# VII. ANALYSIS

## A. STRATIGRAPHIC UNITS

A series of stratigraphic units (SUs) were defined as a means for examining site formation processes at Locust Grove and for organizing the analysis of the artifact assemblages recovered from the various depositional contexts at Site 7NC-F-73. In essence, a stratigraphic unit is a formal device to "lump" or combine deposits from different excavation contexts, allowing analysis to proceed according to somewhat more inclusive data sets. As the name implies, the principal criteria for constructing each stratigraphic unit were soil color and texture, and stratigraphic position, i.e., depth below ground surface/datum and physical relationship to other stratigraphic contexts. It should be noted that only deposits in the two block excavations were assigned SU designations, the reason being that the blocks, and particularly the East Block, exposed relatively large portions of the site. Unlike isolated test units, the contiguous units that made up the block excavations allowed for the detailed examination of the stratigraphic relationships between deposits across a wide area, thus providing a clearer picture of the ways in which at least parts of the site, in this case the front and west side yards, were created. Several exceptions to the "rule" of contiguity have been made, however. As noted in the previous chapter, Test Units 8, 46, 63, and 64 were considered as part of the East Block excavation. Due to their proximity to the block, it was fairly easy to correlate the various stratigraphic contexts exposed in the open area excavation across the intervening space.

