wire Nails	118	<u>Miscellaneous</u>	
Cut Nails	126	Unidentifiable Metal	17
Unidentified Nails	167	Unident. Non-Iron/Steel	2
Tacks	2	Unidentifiable Plastic	1
Spikes	8	Talc	3
Screws	2	Coal	7
Bolts	2	Cinders	14
Hook	1		
Unidentified Unglazed Brick	97		

Mortar Fragments
Total

8
1839

Glass Tubes
Total

2
46

Table 16. Inventory of materials recovered from site 46CB103.

Kitchen Group

Ceramics:

Whiteware:

plain.....4
transfer print (red).....3
transfer print (blue).....1
shell edge, blue.....1
flow blue.....1
banded.....1
color glazed (blue).....1
hand-painted (underglaze)..1

Pearlware:

plain undecorated.....2

Redware:

brown glazed.....2

Stoneware:

Gray-bodied:

salt-glazed.....4
brown glazed.....1

Buff-bodied:

salt-glazed.....3
clear glazed.....1

Glass:

Unidentified container glass:
clear.....2

Architecture Group

Brick:

Unidentified fragments.....10

Table 17. Comparison of historic artifact distribution patterns at the Jenkins site to South's (1977) artifact patterns.

Artifact Group:	Carolina Pattern	Architectural Pattern
Kitchen	47.5 - 78.0%	10.2 - 45.0%
Architecture	12.9 - 35.1%	29.7 - 74.3%
Furniture	0.0 - 0.7%	0.0 - 0.5%
Arms	0.0 - 1.5%	0.0 - 15.6%
Clothing	0.0 - 8.5%	0.0 - 6.9%
Personal	0.0 - 0.6%	0.0 - 0.7%
Tobacco	0.0 - 20.8%	0.0 - 27.1%
Activities	0.1 - 3.7%	0.0 - 11.8%

ture pattern. These results were not surprising considering the fact that each test unit was situated in a structural context (i.e. kitchen foundation, law office foundation, and rear house builder's trench).

The distribution and frequency of artifacts recovered from auger hole tests are displayed by Kitchen Group and Architecture Group in Figures 7 and 8. These figures present a spatial representation of the major functional groups across the site. As expected the majority of the artifacts were located in side yards, rear yard or in structural contexts. The concentration of Kitchen group artifacts from E30/N80 and E20/N80 consisted mainly of clear container glass fragments which may have been shattered upon auger contact; therefore, this most likely does not indicate an area of specific use. Both Kitchen and Architectural group artifacts displayed concentrations to the west of the house structure. The close proximity of this concentration to the creek which flows to the west of the house may indicate a disposal pattern.

The highest percentage of Architectural group artifacts were located to the rear of the house. The highest concentration of architectural artifacts in a single auger hole test was recovered from E30/N70 which was within the kitchen foundation area. The architectural artifacts from this test consisted mainly of nails and window glass. The auger hole test at E0/N80 was located in the area where the law office foundation once existed which accounts for the relatively high concentration of architectural artifacts. Also, as is apparent in Figure 8, there was an architectural artifact concentration along the N40 line between the W10 and E40 coordinates. The presence of architectural artifacts at such a distance from the house structure raises several questions. First, is this concentration indicative of the wooden structure which

Table 18. Intra-site comparison of test unit and auger hole content by group.

Artifact group:	Auger Holes	E20/N72	E20/N76	W13.35/N80.60	E20/N80	E19/N80	W3/N76	Site Total
Kitchen	139 (30.96)	58 (17.31)	144 (26.42)	94 (24.16)	90 (44.55)	102 (41.13)	31 (06.43)	24.82%
Architecture	270 (60.13)	274 (81.79)	365 (66.97)	285 (73.26)	84 (41.58)	120 (48.38)	441 (91.49)	69.37%
Furniture	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	1 (00.21)	0.04%
Arms	0 (00.00)	0 (00.00)	1 (00.18)	2 (00.53)	0 (00.00)	1 (00.41)	0 (00.00)	0.15%
Clothing	1 (00.22)	1 (00.30)	5 (00.92)	1 (00.26)	0 (00.00)	1 (00.41)	0 (00.00)	0.34%
Personal	1 (00.22)	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	4 (01.61)	0 (00.00)	0.19%
Tobacco	0 (00.00)	0 (00.00)	0 (00.00)	0 (00.00)	1 (00.50)	0 (00.00)	0 (00.00)	0.04%
Activities	38 (08.47)	2 (00.60)	30 (05.51)	7 (00.80)	27 (13.37)	20 (08.06)	9 (01.87)	5.05%
Totals	449 (100.0)	335 (100.0)	545 (100.0)	389 (100.0)	202 (100.0)	248 (100.0)	482 (100.0)	00.00%

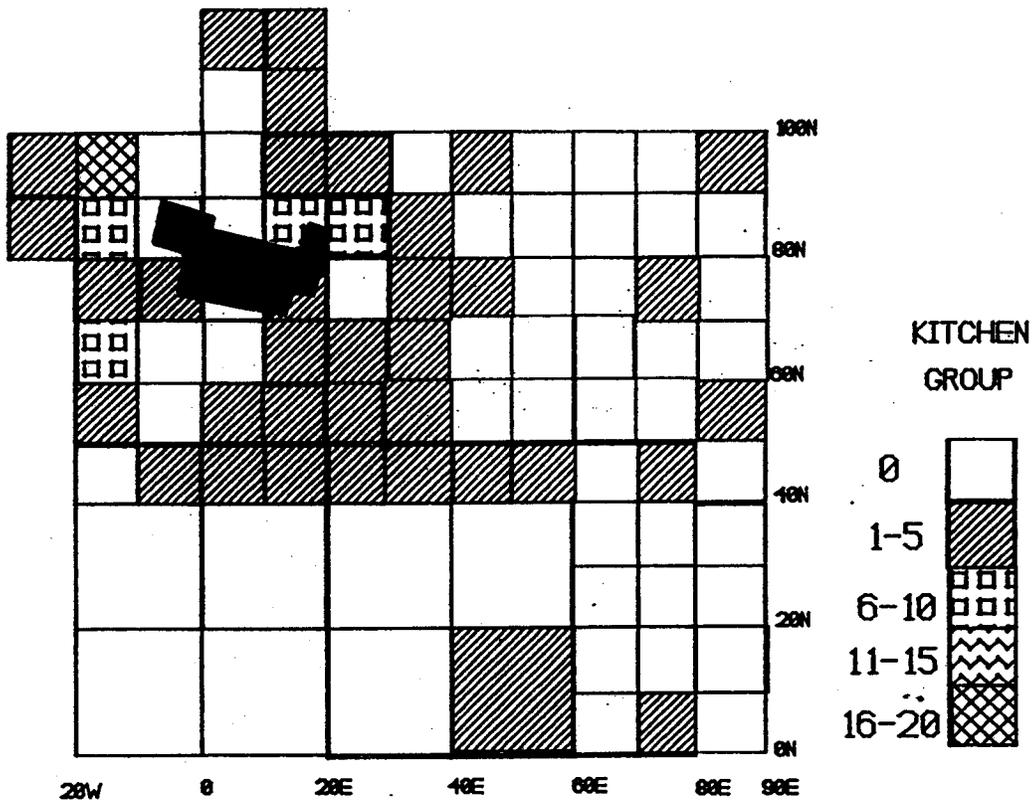


Figure 7. Distribution of kitchen group artifacts.

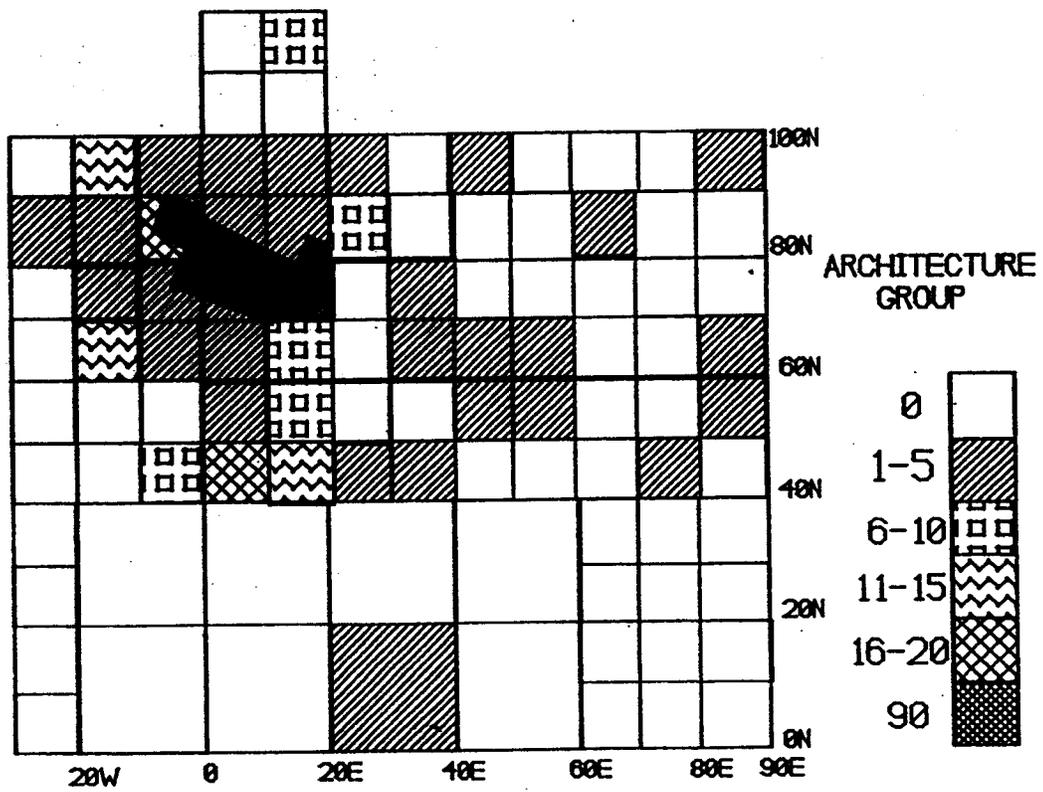


Figure 8. Distribution of architectural group artifacts.

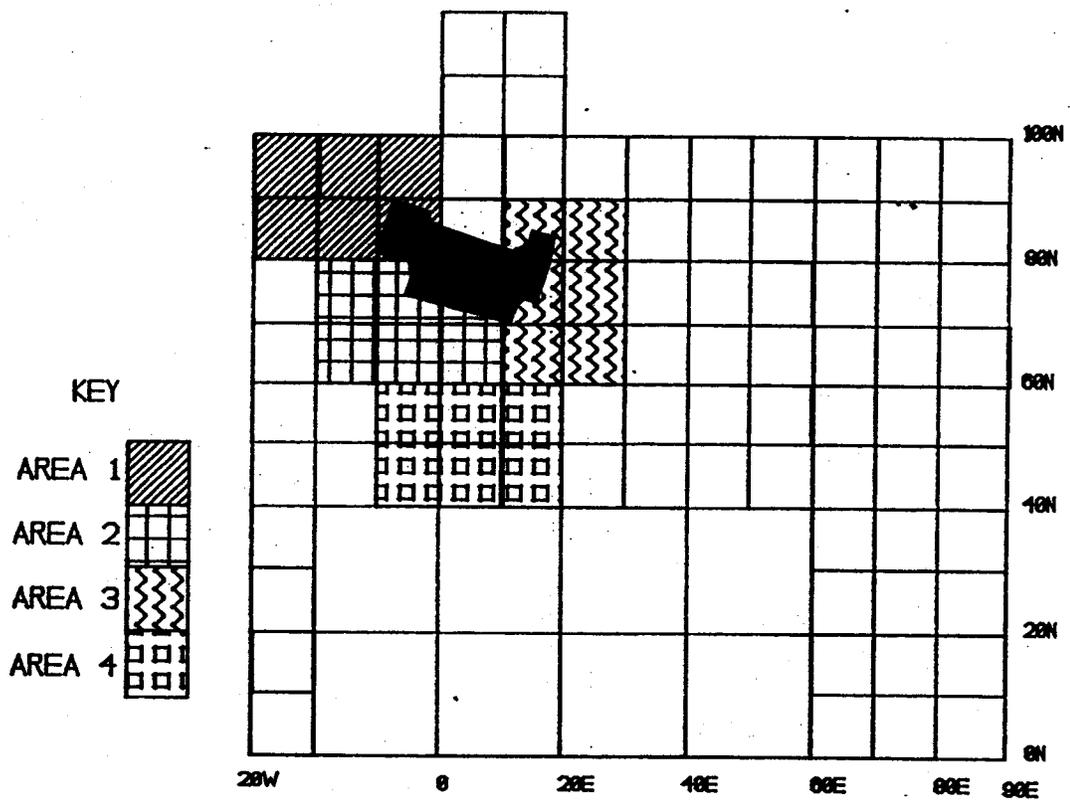


Figure 9. Location of designated areas of artifact concentration.

Table 19. Ball's (1984) Ohio Valley domestic artifact patterns.

Artifact Group:	Residential	Architectural	Open Refuse	Sealed Refuse
Kitchen	46.56%	24.31%	90.32%	75.33%
Architecture	47.37%	65.88%	6.71%	20.25%
Furniture	0.29%	0.69%	0.04%	0.24%
Arms	0.17%	0.53%	0.45%	0.03%
Clothing	0.79%	2.34%	0.30%	0.71%
Personal	0.19	0.51%	0.08%	0.66%
Activities	4.63%	5.74%	2.10%	2.78%

Table 20. Calculated artifact group percentages for four designated areas within the Jenkins houselot.

Artifact Group:	Area 1	Area 2	Area 3	Area 4
Kitchen	28.08%	8.97%	28.15%	21.92%
Architecture	68.47%	88.23%	64.86%	65.75%
Furniture	0.00%	0.19%	0.00%	0.00%
Arms	0.43%	0.00%	0.13%	0.00%
Clothing	0.21%	0.19%	0.47%	0.00%
Personal	0.00%	0.00%	0.34%	0.00%
Activities	2.81%	2.43%	6.04%	12.33%

was reported to have existed during the construction of the Jenkins house, or is it simply the result of artifacts washing downward from the house to the edge of the levy? An examination of the artifacts recovered from this area revealed that the dominant architectural material was brick (N=32). The brick recovered from six auger hole tests in a 60 m area constituted 32.98% of the total brick recovered from the site. The rest of the architectural materials recovered from this area consisted of cut nails (9d), window glass, and one spike. Although it seems possible that this area may be indicative of a pre-existing structure, further work would be required to prove this hypothesis.

Based on areas of Kitchen Group and Architecture Group concentrations discussed above, four specific 60 m² areas were designated (Figure 9) in order to study each for distinguishing functional artifact group variation. Both auger hole tests and test units were included within these designated areas. Using Ball's (1984) application of South's (1977) artifact patterning method, an attempt was made to identify functional patterns within the Jenkins house-lot. Ball's (1984) study resulted in the identification of four artifact patterns based on forty-one different sites, features, and structures within the Ohio River Valley. These patterns include the Residential Pattern and Architectural Pattern (after South's Carolina and Architectural Patterns), Open Refuse and Sealed Refuse Patterns. These patterns were based on the proportional representation of artifacts grouped in seven different functional artifact groups (Table 19). Using Ball's method, percentages were calculated for each functional group within each designated area (Table 20).

The results of this exercise indicated that all selected areas corresponded most closely with the Architecture Pattern. According to Ball (1984), the Architecture Pattern was characterized by an emphasis of domestic artifacts within or around foundations or builder's trenches and reflects construction, remodeling or demolition of structures. It should be acknowledged that the units within Area's 1 and 3 were placed adjacent to existing foundations of the Jenkins House in order to locate the subsurface foundations of the original kitchen (Area 3) and the original law office (Area 1). Similarly, one 1x2 m test unit was placed in Area 2 specifically to sample the builder's trench. In contrast, no test units were placed within Area 4, and the artifact patterning within this area was based solely upon information collected from auger hole tests.

46CB103.

Utilizing Ball's (1984) model for identifying historic artifact patterns within the Ohio Valley region, it may be possible to compare this site with one of his four artifact patterns. The artifact assemblage from 46CB103 was characterized by a dominance of Kitchen Group artifacts (73.68%) over Architecture group artifacts (26.32%). All other artifact groups were unrepresented. The percentages for this artifact assemblage conform best to Ball's (1984) Sealed Refuse Patterns (Table 21). The Sealed Refuse Pattern attempts to differentiate between secondary refuse which has been deposited in sub-surface pits versus Open deposition. Given the abundance of brick fragments observed on the surface of the site, it is likely that these percentages would have

dates to approximately 1831 as shown below.

$$\text{A.D. 1830.7} = \frac{0.8798266}{0.0286} = 30.76 + 1800$$

This date corresponds with Dickinson's (1988) report of 1835 as the year the Jenkins House completion (Appendix C). It may be reasonable to suggest that much of the window glass debris is representative of that period.

Table 22 displays the distribution of flat glass recovered from all test units by level, thickness and approximate manufacturing dates. An examination of window glass thickness by level indicated that mean thickness decreases with increased depth. Nearly 96% of the window glass was under 3.0 mm. thick, which suggests that they were probably manufactured prior to 1870, the point at which Ball (1982:13) reports a subsequent stabilization in flat glass thickness. The majority of the flat glass (47.73%) was around 2.0 mm thick. The approximate manufacturing date for window glass measuring 2.0 mm thick (1835) correlates with the reported finished construction date of 1835 for the Jenkins House and also was congruent with the construction date of the late 1840's for the law office built adjacent to the western side of the house (Dickinson 1988:13).