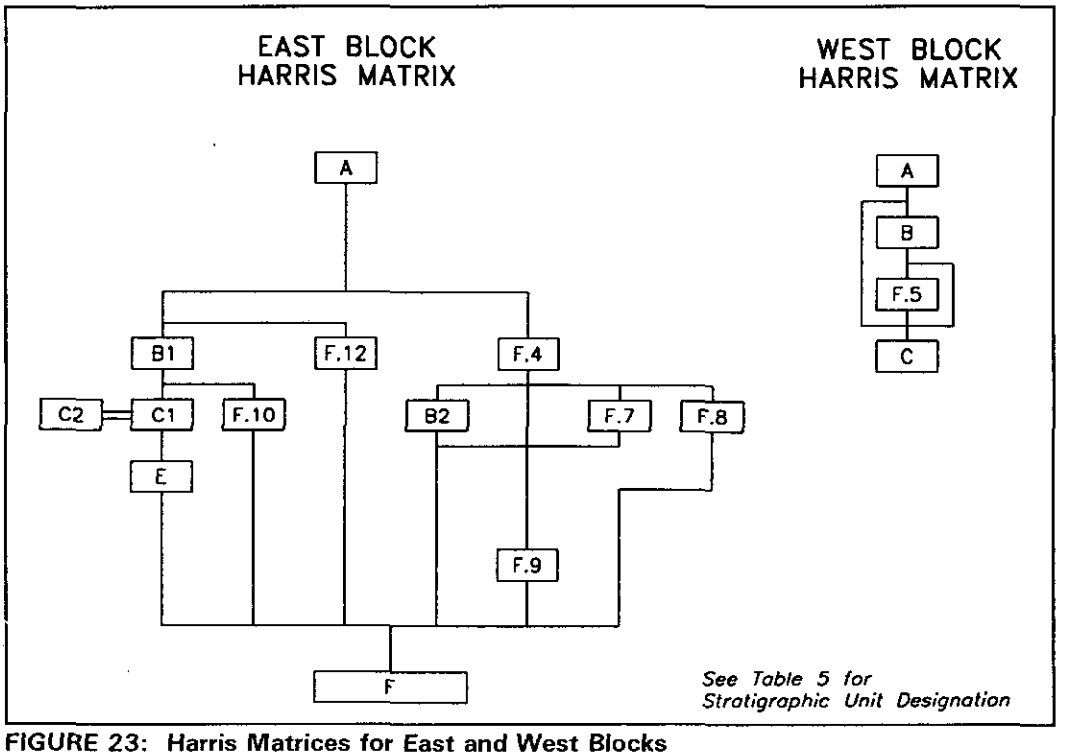


**FIGURE 23: Harris Matrices for East and West Blocks**

TABLE 5

STRATIGRAPHIC CONTEXTS, EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

| STRATIGRAPHIC CONTEXTS | |
|---|---|
| *STRATIGRAPHIC UNIT A* | |
| Landscaping Deposit/Sheet Refuse<br>Stratum A: Test Units 5, 8, 20-30, 46, 49-53, 61<br>Stratum B: Test Unit 22 | Number of Artifacts = 1,813<br>MCD = 1851 (N=66*) TPQ = 1920 |
| *STRATIGRAPHIC UNIT B1* | |
| Landscaping Deposit<br>Stratum B: Test Units 5, 8, 20, 21, 24, 27, 28, 46, 49-52, 54-58, 63, 64<br>Stratum C: Test Unit 5 | Number of Artifacts = 2,178<br>MCD = 1860 (N=92) TPQ = 1880 |
| *STRATIGRAPHIC UNIT B2* | |
| Landscaping Deposit<br>Stratum B: Test Units 25, 29, 30, 53, 59-62 | Number of Artifacts = 491<br>MCD = 1849.5 (N=26) TPQ = 1840 |
| *STRATIGRAPHIC UNIT C1 (includes Feature 11)* | |
| Landscaping Deposit/Demolition Fill<br>Stratum C: Test Units 5, 8, 20, 21, 24, 27, 28, 49-52, 55-57, 63, 64<br>Stratum D: Test Units 5 and 24<br>Stratum E: Test Unit 5 | Number of Artifacts = 2,242<br>MCD = 1855 (N=72) TPQ = 1877 |
| *STRATIGRAPHIC UNIT C2* | |
| Fill/Landscaping Deposit<br>Stratum C: Test Units 46, 54, 58 | Number of Artifacts = 422<br>MCD = 1849 (N=15) TPQ = 1840 |
| *STRATIGRAPHIC UNIT E* | |
| Surface/Midden<br>Stratum E: Test Units 8, 20, 24, 27, 28, 49-52, 54-58, 63, 64 | Number of Artifacts = 1,868<br>MCD = 1851 (N=88) TPQ = 1846 |
| *FEATURE 2 (associated with Stratigraphic Unit E)* | |
| Pit<br>Test Unit 5 | Number of Artifacts = 42<br>MCD = 1843 (N=9) TPQ = 1830 |
| *FEATURE 4* | |
| Filled Depression/Refuse Deposit<br>Test Units 22, 23, 25, 26, 29, 30, 53, 59-62 | Number of Artifacts = 2,435<br>MCD = 1857 (N=64) TPQ = 1857 |
| *FEATURE 7* | |
| Pit<br>Test Unit 26 | Number of Artifacts = 16 TPQ = 1830 |
| *FEATURE 8* | |
| Possible Post<br>Test Unit 22 | Number of Artifacts = 13 TPQ = 1850 |
| *FEATURE 9* | |
| Possible Pit House/Treefall<br>Test Units 23, 26, 30, 53, 59-62; Trench 1 | Number of Artifacts = 16 TPQ = 1820 |
| *FEATURE 10* | |
| Filled Depression/Refuse Deposit<br>Test Units 21 and 22 | Number of Artifacts = 211<br>MCD = 1855 (N=20) TPQ = 1840 |
| *FEATURE 12* | |
| Pit/Refuse Deposit<br>Test Unit 63 | Number of Artifacts = 222<br>MCD = 1856 (N=19) TPQ = 1840 |

* Number of vessels

TABLE 6

STRATIGRAPHIC CONTEXTS, WEST BLOCK, LOCUST GROVE SITE (7NC-F-73)

| STRATIGRAPHIC CONTEXT | NUMBER OF ARTIFACTS |
|---|---|
| *STRATIGRAPHIC UNIT A* | |
| Landscaping Deposit/Sheet Refuse<br>Stratum A: Test Units 3, 4, 31-41 | Number of Artifacts = 2,136<br>MCD = 1861 (N=31*) TPQ = 1965 |
| *STRATIGRAPHIC UNIT B* | |
| Landscaping Deposit<br>Stratum B: Test Units 4, 32-41 | Number of Artifacts = 973<br>MCD = 1828 (N=10) TPQ = 1880 |
| *FEATURE 5* | |
| Pit/Filled Depression/Refuse Deposit<br>Test Units 33-41 | Number of Artifacts = 764<br>MCD = 1823 (N=16) TPQ = 1883 |

* Number of vessels

The SUs are summarized in Tables 5 and 6; generally speaking, each SU follows the stratum designations assigned in the field, so SU A corresponds to Stratum A, and so forth. However, in several instances it was possible to combine strata, again, based on soil characteristics. In a couple of cases, strata were split—this was discussed earlier in reference to Stratum B in the East Block, and is also true for Stratum C, also in the East Block. The latter was divided into SU C1, corresponding to the limits of Feature 11, and SU C2, which lay beyond the feature. Features retained their in-field designations.

Once the analysis of the field data had been completed and SUs assigned, it was then possible to reconstruct the stratigraphic relationships in the two blocks. Because of the size of the excavations, particularly the East Block, it was not possible to show all of the various strata and features in a single profile drawing or set of drawings. Using the matrix developed by Edward Harris (1989), it is possible, however, to depict the stratigraphic sequences in the two blocks schematically. The Harris Matrix for the two blocks is presented in Figure 23.

Crossmends are also indicative of the relationships between stratigraphic units. As noted in Tables 5 and 6, many, if not most, of the deposits excavated in the two blocks appear to be the result of landscaping activities. Landscaping could involve cutting and filling and the movement of soils from one part of the site to another, resulting in the mixture of earlier and later materials which can obscure or even eliminate their original use or depositional contexts (LBA 1994).