Table 22. Distribution of window glass thickness by unit level. Dates calculated utilizing Ball's (1983:133) formula.

Th*	Date	Lev.1	Lev.2	Lev.3	Total	Percent
1.0	1800	93	78	2	173	15.43
1.5	1817	102	59	3	164	14.63
2.0	1835	381	149	5	535	47.73
2.5	1852	126	70	0	196	17.48
3.0	1870**	24	28	1	53	4.73
3.5	n/a					
Totals		726	384	11	1121	100.0
Mean thickness:		1.92	1.88	1.77		
*thickness in mm				**or later		

Three different flat glass colorations, aqua (blue-tinted, green, and clear, were identified in the Jenkins site assemblage. Ball (1982) contends that it may be possible to use blue-tinted flat glass as an indicator of early to mid-1800's manufacture. This was based on observations that noted blue-

Table 21. Comparison of historic artifact distribution patterns at 46CB103 to Ball's (1984) Ohio Valley domestic artifact patterns.

Artifact Group:	46CB103	Residential	Architectural	Open Refuse	Sealed Refuse
Kitchen	73.68%	46.56%	24.31%	90.32%	75.33%
Architecture	26.32%	47.37%	65.88%	6.71%	20.25%
Furniture	0.00%	0.29%	0.69%	0.04%	0.24%
Arms	0.00%	0.17%	0.53%	0.45%	0.03%
Clothing	0.00%	0.79%	2.34%	0.30%	0.71%
Personal	0.00%	0.19	0.51%	0.08%	0.66%
Activities	0.00%	4.63%	5.74%	2.10%	2.78%

been congruent with the Residential Pattern had all brick been collected. The absence of window glass and architectural hardware in the assemblage may be due to the camouflaging effect of the artifact color against the soil matrix background hues.

The possibility that this site may represent Spurlock's cabin has not been ruled out. Further excavation would be necessary to determine the actual function of this historic artifact cluster.

Chronological Implications of the Assemblage

Jenkins House site (46CB41).

Flat Glass

According to Ball (1982) flat glass thickness began to increase gradually from 1.0 mm starting around 1800 and began to stabilize at about 3.0 mm thick beginning during the 1870's to present. An average thickness of 1.8798266 mm. was calculated for the 1259 sherds recovered from the Jenkins site. Utilizing Ball's (1982) linear regression formula:

$$D = \frac{M - 1.00 \text{ mm}}{.0286} + 1800$$

where D is the date derived from the formula and M is the average thickness of the window glass in any given site assemblage, the Jenkins site flat glass

tinted flat glass being consistently thinner and less frequent through time than other (green and clear) colorations. Table 23 compares the frequency and percentage of blue-tinted versus other colorations of flat glass by thickness and gives the calculated mean date for each. Consistent with Ball's (1982) contention, blue-tinted sherds were less prevalent than green or clear flat glass sherds, and they appeared to be more limited chronologically to the early 1800's.

Mean Ceramic Date

The following formula, as developed by South (1972), was used to calculate a mean ceramic date for the Jenkins House site assemblage:

$$\frac{\text{Number of Sherds Recovered (by type)} \times \text{Median Ceramic Date for Type}}{\text{Total Number of Sherds Recovered}}$$

As shown in Table 24, the application of South's (1972) formula to the total ceramic assemblage produced a mean ceramic date of 1889.26. This date is much more recent than the date generated for the flat glass; however, given the long-term occupation of the Jenkins House site (1835-present) the mean ceramic date of 1889 was considered reasonable. It should be noted that originally the mean ceramic date was calculated using 1865 as the mean production date for plain whiteware (Lofstrom et al. 1982) which generated a mean ceramic date of 1861 for the site. After further consideration, a decision was made to use the mean date of 1900 (Brashler et al. 1987) for plain whiteware sherds which produced the mean ceramic date which will be used for this report. Given the high relative percentage of undecorated whiteware sherds in comparison to decorated sherds and the long-term occupation of the site it seemed most reasonable to use the more recent mean date.

An attempt was made to distinguish between the selected areas within the houselot (Figure 9) using South's mean ceramic date formula as an indicator. The areas were selected based on the location of concentrations of both Kitchen and Architecture functional artifact groups (Figure 7 and 8). With the exception of Area 4, all other areas contained not only auger hole test, but at least one 1x2 m² excavated test units. It should be noted that Area 3 contained a total four excavation units; however, this bias did not seem to affect the mean ceramic date calculations. With the exception of Area 4 (ceramic sample size too small for accurate calculation) there was no significant difference in mean ceramic dates between the three areas considered.

The assemblage recovered from Area 1, located in the west side yard of the site, generated a mean ceramic date of 1893.58. This date was congruous with a date of ca.1890 for an identified maker's mark (see ID #2, Appendix B) from Area 1. It was also within the time span reported for the law office (late 1840's - 1913) (Dickinson this report) which was located within this area. The Area 2 assemblage recovered from the rear yard area produced a mean ceramic date of 1898.25 and the Area 3 assemblage generated a date of 1885.66. A mean ceramic date of 1882 was generated for Area 4; however, given the small sample size (N=6) and the prevalence of undecorated whiteware within the sample (N=4), it would not be reasonable to use this date as a valid indicator.

Alternatively, it appeared more useful to calculate a mean date for flat glass within this area considering its possible structural context. When Ball's (1982) formula was applied to the flat glass from Area 4 a mean date of 1814.99 was computed. This date is significantly earlier than the mean flat glass date for the site total and lends support to the hypothesis that this area may represent an earlier structural site.

Table 23. Seriation comparison of Jenkins site flat glass assemblage by thickness and coloration frequency (after Ball 1982).

Date	Thick- ness	Blue- Tint	Other	Totals
1800	1.0	10 (5.71)	165 (94.29)	175 (100.00)
1817	1.5	83 (33.33)	166 (66.67)	249 (100.00)
1835	2.0	29 (05.04)	546 (94.96)	575 (100.00)
1852	2.5	2 (00.97)	204 (99.03)	206 (100.00)
1870	3.0	0 (00.00)	54 (100.0)	54 (100.00)
Totals		124	1135	1259

Table 24. Application of the mean ceramic date formula to the Jenkins site assemblage.

	Sample N				
Whiteware:					
blue transfer print	13	x	1830	=	23,790
red transfer print	2	x	1840	=	3,680
pink/green transfer print	5	x	1845	=	9,225
polychrome	1	x	1835	=	1,835
handpainted, blue	2	x	1835	=	3,670
undecorated	170	x	1900	=	323,000
lustre	2	x	1860	=	3,720
molded	1	x	1845	=	1,845
shell edge *(ed1)	1	x	1817	=	1,817
shell edge *(ed6)	3	x	1884	=	5,652
banded	2	x	1850	=	3,700
					Lofstram et al. 1982
					Lofstram et al. 1982
					Freeman 1954
					G. Miller pers. com 1988
					G. Miller pers. com 1988
					Brashler et al. 1987
					Freeman 1954
					Freeman 1954
					G. Miller n.d.
					G. Miller n.d.
					Brashler et al. 1987
Pearlware:					
undecorated	3	x	1815	=	5,445
					Lofstram et al. 1982
Ironstone:					
undecorated	2	x	1910	=	3,820
					Brashler et al. 1987
Yellowware:					
undecorated	1	x	1865	=	1,865
rockingham	4	x	1865	=	7,460
					Ramsay 1939
					Ramsay 1939
Subtotals:	212				400,524

$$\text{Mean Ceramic Date} = \frac{400,524}{212} = 1889.26$$

*ed1 = Miller type 1, scalloped rim impressed curved lines.

*ed6 = Miller type 6, unscalloped, unmoulded.

46CB103.

Using South's (1972) formula a mean ceramic date of 1833.7 was calculated for the ceramic assemblage from 46CB103 (Table 25). Ten of the fifteen late refined earthenware sherds could be assigned ceramic type date ranges and median date. Stoneware and redware were not included due to their extended range of manufacture. Undecorated whiteware sherds were not included due to their long range of production. Further, the small sample size (N=10) should be acknowledged as a bias which renders the calculated mean ceramic date for this site questionable at best.

Socioeconomic Status and Economic Choice

As Wesler (1987) has noted Miller's (1980) classification and economic scaling of 19th century ceramics presents restrictions when dealing with small test excavations. As was the case with the Jenkins site, small test excavation sites tend to render a limited representation of vessels. Considering the long-term occupation of the site, the assemblage was first broken into several different time units and calculated using more than one scale; however, this did not produce any significant difference in the average index value for the assemblage. Therefore, the 1855 index value scale was chosen as a mid-range date for the purposes of this report. Table 26 illustrates the average value of cups, saucers, plates and bowls recovered from the Jenkins site relative to the cost of "CC" vessels as determined by Miller (1980). The calculated index values for identified vessel forms produced an average index value of 1.25.

McBride and McBride (1987) adapted Miller's (1980) analysis for use with sherd counts as opposed to vessel counts. By averaging the cost of plates, cups and bowls for the year chosen for a given site assemblage they produced an average value to be multiplied times the number of sherds in that assemblage. Table 27 displays the results of this modification when applied to the Jenkins site assemblage. Although the average index value of 1.18 was somewhat lower than that calculated using Miller's method, the results were comparable given the high number of undecorated whiteware sherds which can have a lowering effect on the mean index value (McBride and McBride 1987).

The resulting average index values from each method were considerably lower than expected for a plantation owner's houselot site. It is reasonable to suggest that this discrepancy may be attributed to the relatively small sample recovered during testing.

Table 25. Application of the mean ceramic date formula to the 46CB103 site assemblage.

	Sample N				
Whiteware:					
blue transfer print	1	x	1830	=	1,830
red transfer print	3	x	1840	=	5,520
handpainted, blue	1	x	1835	=	1,835
shell edge, blue *ed1	1	x	1817	=	1,817
banded	1	x	1850	=	1,850
flow blue	1	x	1855	=	1,855
Pearlware:					
undecorated	2	x	1815	=	3,630
Subtotals:	10				18,337

Lofstram et al. 1982
Lofstram et al. 1982
G. Miller pers. com 1988
G. Miller n.d.
Brashler et al. 1987
Brashler et al. 1987

Lofstram et al. 1982

$$\text{Mean Ceramic Date} = \frac{18,337}{10} = 1833.7$$

*ed1 = Miller type 1, scalloped rim impressed curved lines.

Table 26. Average value of cups, saucers, plates, and bowls recovered from the Jenkins site relative to the cost of "CC" vessels as determined by Miller (1980).

Vessel Form	Decorative Type	1855 Index Value		Number Recovered	Product
Cups	undecorated	1.00	x	4	= 4.00
	min. decorated				
	painted				
	printed				
	ironstone				
				Subtotals: 4	4.00
				Average Value:	1.00
Saucers	undecorated	1.00	x	4	= 4.00
	min. decorated	1.00**	x	1	= 1.00
	painted				
	printed	3.00	x	2	= 6.00
	ironstone				
				Subtotals: 7	11.00
				Average Value:	1.57
Plates	undecorated	1.20	x	8	= 9.60
	min. decorated	1.20	x	3	= 3.60
	painted	2.17**	x	2	= 4.34
	printed	1.60	x	1	= 1.60
	ironstone	1.69**	x	1	= 1.69
				Subtotals: 15	20.83
				Average Value:	1.39
Bowls	undecorated	1.00	x	1	= 1.00
	min. decorated	1.10	x	1	= 1.10
	painted				
	printed				
	ironstone				
				Subtotals: 2	2.10
				Average Value:	1.05

TOTAL AVERAGE VALUE: 1.25

** = estimated value

Table 27. Ceramic Average Value by sherd count (after McBride and McBride 1987).

Decorative Type	Counts	1855 index value	Sum of counts x ind. value	Total count	Average value (sum/total)
Undecorated	172	1.00			
Min. decorated	11	1.16			
Painted	3	1.30	248.66	210	1.18
Printed	22	2.50			
Ironstone	2	2.50			

CHAPTER VI. SITE DESCRIPTIONS

The following chapter centers on a site-by-site description of those sites recorded during the present study. It also includes updated information on the previously recorded sites that were relocated by Cultural Resource Analysts' field personnel. Figure 10 and 11 shows the locations of all sites discussed in this chapter.

Site Number 46CB15.

Elevation: 550 feet AMSL
Size: 9,000 square m
Components: Late Woodland
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: adjacent north
Topographic setting: T1
Slope: less than 5 degrees
Aspect: open

Site Description: This site is located on a dredged, back channel of the Ohio River and is presently subject to erosion and period inundation. It fronts the river for about 50 m. All along this area there is a fairly dense "pavement" of fire-cracked rock and river cobbles which have eroded out of the river bank. The concentration of fire-cracked rock and river cobbles extends back away from the river bank for about 125 m; and the site seems to be confined to a slightly elevated area on the T1. Judging from the ceramics recovered from the site, it appears to represent at least one Late Woodland occupation. The limestone-tempered, cord-marked pottery recovered from 46CB15 was exclusively S-twist.

The site was collected on two occasions, but conditions were less than ideal in each instance. The freshly plowed strips generated a quantity of material but would have produced a great deal more if the strips had been walked after a heavy rainfall. It should be noted that all of the pottery and bone recovered from the site was found eroding out of the river bank.

Table 28. Materials Recovered from 46CB15

Initial Reduction Bifaces	N = 3
Primary Reduction Bifaces	N = 1
Secondary Reduction Biface	N = 1
Pitted Cobble	N = 1
Tertiary Flakes	N = 7
Secondary Flake	N = 3
Primary Flakes	N = 7
Shatter	N = 8
Prehistoric Ceramics	N = 6
Bone	0.3 gms

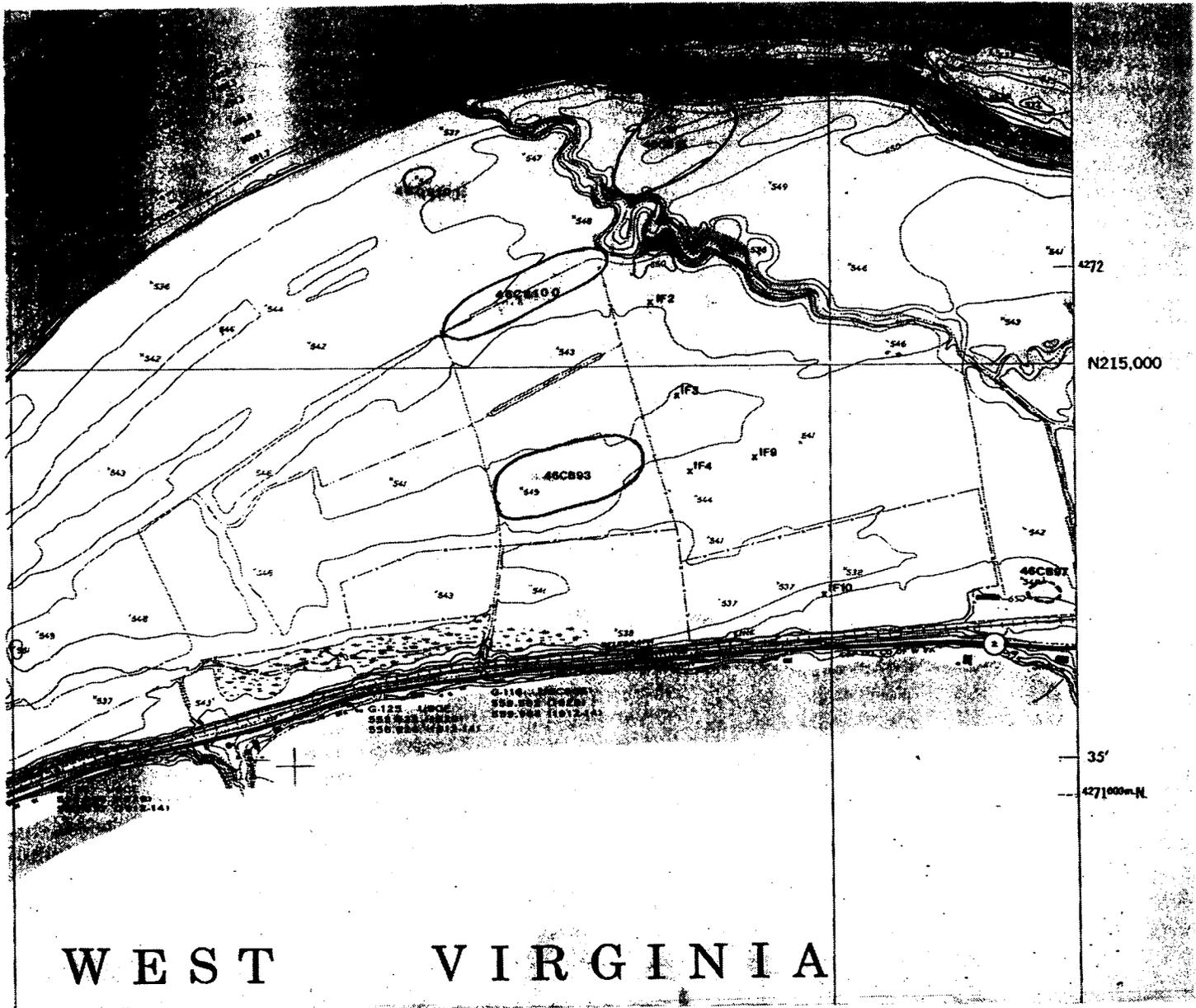


Figure 10. Topographic map showing the location and boundaries of sites discussed.