Ceramic crossmends, recorded during analysis and summarized in Table 7, indicate the extent to which this has occurred in the front and side yards of Locust Grove. Sherds from the two most extensive intact nineteenth-century deposits in the East Block, Feature 4 and SU E, mend with fragments from overlying deposits, indicating a degree of truncation and subsequent mixing. For

TABLE 7

FREQUENCY OF CERAMIC CROSSMENDS
EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

| PROVENIENCE | STRATIGRAPHIC UNIT | | | | | FEATURE | | |
|---|---|---|---|---|---|---|---|---|
| | A | B1 | B2 | C1 | E | 4 | 10 | 12 |
| A | . | 5 | 1 | 7 | 2 | 6 | . | . |
| B1 | 5 | . | . | 8 | . | 3 | 1 | 1 |
| B2 | 1 | . | . | . | . | 1 | . | . |
| C1 | 7 | 8 | . | . | 3 | 3 | . | . |
| E | 2 | . | . | 3 | . | 2 | . | . |
| Feature 4 | 6 | 3 | 1 | 3 | 2 | . | . | 1 |
| Feature 10 | . | 1 | . | . | . | . | . | 1 |
| Feature 12 | . | 1 | . | . | . | 1 | 1 | . |

example, eight mends were identified between Feature 4 and the overlying SU A, while a number of mends were also noted between the feature and landscaping deposits in the western half of the block. Sherds from SU E mend with fragments from the immediately overlying SU C1, as well as with sherds from SU A and from Feature 4. Mixing was also evident in the West Block, but to a much lesser extent. Only one mend was noted between Feature 5 and the overlying deposits, while three crossmends were documented between SU A and SU B.

## B. ARTIFACT ANALYSIS

### *1. Introduction*

As shown in Table 8, over 22,000 artifacts were recovered during the three phases of investigation at Site 7NC-F-73, 14,670 of which are identifiable in terms of the functional categories described by South (1977). The majority of the Locust Grove artifacts fall into South's (1977) Kitchen Group, which is dominated by ceramics; bottles and other kitchen-related glassware are represented by relatively minor percentages of the functionally identifiable artifacts. Architectural items (not including brick and other building materials) make up less than one quarter of the collection, and consist mainly of nails (many of which are too corroded to identify) and window glass. Activities-related artifacts, the third most highly represented functional group, account for just over four percent of the Locust Grove collection. The majority of these items are classified as being associated with household activities, and consist almost entirely of unglazed redware flowerpot sherds. The other functional groups (Arms, Furnishings, Clothing, Personal, and Tobacco) are all represented in the Site 7NC-F-73 collection by relatively small numbers of artifacts, and none of these groups account for more than 0.51 percent of the functionally identifiable items. The balance of the collection, as noted at the bottom of Table 8, consists of brick and other building materials (mortar, roofing slate, and plaster), unidentifiable

TABLE 8

ARTIFACT PATTERN ANALYSIS, LOCUST GROVE SITE (7NC-F-73)

| ARTIFACT GROUP/CLASS | COUNT | PERCENTAGE |
|---|---|---|
| *KITCHEN* | | |
| Ceramics | 9,348 | 63.72 |
| Bottles | 831 | 5.66 |
| Tumblers/Stemware | 87 | 0.59 |
| Jars/Containers | 58 | 0.39 |
| Tableware | 45 | 0.31 |
| Other | 9 | 0.06 |
| Kitchen Subtotal | 10,378 | 70.74 |
| *ARCHITECTURAL* | | |
| *Wrought Nails* | *276* | *1.88* |
| Cut Nails | 564 | 3.84 |
| Wire Nails | 181 | 1.23 |
| Unidentified Nails | 1,042 | 7.10 |
| Crown Glass | 88 | 0.60 |
| Broad Glass | 994 | 6.78 |
| Other Window Glass | 183 | 1.25 |
| Architectural Hardware | 8 | 0.05 |
| Tacks, Staples, etc. | 14 | 0.09 |
| Plumbing/Electrical | 3 | >0.05 |
| Architectural Subtotal | 3,353 | 22.86 |
| *FURNISHINGS* | | |
| Lighting Related | 19 | 0.13 |
| Furniture Hardware | 9 | 0.06 |
| Furnishings Subtotal | 28 | 0.19 |
| *ARMS* | | |
| Cartridges | 8 | 0.05 |
| Gunflints | 1 | >0.05 |
| Arms Subtotal | 9 | 0.06 |
| *CLOTHING* | | |
| Fasteners | 25 | 0.17 |
| Sewing | 3 | >0.05 |
| Shoes | 3 | >0.05 |
| Clothing Subtotal | 31 | 0.21 |
| *PERSONAL* | | |
| Coins | 5 | >0.05 |
| Hygiene/Grooming | 8 | 0.05 |
| Jewelry | 3 | >0.05 |
| Pharmaceutical | 53 | 0.36 |
| Other | 6 | >0.05 |
| Personal Subtotal | 75 | 0.51 |

Table 8 (continued)

| ARTIFACT GROUP/CLASS | COUNT | PERCENTAGE |
|---|---|---|
| *TOBACCO PIPES* | | |
| Tobacco Pipes | 14 | 0.09 |
| Tobacco Subtotal | 14 | 0.09 |
| *ACTIVITIES* | | |
| Hardware | 145 | 0.99 |
| Farm Related | 9 | 0.06 |
| Livestock | 3 | >0.05 |
| Tools | 7 | 0.05 |
| Writing | 2 | >0.05 |
| Household | 603 | 4.11 |
| Toys | 10 | 0.07 |
| Miscellaneous | 3 | >0.05 |
| Activities Subtotal | 782 | 5.33 |
| SITE TOTAL * | 14,670 | 100.00 |

*Does not include faunal (1,151), floral (11), building materials (3,485), unidentifiable unglazed redware (895), unidentified glass (764), unidentified metal (479), and miscellaneous (159)

glass, unidentified metal fragments, unglazed redware sherds that could not be identified as to function, faunal and floral remains, and miscellaneous artifacts. The latter category includes items such as plastic, rubber, pieces of lime, and other unidentified artifacts.