Site Number 46CB40.

Elevation: 550 feet AMSL
Size: 54,400 square m
Components: Fort Ancient
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: adjacent north
Topographic setting: floodplain
Slope: less than 5 degrees
Aspect: open

Site Description:

Site 46CB40 was known to exist since at least the 1920's (Freidin 1987). The earliest recorded excavations at the site were recorded by Griffin as the Clover Component of the Fort Ancient period (1943:244). He noted that three raised areas, each about 5 feet high and 200 feet in diameter, were located at the site. These three mounds are barely visible today since they have been deflated by fifty years of plowing. He remarked that a grave was excavated which contained a child. Grave goods incorporated with the burial included a clay effigy and shell beads and ornaments. The site was revisited in 1974 by Gary Wilkins of the West Virginia Geological and Economic Survey. He surveyed the Greenbottom area in advance of the expansion of West Virginia State Route 2. In addition to relocating 46CB40, Wilkins relocated and conducted test excavations at 46CB41 and 46MS93. Since Clover was sufficiently removed from the proposed construction activities test excavations were not warranted and were not undertaken by Wilkins.

Between 1984 and 1986, a number of investigations were undertaken by the Marshall University Archaeological Field School under the direction of Nicholas Freidin. Aerial photographs of the site were initially examined. They exhibited a circular light green zone, comprising Clover, surrounded by darker green. The site was subsequently mapped with a plane-table and alidade. The topographic map created displayed a rather unconvincing but slightly elevated ring of ground which was thought to correspond with a midden circle. Following this procedure an electrical resistivity survey was completed on a small part of the site in order to support the previous findings. The results of this effort displayed that areas of low resistivity corresponded with the outline of the midden obtained from the previous investigations. Finally, a series of one and two square meter test units were excavated at the site. The test pits revealed that the circular midden surrounding the village area was from 30 to 40 cm in thickness and that, although the village exhibited debris build-up, the midden circle was much more substantial in cultural and subsistence remains. Subsurface remains discovered at the site included six burials, post molds, a hearth and one feature of indeterminate function.

As per the scope of services for the present investigation, site 46CB40 was relocated but was for the most part avoided. A total of four plowed and disked transects crossed the known boundaries of the Clover Site so that more accurately boundaries could be drawn. The site was semi-circular in shape and located on the high bank of the Ohio River. It was situated on Huntington and Ashton silt loams. Its maximum dimensions were 160 m north/south by 340 m

east/west. It was apparent that the Ohio River had impacted the northern edge of the site. As evidence, artifacts were observed eroding out of the riverbank. The site was in pasture.

Previous excavations by Marshall University demonstrated that the site was semicircular in shape and encompassed approximately 5 acres. Their assessment of the shape of the site was determined by the methods outlined above and by comparisons with other sites similar to the Clover Site in terms of cultural period, size and location. Additional plowing outside the known limits of the site during this investigation generally confirmed this assessment; however, controlled surface collection of the plowed strips outside of Clover proper suggested that the site continued along a well developed levee extending to the southwest. The highest concentration of artifacts and mussel shell was indeed within the semicircular plan of the site but, a moderate density of lithic debitage, triangular projectile points, shell tempered ceramic sherds and mussel shell was evident along the highest point of the levee outside of Clover's known boundaries. Because the limits of Clover have been well established for many years it was decided to assign a different site number for the artifact concentration on the well developed levee (46CB98).

All tools, temporally diagnostic artifacts and a representative sample of lithic debitage, bone and ceramic sherds were recovered from the surface of Clover. The total artifact assemblage recovered is given in Table 29. Analysis of the ceramics determined that the majority of the sherds were tempered with shell. The exterior surface treatment included plain and cordmarked or smoothed cordmarked. One sherd with leached temper and two with no observable temper in the paste were also recovered from this site.

Table 29. Materials recovered from 46CB40.

Projectile Points: Madison	N = 6
Type 1 Triangle	N = 1
Secondary Reduction Bifaces	N = 14
Primary Reduction Bifaces	N = 6
Initial Reduction Bifaces	N = 29
End Scraper	N = 1
Celts	N = 2
Hoe	N = 1
Gorget	N = 1
Mano	N = 1
Tertiary flakes	N = 117
Secondary flakes	N = 71
Primary flakes	N = 50
Shatter	N = 89
Modified Hematite	N = 1
Prehistoric Ceramics	N = 122

Site Number 46CB41.

Elevation: 550 feet AMSL
Size: 30,000 square m
Components: Fort Ancient and Historic
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 800 m north
Topographic setting: second terrace
Slope: less than 5 degrees
Aspect: open

Site Description:

Site 46CB41 was relocated and described by Gary Wilkins (1974) of the West Virginia Geological and Economic Survey. He conducted a survey of the Green-bottom area in advance of the expansion of West Virginia State Route 2. One test unit 5 X 10 square ft in size was placed within the original boundaries of the site and was excavated to a depth of 1.5 ft. The exact placement of the test unit was not given in Wilkin's report. The density of the cultural materials in the unit was low and subsurface features were not observed.

As a result of the present investigations, the original boundaries of site 46CB41 were expanded approximately 100 m to the west. This was done to include a fairly substantial prehistoric midden and the Jenkins house, the historic component of the site. The maximum dimensions were 100 m north/south by 300 m east/west. The boundaries were defined on the basis of prehistoric artifact density, which was low within the original boundaries and which increased toward the west. The maximum density of material occurred around the Jenkins house. The site was located on the second terrace of the Ohio river immediately north and adjacent to Homestead, West Virginia. The site was situated on Ashton silt loam. The eastern half of the site was situated in a horse pasture and the western half was in grass.

The eastern half of site 46CB41, within the original recorded boundaries of the site, was plowed and disked at 20 meter intervals for a total of five strips and a pedestrian survey of each transect was conducted. All cultural material was collected and very few prehistoric artifacts were recovered. Wilkins excavations most likely were conducted in this area. Test excavations at the adjacent Homestead revealed that the richest portion of site 46CB41 was located beneath and surrounding the Jenkins House site. Eighty-eight auger holes and six test units were excavated in and around site 46CB41. This site consisted primarily of Late Woodland ceramic types and triangular projectile points in addition to a small amount of Late Prehistoric pottery types, triangular points and mussel shell refuse. An even smaller amount of Early Woodland pottery types were also recovered. These investigations revealed that the site contained up to 1 meter of prehistoric midden deposits and possibly intact features. Therefore, both vertical and horizontal stratigraphy may

exist at this site. It also appeared that historic activities have disturbed the prehistoric deposits very little despite the long history of historic occupations at the site.

In addition to the prehistoric occupation at the site was an historic occupation by Jenkins and his descendents (see Appendix C). Testing at the Jenkins House or "Homestead" revealed that intact features are present at the site (Figure 12). In addition to the structural remains a cistern was observed and mapped in the back yard. A series of eighty-eight 25 cm diameter auger holes placed on a 10 meter grid and excavated to a depth of 50 cm exhibited very little historic artifactual debris and quite a bit of prehistoric artifacts associated with site 46CB41. Most of the historic material was restricted in time to the nineteenth century. Hand excavation of a total of 10 square meters adjacent to the house exposed the foundation for the original kitchen immediately to the east of the main house. The planview and profile of the kitchen foundation are displayed in Figure 13 and 14. It was postulated that the law office was placed in a similar position to the west of the house which would create symmetry to the house. Excavation of a 1 X 2 m test unit in this area failed to produce a foundation; however, it was possible that the foundation was salvaged for construction of a patio on the same side of the house in the mid-twentieth century. Nevertheless, portions of the law office foundation may still be intact where excavations did not take place. This assumption is based on the fact that numerous square nails and window glass fragments were recovered during the excavation of this 1 X 2 m unit.

One twenty liter flotation sample was collected from level 2 within the kitchen area. Analysis of these botanical samples was completed by Dr. Dee Ann Wymer at the Licking Archaeological and Landmark Society's Paleoethnobotanical Laboratory. The results of this analysis revealed nutshell, wood charcoal, corn, squash rind, and other unidentified organic material. The nutshell consisted of 0.06 gms *Juglandaceae*, and there was 0.02 gms of squash rind. Of the 0.24 gms corn recovered, 0.12 gms were kernel fragments, 0.06 gms were whole cupules and 0.06 gms were segments. Six different wood types were identified and include hard maple (0.33 gms), hickory (0.04 gms), ash (*Fraxinus*) (0.20 gms), *Prunus* (cherry species) (0.10 gms), white oak (0.68 gms) and porous ring (0.14). Finally, there was a total of 10.96 gms of wood charcoal present.

All prehistoric materials were collected, both in the horse pasture and the artifacts recovered during auger and test excavations. In addition, the prehistoric and historic artifacts collected were retained separately as to auger hole and test unit, by level. One exception was that most brick in the test excavations was not retained simply because of the sheer volume exposed; however, brick in the auger holes was retained. A complete list of prehistoric and historic materials is given in Tables 30 and 31, respectively. A wide variety of ceramic ware groups were identified during the ceramic analysis. The majority of the sherds recovered were tempered with limestone and the cordmarked specimens were predominantly two ply Z-twist. Rim treatments and other decorative motifs suggested that the major occupation at the site was during the Late Woodland period with some Late Prehistoric occupation inferred by the presence of shell tempered ceramics.

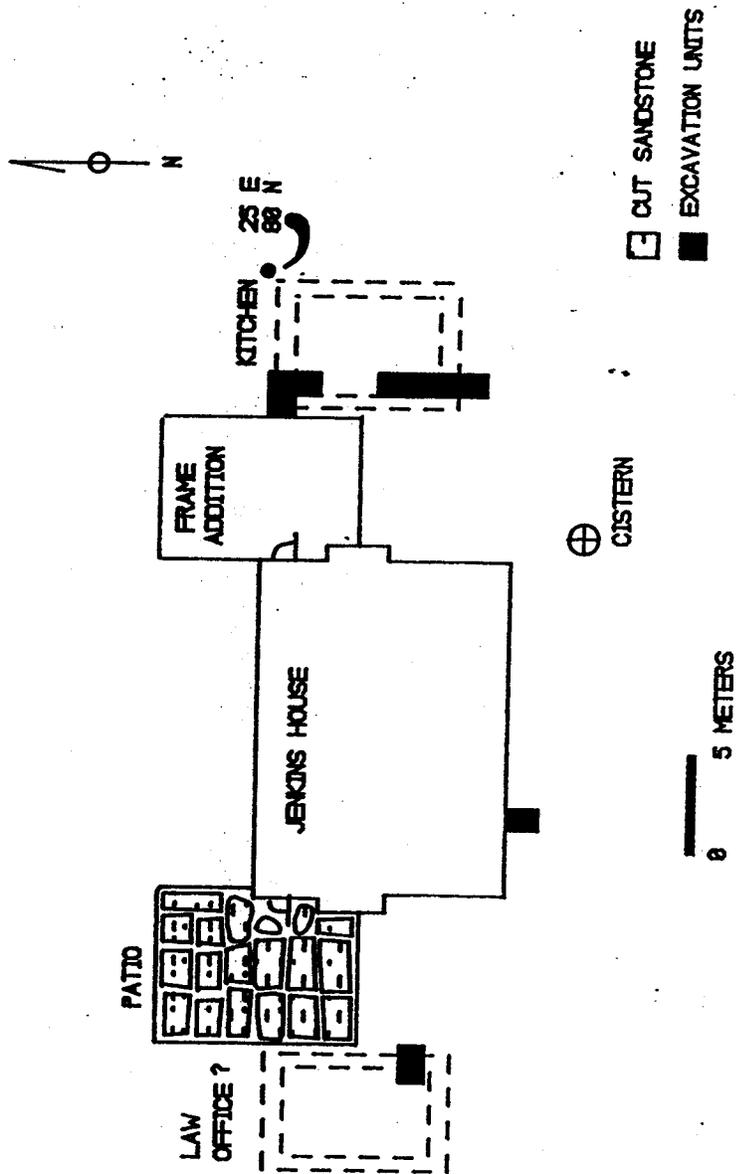


Figure 12. Planview of Jenkins Homestead.

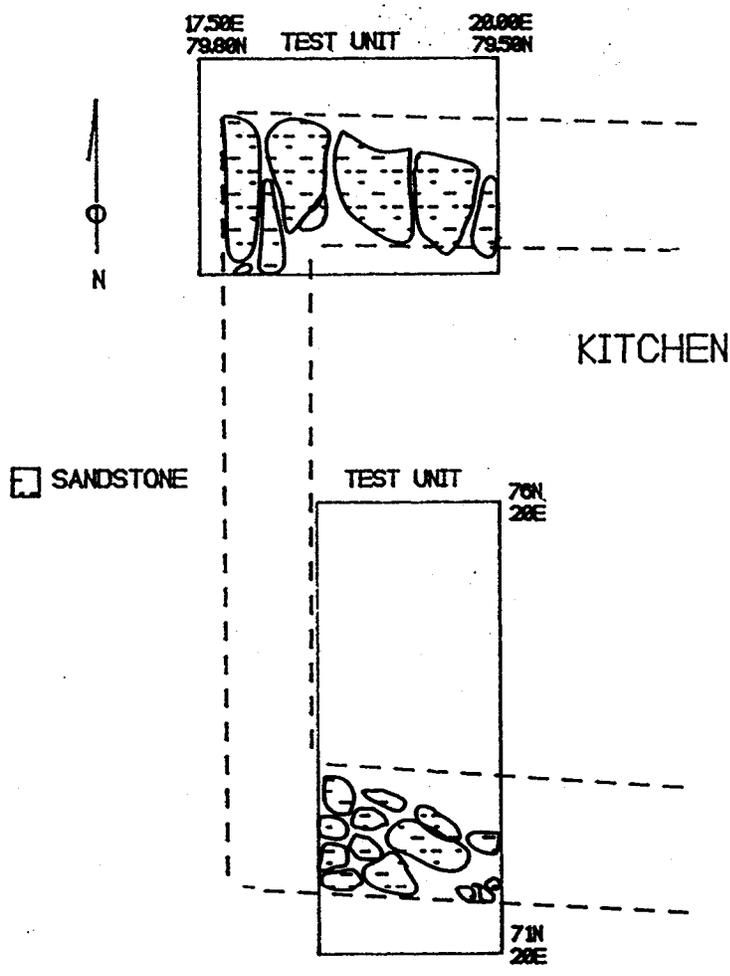


Figure 13. Planview of test units showing the boundaries of the original kitchen foundation.