### 2. *Kitchen Artifacts*

As shown in Table 8, 70.74 percent of the Locust Grove assemblage consists of kitchen-related artifacts, a total of 10,378 items. Of these, the overwhelming majority are ceramic fragments (12,816), accounting for 90.1 percent of the kitchen assemblage. Whitewares, first produced around 1815, and redwares are by far the most highly represented ware types at Site 7NC-F-73, and make up 42.8 and 43.9 percent, respectively, of the ceramic assemblage. Along with whiteware, other nineteenth- and twentieth-century ceramic types recovered from the site include ironstone and yellowware, which together account for an additional 1.4 percent of the site-wide ceramic assemblage. Earlier ware types (i.e., eighteenth and early nineteenth centuries), include 274 creamware (2.9%), 605 pearlware (6.5%), seven delft (>0.1%), three white salt-glazed stoneware (>0.1%), two early cream-colored refined earthenware (>0.1%), four yellow-bodied lead-glazed earthenware (>0.1%), and 38 refined red-bodied earthenware (0.4%). Also recovered were 41 fragments of gray salt-glazed stoneware (0.4%), 42 fragments of hard-paste porcelain (0.4%), 16 sherds of oriental porcelain (0.2%), and four fragments of soft-paste porcelain (>0.1%).

A total of 981 ceramic vessels were reconstructed from fragments recovered during the Locust Grove investigations (Table 9). Over 80 percent of the vessels from the site are either redware (40.16%) or whiteware (39.96%). Of the remainder, pearlware is represented by 80 vessels, accounting for just over eight percent of the total. Yellowware, creamware, stoneware, hard-paste

TABLE 9

SITEWIDE CERAMIC MNVS BY WARE TYPE, LOCUST GROVE SITE (7NC-F-73)

| WARE TYPE | COUNT | PERCENTAGE |
|---|---|---|
| Redware | 394 | 40.2 |
| Whiteware | 392 | 40.0 |
| Pearlware | 80 | 8.2 |
| Yellowware | 21 | 2.1 |
| Creamware | 20 | 2.0 |
| Stoneware | 18 | 1.8 |
| Hard-Paste Porcelain | 13 | 1.3 |
| Ironstone | 12 | 1.2 |
| Refined Red Earthenware | 10 | 1.0 |
| Oriental Porcelain | 7 | 0.7 |
| Soft-Paste Porcelain | 4 | 0.4 |
| Delft | 3 | 0.3 |
| Unidentified Refined Earthenware | 3 | 0.3 |
| Buff/White-Bodied Earthenware | 2 | 0.2 |
| Early Cream-Colored Earthenware | 1 | 0.1 |
| Buff/Yellow-Bodied Earthenware | 1 | 0.1 |
| TOTAL | 981 | 100.0 |

porcelain, ironstone, and refined red earthenware together account for an additional 9.58 percent. The balance of the vessel assemblage is comprised of oriental porcelain, soft-paste porcelain, delft, unidentified refined earthenware, buff/white-bodied earthenware, early cream-colored earthenware, and buff/yellow-bodied earthenware.

Of the functionally identifiable vessels, tablewares are predominant (Table 10), followed in order of frequency by teaware; food storage vessels; multifunctional wares (essentially kitchen vessels, such as dishes or pans, used for both food preparation and service); miscellaneous (mainly flowerpots); food preparation vessels, which, in this instance, mainly consist of milk pans; hygiene wares (chamberpots); household-related vessels; and beverage containers. As shown in Table 10, 398 of the reconstructed vessels (40.6%) were unidentifiable as to function, although most appear to be hollowwares. The high percentage of unidentified vessels is due to their low completeness. Only 11 vessels (1.1%) in the Locust Grove assemblage are more than 26 percent complete; of those that fall into the 0-25 percent range, most are near the very low end and many are represented by only one or two sherds. The extremely low completeness of these vessels suggests that the principal refuse deposits for broken ceramics lay elsewhere on the property.

The ceramic vessel assemblage, arranged in Table 11 by function and ware type, falls into a predictable pattern for a site occupied for much of the nineteenth century. All but two of the

TABLE 10

SUMMARY OF CERAMIC VESSEL FUNCTIONS, LOCUST GROVE SITE (7NC-F-73)

| FUNCTION | COUNT | PERCENTAGE |
|---|---|---|
| Teawares | 156 | 15.9 |
| Tablewares | 238 | 24.3 |
| Food Preparation | 25 | 2.6 |
| Food Storage | 66 | 6.7 |
| Hygiene | 6 | 0.6 |
| Household | 2 | 0.2 |
| Multifunction (food storage) | 63 | 6.4 |
| Beverage | 1 | 0.1 |
| Miscellaneous | 26 | 2.6 |
| Unidentified | 398 | 40.6 |
| TOTAL | 981 | 100.0 |

identifiable kitchen-related redware vessels are associated with food preparation, storage, or the multifunctional category of food preparation/service (for example, baking dishes that could be brought to the table). The refined wares (pearlware, whiteware, ironstone, creamware, and porcelain), on the other hand, are largely teawares (cups, saucers, and bowls) and tablewares (plates, platters, serving bowls, and tureens). Of the three identifiable yellowware vessels, one (a bowl) is classified as tableware, and two are classified as food preparation/serving forms. The two identifiable stoneware vessels were used for food storage; of the three refined red earthenware vessels, two (including an engine-turned teapot) are classified as teaware, while the third falls into the multifunctional category (see Table 11).