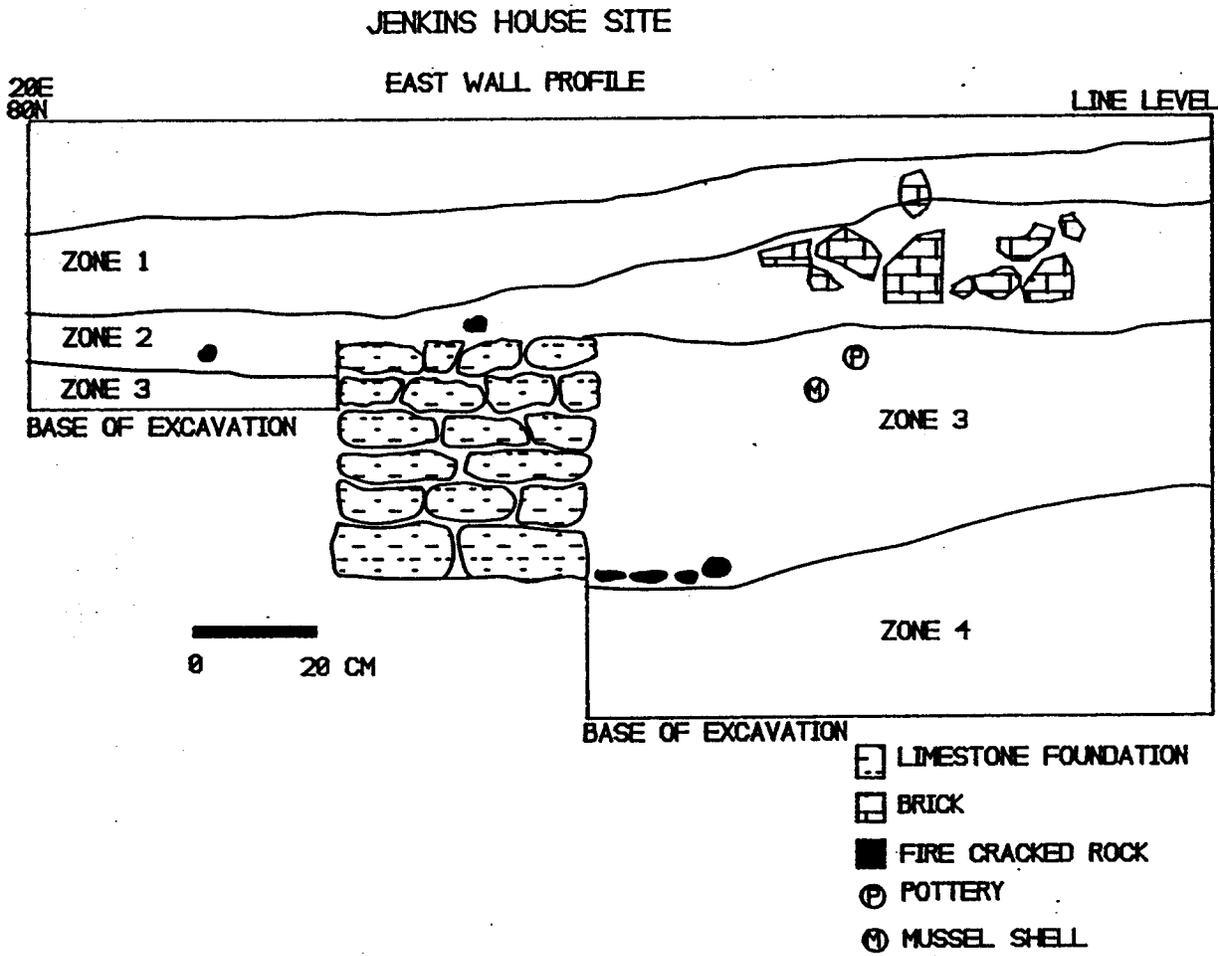


Figure 14. Profile view of original kitchen foundation.

Table 30. Prehistoric materials recovered from 46CB41.

Projectile Points: Madison	N = 5
Drill	N = 1
Secondary Reduction Bifaces	N = 15
Primary Reduction Bifaces	N = 5
Initial Reduction Bifaces	N = 3
Tertiary Flakes	N = 422
Secondary Flakes	N = 292
Primary Flakes	N = 195
Shatter	N = 158
Bladelets	N = 2
Spokeshave	N = 1
Marginally Modified Flakes	N = 3
Notched Flakes	N = 3
Celt	N = 1
Pitted Cobbles	N = 2
Groundstone Fragment	N = 1
Bone Needle Fragment	N = 1
Prehistoric Ceramics	N = 534
Burnt Clay	0.3 gms
Mussel Shell	517.5 gms

Table 31. Historic materials recovered from 46CB41

Ceramics	N = 237	Porcelain Doll Parts	N = 2
Container Glass	N = 420	Clear Lamp Glass	N = 74
Plastic	N = 1	Saw Fragment	N = 1
Bone	1195.0 gms	Lid Closure	N = 1
Tile	N = 1	Horseshoe Nails	N = 2
Window Glass	N = 910	Valve Cap	N = 1
Nails	N = 448	Gaming Piece	N = 1
Tacks	N = 2		
Spikes	N = 8		
Screws	N = 2		
Bolts	N = 2		
Hook	N = 1		
Unglazed Brick Fragments	N = 97		
Mortar Fragments	N = 8		
Flowerpot Fragment	N = 1		
Rimfire Cartridges .22	N = 4		
Buttons	N = 6		
Round Blue Bead	N = 1		
Metal Shoe Part	N = 2		
Bakelite Comb/Brush	N = 1		
Plastic Toothbrush Fragments	N = 3		
Bone Toothbrush Fragment	N = 1		
Molded Red Clay Pipe Bowl	N = 1		

Table 31 continued. Historic materials recovered from 46CB41

Clay pigeon	N = 3
Field Tile Fragment	N = 1
Unidentifiable Metal	N = 17
Unidentifiable Non-Iron/Steel	N = 2
Unidentifiable Plastic	N = 1
Talc	N = 3
Coal	N = 7
Cinders	N = 14
Glass Tubes	N = 2

Site Number 46CB90

Elevation: 550 feet AMSL
 Size: 90,000 square m
 Components: Late Archaic, Early to Late Woodland
 Closest named water: Ohio River
 Type of nearest water: permanent stream
 Distance to nearest water: adjacent north
 Topographic setting: levee
 Slope: less than 5 degrees
 Aspect: open

Site Description:

This prehistoric site was located on a well developed levee near the center of the project area. It had a long, linear shape and had maximum dimensions of 100 m north/south by 900 m east/west. The site consisted of a light scatter of lithic debitage, tools and a few ceramic sherds. The highest concentration of artifacts were recovered from the western one quarter and highest portion of the site. Very few artifacts were recovered towards the east along the levee. This site probably consisted of a temporary campsite or series of campsites on the levee. The site was bordered on the south by low, swampy area and on all other sides by a drop in elevation off the edges of the levee. The soils on which the site was situated were Huntington and Ashton silt loams and was in pasture at the time of the survey.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 32. Temporally diagnostic projectile points recovered indicated the possibility of Late Archaic and Early to Late Woodland/Late Prehistoric occupation at this site. Analysis of the ceramics from the site could only suggest a Woodland occupation at the site. The small assemblage collected from the site included two siltstone, two leached and one sandstone tempered sherd.

Table 32. Materials recovered from site 46CB90.

Projectile Points: Adena (like)	N = 1
Adena	N = 1
Type 1 Triangle	N = 1
Kramer (like)	N = 1
Lamoka	N = 1
Merom-Trimble	N = 1
Secondary Reduction Bifaces	N = 5
Primary Reduction Bifaces	N = 2
Initial Reduction Bifaces	N = 13
Tertiary Flakes	N = 81
Secondary Flakes	N = 99
Primary Flakes	N = 89
Shatter	N = 105
Bifacial Thinning Flakes	N = 2
Notched Flake	N = 1
Marginally Modified Flake	N = 1
Pitted Cobbles	N = 2
Prehistoric Ceramics	N = 5

Site Number 46CB91

Elevation: 545 feet AMSL
 Size: 8400 square m
 Components: unassigned prehistoric
 Closest named water: Ohio River
 Type of nearest water: permanent stream
 Distance to nearest water: 500 m north
 Topographic setting: levee
 Slope: 5 to 10 degrees
 Aspect: south

Site Description:

This prehistoric site was located on the southern side of a well developed levee near the center of the project area - immediately west of 46CB90. It had an oval shape and its maximum dimensions were 60 m north/south by 140 m east/west. The site consisted of a very light scatter of lithic debitage and one biface fragment. The site was bordered on the south by a low, swampy area and by the top of the levee to the north. The eastern and western boundaries were defined by a lack of recovered materials. The soils on which the site was situated were Ashton silt loams and at the time of survey was in thick, secondary growth.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 33. No temporally diagnostic arti-

facts were recovered.

Table 33. Materials recovered from site 46CB91.

Secondary Reduction Biface	N = 1
Tertiary Flakes	N = 6
Secondary Flakes	N = 4
Primary Flakes	N = 3
Shatter	N = 8

Site Number 46CB92.

Elevation: 555 feet AMSL

Size: 15,000 square m

Components: Late Archaic and Late Woodland/Late Prehistoric

Closest named water: Ohio River

Type of nearest water: permanent stream

Distance to nearest water: 300 m north

Topographic setting: levee

Slope: less than 5 degrees

Aspect: open

Site Description:

This prehistoric site consisted of a dense scatter of artifacts in a sod and hay field. The plowed strips afforded excellent surveying conditions. A total of 15 plowed transects passed through or into the limits of the site. Eight of these strips were surveyed twice, the second time after heavy precipitation which assisted in the exposure and recovery of cultural material. The site was roughly oval in shape with maximum dimensions of 120 m north-south and 160 m east-west. It was located at the western end of a levee within the floodplain of the Ohio River. The site was bounded by the Greenbottom swamp to the south, by a swale 9 feet lower in elevation to the north and west and by a lack of artifactual material to the east along the levee. There was an approximately 100 m separation between the boundaries of this site and site 46CB98 to the east along the levee. The soils on the site were dominated by the Ashton silt loam series with 3% to 8% slopes. They are characterized as occurring on long, narrow areas and are subject to slight sheet erosion. Materials observed and collected from the surface of the site included lithic tools, ceramics and groundstone artifacts. Fire-cracked rock was also moderately dense across the site. Most of the artifacts were concentrated on the northern slope of the levee toward the river.

All cultural material observed on the surface of the site was collected but not provenienced. Other than a higher concentration of artifacts on the northern slope of the terrace no artifact patterning was observed during field observations. On the basis of the temporally diagnostic artifacts recovered this site was probably occupied first during the Late Archaic and then during

the Late Woodland/Late Prehistoric periods. A small number of siltstone and shell tempered ceramics were recovered from this site suggesting both a Woodland and Late Prehistoric occupation at the site. A complete list of the materials recovered is given in Table 34.

Table 34. Materials recovered from site 46CB92.