Of the 583 functionally identifiable vessels recovered from the site, 578 were collected from the East (N=493) and West (N=85) blocks. The distributions of these vessels by provenience, ware type, variety, and function are presented in Appendices D and E.

Apart from the marked difference in the number of reconstructed vessels, the two block excavations were also characterized by differences in the variety of wares present. For example, 23 of the vessels from the West Block (over one-quarter) are unglazed redware flower pots, most of which were recovered from SU A. In contrast, only three flower pots were present in all of the East Block. By factoring out the unglazed redware, the two blocks contain comparable percentages of redware vessels (26.8% in the East Block, and 27.3% in the West Block [with most from Feature 5]), although the West Block produced no glazed redware milk pans compared to the 23 recovered from the East Block (see Appendices D and E). On the other hand, porcelain teaware and tableware vessels are more prevalent, both in absolute numbers and in percentage, in the West Block.

TABLE 11

SITEWIDE CERAMIC MNVS BY WARE TYPE AND FUNCTIONAL CATEGORY
LOCUST GROVE SITE (7NC-F-73)

| WARE TYPE | FUNCTIONAL CATEGORY | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Teaware | Tableware | Food Prep | Food Storage | Hygiene | Household | Multi-function | Beverage | Misc. | Unident. | |
| Redware | . | 2 | 25 | 64 | 3 | . | 60 | 1 | 26 | 213 | 394 |
| Whiteware | 114 | 186 | . | . | 3 | 2 | . | . | . | 87 | 392 |
| Pearlware | 27 | 31 | . | . | . | . | . | . | . | 22 | 80 |
| Yellowware | . | 1 | . | . | . | . | 2 | . | . | 18 | 21 |
| Creamware | . | 8 | . | . | . | . | . | . | . | 12 | 20 |
| Stoneware | . | . | . | 2 | . | . | . | . | . | 16 | 18 |
| Hard-Paste Porcelain | . | 5 | . | . | . | . | . | . | . | 8 | 13 |
| Ironstone | 7 | 4 | . | . | . | . | . | . | . | 1 | 12 |
| Refined Red Earthenware | 2 | . | . | . | . | . | 1 | . | . | 7 | 10 |
| Oriental Porcelain | 5 | . | . | . | . | . | . | . | . | 2 | 7 |
| Soft-Paste Porcelain | 1 | 1 | . | . | . | . | . | . | . | 2 | 4 |
| Delft | . | . | . | . | . | . | . | . | . | 3 | 3 |
| Unident. Refined | . | . | . | . | . | . | . | . | . | 3 | 3 |
| Buff/White Earthenware | . | . | . | . | . | . | . | . | . | 2 | 2 |
| Buff/Yellow Earthenware | . | . | . | . | . | . | . | . | . | 1 | 1 |
| Early Cream-Colored | . | . | . | . | . | . | . | . | . | 1 | 1 |
| TOTAL | 156 | 238 | 25 | 66 | 6 | 2 | 63 | 1 | 26 | 398 | 981 |

Overall, the functionally identifiable wares from the West Block are rather limited in their variety. In SU A, which yielded a total of 44 vessels, 15 (over one-third) are unglazed redware flower pots, while the five remaining redware vessels include four multifunctional forms (preparation and serving vessels) and a glazed pan used for food preparation. Tablewares include a plate, bowl, and miscellaneous forms in plain porcelain, a plain pearlware plate, three shell edge pearlware plates (one blue and two green shell edge), and a pearlware plate with an embossed rim motif. Table forms in whiteware include an undecorated bowl and two miscellaneous tablewares, a blue transfer-printed plate, an overglaze decal-decorated plate (1880-1990), and a bowl with simple banded decoration. Teawares from SU A include an overglaze-decorated oriental porcelain saucer/bowl, a plain creamware cup, an engine-turned refined red earthenware teapot, a miscellaneous form in plain pearlware, an underglaze blue handpainted cup, a miscellaneous form in underglaze polychrome handpainted pearlware, and a plain whiteware saucer. Fragments of a colored glaze whiteware jardiniere, an ornamental container used for plants or flowers or to hold a flowerpot, were also present.

Sherds from only 10 identifiable vessels were recovered from SU B, seven of which are redwares—six flowerpots and a glazed food preparation/serving vessel. Refined wares from SU B include a feather-edge creamware plate, a green shell edge pearlware plate, and a Victorian majolica jardiniere (1870-1900).

Feature 5 contains the earliest ceramic assemblage identified at Locust Grove, with the 16 datable vessels yielding an MCD of 1824. The mean beginning and mean ending dates of 1776 and 1871 derived from these vessels, however, span nearly a century, a period during which the property was occupied by a number of households, including both owners and tenants. The fact that the ceramics in Feature 5 were recovered along with bottle glass postdating 1880 suggests that these vessels were deposited as part of a clean-up effort toward the end of the nineteenth century.

Among the 31 reconstructed vessels in Feature 5 are 19 redware forms (61% of the assemblage), including two flowerpots, six glazed storage jars, a porringer, a chamberpot, and nine food preparation/serving vessels. The latter include two cookpots that would be brought to the table, and five trailed slipware pans used for baking and serving.

The refined wares include porcelain, ironstone, pearlware, thin-bodied red earthenware, and whiteware. The 11 teawares, which account for nearly all of the non-redware vessels from Feature 5, include cups and/or saucers/bowls in plain oriental porcelain, overglaze decorated oriental porcelain, plain ironstone, plain and blue underglaze handpainted pearlware, and plain and embossed whiteware. An engine-turned red earthenware teapot is also represented in the assemblage. The single refined tableware form in this deposit is a plain oriental porcelain plate.

The 493 functionally identifiable vessels from the East Block excavations are quite varied in terms of ware types and decorative varieties. Moreover, none of the East Block ceramic assemblages can be attributed to a single household. As shown in Table 12, the mean beginning and mean ending dates for the ceramic vessel assemblages (not including redware) span a minimum of 56 years, from the 1810s to the turn of the twentieth century, encompassing the

TABLE 12

MEAN BEGINNING AND MEAN ENDING DATES
EAST AND WEST BLOCKS, LOCUST GROVE SITE (7NC-F-73)

| PROVENIENCE | NUMBER OF VESSELS | MEAN BEGINNING DATE | MEAN ENDING DATE |
|---|---|---|---|
| *EAST BLOCK* | | | |
| SU A | 66 | 1812 | 1890 |
| SU B1 | 92 | 1817 | 1902 |
| SU B2 | 26 | 1811 | 1888 |
| SU C1 | 72 | 1817 | 1893 |
| SU C2 | 15 | 1819 | 1879 |
| SU E | 88 | 1819 | 1884 |
| Feature 2 | 9 | 1815 | 1871 |
| Feature 4 | 64 | 1817 | 1898 |
| Feature 10 | 20 | 1814 | 1895 |
| Feature 12 | 19 | 1820 | 1892 |
| *WEST BLOCK* | | | |
| SU A | 31 | 1811 | 1910 |
| SU B | 10 | 1799 | 1858 |
| Feature 5 | 16 | 1776 | 1871 |

households of Samuel Pennington, Pere Hendrickson, Samuel Pennington, Jr., James Hoffecker, and Franklin Pennington. The MCDs for the East Block deposits almost all fall into the period 1849-1860 (see Table 12), and with the exception of a single unidentifiable decal-decorated piece, none of the East Block vessels have beginning dates of manufacture later than 1850. Because of the broad time span represented by the various assemblages, Miller's CC Index (Miller 1980, 1991), which, under suitable conditions, can provide a scale to evaluate a household's expenditures for ceramics, was not employed. For Locust Grove, or for any site, the utility of averaging the ceramic values from several households is questionable. However, some general observations concerning the acquisition and use of ceramics by the occupants of Locust Grove during the nineteenth century can be made.

As shown in Appendix D, redware vessels recovered from the East Block deposits make up the lion's share of the utilitarian kitchen wares, i.e., those forms used for the storage and/or preparation of food (Plate 13). Of the 134 vessels identified as being related to food storage/preparation (27.2% of the East Block vessels), 129 are redwares, including all of the milk pans. The 23 milk pans represented in the East Block assemblages indicate a certain level of economic independence during the course of the nineteenth century; the agricultural census data from 1850, 1860, and 1870 show that the Locust Grove farm was producing, on average, about 320 pounds of butter per year, probably for household consumption and for sale to local merchants. Non-redware kitchen forms include two gray salt-glazed storage vessels (Feature 4), an embossed yellowware bowl (Feature 4), a plain yellowware pie plate (SU A), and a refined

red earthenware food preparation/serving vessel (Feature 4). Redware food preparation/serving vessels from the East Block include a number of shallow slip-decorated forms, often referred to as "pie plates," that served as baking and serving dishes; several shallow hollowware pans (Plate 14), used for puddings, cakes, or casserole-type dishes, were also represented in the East Block assemblages. The tablewares recovered from the East Block are quite varied, as shown in Appendix D, and include creamware (Plate 15), pearlware, ironstone, porcelain, and yellowware. Yet, based on their occurrence in nearly every deposit, and the fact that they make up over 16 percent (N=81) of all identifiable vessels, blue shell edge whiteware plates (Plate 16) appear to have been the everyday tablewares for much of the period represented by the East Block assemblages. These wares continued to be produced with some variation throughout the period from 1815 to 1890, and several sets appear to be represented in the East Block. These would include plates ranging in size from 6 to 10 inches as well as larger serving pieces such as platters or chargers. Several blue shell edge pearlware pieces are also present in the assemblages, as are a number of green shell edge whitewares and pearlwares. Shell edge table settings may have been accompanied by serving bowls, pitchers, and other pieces decorated with simple bands or more elaborate mocha or handpainted styles (Plate 17).