Projectile Points:	Madison	N = 4
	Lamoka	N = 1
	Lamoka (like)	N = 1
	Bottleneck Stemmed	N = 1
	McWhinney Heavy Stemmed	N = 3
	Motley	N = 2
	Merom-Trimble	N = 3
Drill		N = 1
Secondary Reduction Bifaces		N = 16
Primary Reduction Bifaces		N = 10
Initial Reduction Bifaces		N = 17
Tertiary Flakes		N = 201
Secondary Flakes		N = 211
Primary Flakes		N = 149
Shatter		N = 217
Celt		N = 1
Groundstone		N = 1
Hammerstones		N = 2
Pitted Cobbles		N = 4
Modified Hematite		N = 2
Prehistoric Ceramics		N = 5
Bone		97.2 gms

Site Number 46CB93

Elevation: 545 feet AMSL
 Size: 24,000 square m
 Components: unassigned prehistoric
 Closest named water: Ohio River
 Type of nearest water: permanent stream
 Distance to nearest water: 800 m north
 Topographic setting: levee
 Slope: less than 5 degrees
 Aspect: open

Site Description:

This prehistoric site was located on a well developed levee near the western end of the project area. It had an elliptical shape and had maximum dimensions of 80 m north/south by 300 m east/west. The site consisted of a very light scatter of lithic debitage and two initial reduction biface fragment. The site was bordered on all sides by an approximately five foot drop

in elevation off the edges of the levee. The soils on which the site was situated were Ashton silt loams and at the time of the survey the ground was covered with soybean stubble.

Each of the five plowed strips were surveyed and all cultural materials observed on the surface of the site were collected. The items collected are listed in Table 35. No temporally diagnostic artifacts were recovered, and the site appeared to simply consist of a surface lithic scatter.

Table 35. Materials recovered from site 46CB93.

Initial Reduction Bifaces	N = 2
Marginally Modified Flake	N = 1
Tertiary Flakes	N = 6
Secondary Flakes	N = 1
Primary Flakes	N = 6
Shatter	N = 7

Site Number 46CB94

Elevation: 545 feet AMSL
Size: 8400 square m
Components: historic
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 500 m north
Topographic setting: levee
Slope: 5 to 10 degrees
Aspect: south

Site Description:

This historic site exhibited boundaries that were nearly the same as the prehistoric site 46CB91. The historic site was located on the southern side of a well developed levee near the center of the project area immediately west of 46CB90. It had an oval shape and had maximum dimensions of 60 m north/south by 140 m east/west. The site consisted of a very light scatter of historic ceramics, glass and brick fragments. The site was bordered on the south by low, swampy area and by the top of the levee to the north. The eastern and western boundaries were defined by a lack of recovered materials. The soils on which the site was situated were Ashton silt loams and thick, secondary growth was the observed vegetation in the area.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 36.

Table 36. Materials recovered from site 46CB94.

Historic Ceramics	N = 5
Container Glass	N = 14
Window Glass	N = 1
Brick Fragments	N = 2

Site Number 46CB95

Elevation: 545 feet AMSL
Size: 5000 square m
Components: historic
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 400 m north
Topographic setting: levee
Slope: 5 to 10 degrees
Aspect: south

Site Description:

This historic site was located on the southern side of a well developed levee near the center of the project area. The Clover site (46CB40) was located directly to the north. The site had an oval shape and had maximum dimensions of 50 m north/south by 100 m east/west. The site consisted of a very light scatter of one historic ceramic sherd and glass fragments. The site was bordered on the south by low, swampy area and by the top of the levee to the north. The eastern and western boundaries were defined by a lack of recovered materials. The soils on which the site was situated were Ashton and Melvin silt loams and the site was situated in pasture and hay at the time of the present survey.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 37.

Table 37. Materials recovered from site 46CB95.

Historic Ceramic	N = 1
Container Glass	N = 6
Window Glass	N = 5

Site Number 46CB96

Elevation: 550 feet AMSL
Size: 6000 square m
Components: historic

Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 800 m north
Topographic setting: second terrace
Slope: less than 5 degrees
Aspect: open

Site Description:

This historic site was located on the second terrace of the Ohio River and immediately east of 46CB41, the Jenkins House site. The site had an oval shape and had maximum dimensions of 60 m north/south by 100 m east/west. The site consisted of a very light scatter of historic ceramics, container and window glass, brick fragments and one nail. The site was bordered on the north by the Greenbottom swamp and by West Virginia State Route 2 to the south. The eastern and western boundaries were defined by a lack of recovered materials. The soils on which the site was situated were Ashton silt loams and the site was situated in a horse pasture at the time of the present survey.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 38.

Table 38. Materials recovered from site 46CB96.

Historic Ceramics	N = 3
Container Glass	N = 4
Window Glass	N = 3
Nail	N = 1
Brick Fragments	N = 6
Unidentifiable Metal Fragments	N = 3

Site Number 46CB97

Elevation: 550 feet AMSL
Size: 2500 square m
Components: historic
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 800 m north
Topographic setting: second terrace
Slope: less than 5 degrees
Aspect: open

Site Description:

This historic site was located on the second terrace of the Ohio River and immediately west of 46CB41, the Jenkins House site. A small, unnamed stream was located between the two sites. Site 46CB97 had an oval shape and had maximum dimensions of 60 m north/south by 100 m east/west. The site consisted of a very light scatter of one historic ceramic sherd and container, window and brick fragments. The site was bordered on the north by a five foot drop

in elevation, to the south by West Virginia State Route 2, to the east by the unnamed creek and the west by a farm access road. The soils on which the site was situated were Ashton silt loams and the site was situated in grass at the time of the present survey.

All cultural material observed on the surface of the site was collected. The items collected are listed in Table 39.

Table 39. Materials recovered from site 46CB97.

Historic Ceramic	N = 1
Container Glass	N = 1
Window Glass	N = 1
Brick Fragments	N = 4

Site Number 46CB98.

Elevation: 560 feet AMSL
Size: 35,000 square m
Components: Late Archaic and Late Woodland/Late Prehistoric
Closest named water: Ohio River
Type of nearest water: permanent stream
Distance to nearest water: 200 m north
Topographic setting: levee
Slope: less than 5 degrees
Aspect: open

Site Description:

This prehistoric site was situated on a levee adjacent to the Ohio River. It was located during pedestrian survey of 13 plowed transects around the Clover Site (46CB40) which was situated immediately to the north. The site was generally linear in shape, following the contour of the levee. There did not appear to be a gap in artifact recovery density between this site and the Clover site nor were the types of artifacts observed and recovered grossly dissimilar. It appeared that this site was related to Clover; however, it possibly represented a slightly less intensively occupied village area. It had a maximum northeast-southwest dimension of 350 m and a northwest-southeast dimension of 100 m. It was bordered on the south by a 15 to 20 ft drop in elevation to the Greenbottom Swamp and to the north by 5 ft depression or swale. The eastern boundary was also demarcated by a 5 ft swale and to the west by a drop in artifact density. Site 46CB92 was located approximately 100 m to the west along and at the extreme western end of the levee. The site was situated on Ashton silt loam and was in grass and hay at the time of the present investigations. Artifact density was moderate to high and generally consistent across the site. Fire-cracked rock density was relatively low. A low to moderate density of mussel shell was observed within the plowed strips.

All material culture observed on the site's surface was examined with all diagnostic artifacts, tools and ceramic sherds being recovered. Also, a

representative sample of lithic debitage was obtained by collecting all artifacts observed in three transects. Since it appeared that there was no visible patterning to the materials it was decided simply to collect all the aforementioned artifacts.

The temporally diagnostic artifacts recovered indicated that this site was probably occupied during the Late Archaic and Late Woodland/Late Prehistoric periods. Sherds recovered from the site included shell; siltstone and grit tempering materials in their paste suggesting both Woodland and Late Prehistoric occupations at the site. A complete list of the recovered artifacts is given in Table 40.

Table 40. Materials recovered from site 46CB98.

Projectile Points: Madison	N = 4
Lamoka (like)	N = 1
Lamoka	N = 1
Brewerton Corner Notched	N = 1
Secondary Reduction Bifaces	N = 13
Primary Reduction Bifaces	N = 5
Initial Reduction Bifaces	N = 23
Cores	N = 2
Notched Flakes	N = 1
Marginally Modified Flakes	N = 7
Tertiary Flakes	N = 15
Secondary Flakes	N = 110
Primary Flakes	N = 88
Shatter	N = 135
Chopper	N = 1
Axe	N = 1
Multi-purpose groundstone	N = 1
Miscellaneous groundstone	N = 1
Prehistoric Ceramics	N = 9
Bone	12.2 gms

Site Number 46CB99

Elevation: 550 feet AMSL

Size: 110,000 square m

Components: Late Archaic, Early Woodland and Late Woodland/Late Prehistoric

Closest named water: Ohio River

Type of nearest water: permanent stream

Distance to nearest water: adjacent m north

Topographic setting: levee

Slope: less than 5 degrees