**PLATE 13: Redware Wide-Mouth Jar (Feature 2)**

Teawares that were probably used on an everyday basis are represented in the East Block assemblages by vessels in a variety of decorative styles, with polychrome handpainted cups and saucers (in pearlware and whiteware) being the most common at Locust Grove. A minimum of 24 polychrome handpainted cups in whiteware are represented in the East Block (including seven in SU E and five in Feature 4), together with at least six in pearlware. Fifteen whiteware polychrome handpainted saucers (a third of which were present in SU E) were recovered from the East Block. Other decorative varieties of everyday teawares include dipped, banded, and sponged (Plates 18 and 19), with the latter being the most common after the polychrome handpainted forms. A minimum of seven whiteware cups, nine saucers, and four miscellaneous teaware forms with sponged decoration were recovered from the East Block excavations. Four sponged teawares in pearlware, including a cup, two saucer/bowl forms, and a miscellaneous piece, were also present. Because of the highly fragmented condition of the teaware vessels from Locust Grove, it has not always been possible to identify their precise forms; most of the teacups from the East Block, for example, are classified simply as cups (see Appendix D). The more

PLATE 14: Redware Pan with Clear Glaze and Brown Decoration (SU B1)

complete pieces, such as the cups shown in Plate 18, appear to be "London Shape," the most common cup shape for the period 1810-1840 (Miller 1991); except for a polychrome handpainted teacup from SU B1, most do not appear to have had handles, a feature uncommon on cups until the second half of the nineteenth century (Miller 1991).

More formal occasions, such as Sunday dinners, perhaps, or meals shared with guests, were probably accompanied by more expensive transfer-printed tablewares, teawares, and serving pieces. Sixty-two of the East Block vessels are transfer-printed forms, including nine pearlware, 52 whiteware, and one ironstone. Most (48) are blue transfer-printed; two vessels, one with brown and one with black transfer-printed decoration, were recovered, along with two vessels with transfer-print flowing color motifs. Teawares and tablewares with transfer-printed decoration are represented by identical numbers of vessels. Teawares include a flowing-color ironstone teapot, 11 saucers/bowls, 15 cups (including one double-curved), and five miscellaneous forms. Transfer-printed tablewares from the East Block include 15 plates, five flatwares (chargers and platters), two serving bowls, and nine miscellaneous pieces. At least eight different blue transfer-print patterns are represented in the East Block assemblages, and all were produced in Britain at various times during the period from the 1820s to the 1860s (Table 13); three of these patterns are illustrated in Figure 24 and Plates 20 and 21. By the 1850s, transfer-printed wares had declined in popularity and were replaced by white granite wares, which remained

PLATE 15: Royal Pattern Creamware Plate (Feature 4)

PLATE 16: Shell Edge Plate Rims
Top: "Chicken Foot" Motif (Feature 4)
Center: Inpressed and Unscalloped Rim (SU E)
Bottom: Dish or Platter with Floral Molding and Impressed Rim (SU B1)

dominant until the end of the nineteenth century (Miller 1991). Since most of the transfer-printed vessels in the East Block assemblages were highly fragmented, it is not possible to determine if they were purchased as sets or as individual pieces on an ad hoc basis. Given the economic status of the households that occupied the property during the nineteenth century, the former would seem more likely, but cannot be assumed *a priori*.

Tea and tablewares in plain whiteware were also recovered from deposits in the East Block (see Appendix D), and together account for just over seven percent (N=37) of the reconstructed vessels. These may represent vessels purchased in the second half of the nineteenth century as replacements for earlier shell edge or transfer-printed forms. Unfortunately, the fact that the ceramic wares from several households may be represented in any one of the East Block deposits precludes any definitive statement concerning changes in ceramic usage over time at Locust Grove. The majority of the plain whiteware vessels are tablewares, most of which were recovered from landscaping deposits, including 18 plates, six flatware, five miscellaneous tableware forms, and one bowl. The seven plain whiteware teawares include a London Shape

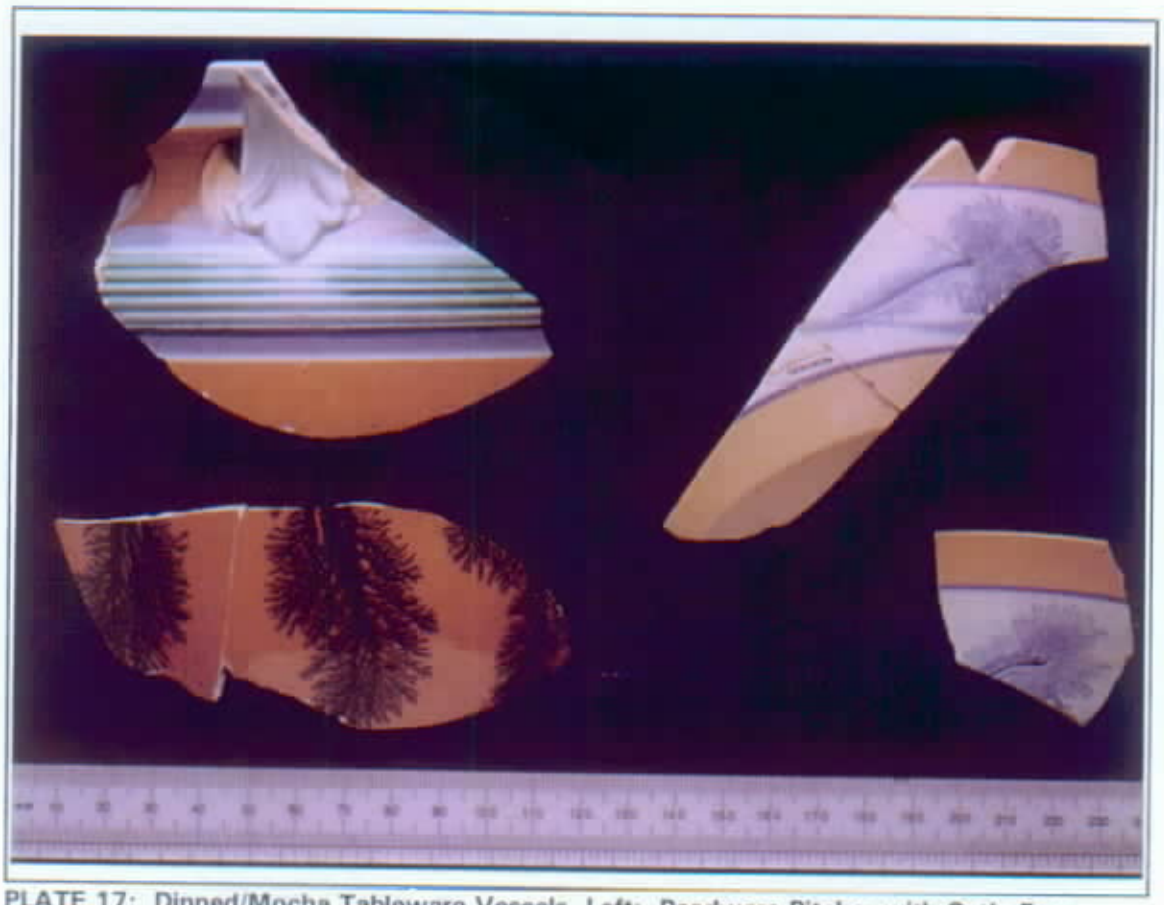

**PLATE 17: Dipped/Mocha Tableware Vessels. Left: Pearlware Pitcher with Cat's Eyes, Incised, and Dendritic Motifs (SU B2) Right: Yellowware London Shape Bowl with Blue Seaweed Decoration (SU E)**

cup, three handleless cups, two miscellaneous teacups, and a saucer/bowl. One miscellaneous tableware, two handleless cups, and a miscellaneous teacup in plain panelled whiteware were also recovered. Three chamberpots in plain whiteware are also represented. The balance of the East Block ceramic vessels include teawares and/or tablewares in porcelain, plain creamware (including the Royal Pattern plate shown in Plate 15), and ironstone (plain and embossed). These vessels all represent relatively minor percentages of the East Block assemblages.

A total of 186 minimum glass vessels were recovered from Site 7NC-F-73, 128 from deposits in the East Block (Table 14) and 58 from the West Block (Table 15). For both blocks, themajority of the reconstructed glass vessels (128, or 68.8%) are unidentifiable as to specific function, mainly due to the overall lack of vessel completeness, which strongly suggests that containers and whole and broken glassware were deposited elsewhere on the site. Indeed, only one intact bottle was recovered from the site. This bottle, collected from SU C 1, had once contained "Radway's Ready Relief," a painkiller produced in New York as early as 1848; the bottle recovered from SU C1 was mold blown and postdates 1877 (Fike 1987:74). Among the identifiable vessels, beverage bottles are poorly represented at Locust Grove (2.2% of the glass MNVs); only one miscellaneous bottle was collected from SU B1 in the East Block, while SU A and Feature 5 in the West Block yielded the only identifiable wine/liquor bottles recovered

**PLATE 18: Sponged Whiteware London Shape Tea Cups. Left: Yellow and Blue Decoration (Feature 4) Right: Blue Decoration (Feature 4)**

TABLE 13

TRANSFER-PRINT PATTERNS
EAST BLOCK, LOCUST GROVE SITE (7NC-F-73)

| PATTERN | MANUFACTURER | DATES OF PRODUCTION |
|---|---|---|
| Napier | John & George Alcock | 1839-1846 |
| Nankin | Thomas Dimmock | 1828-1859 |
| Canova | | 1826-1848 |
| Delphi | William Adams & Son | 1825-1864 |
| Texian Campaigne | James Beech (?) | 1846-1860 |
| Ruins | William Adams & Co. | 1825-1864 |
| Columbus | William Adams & Son | 1825-1864 |
| York Minster | Henshall & Co. | 1820s |

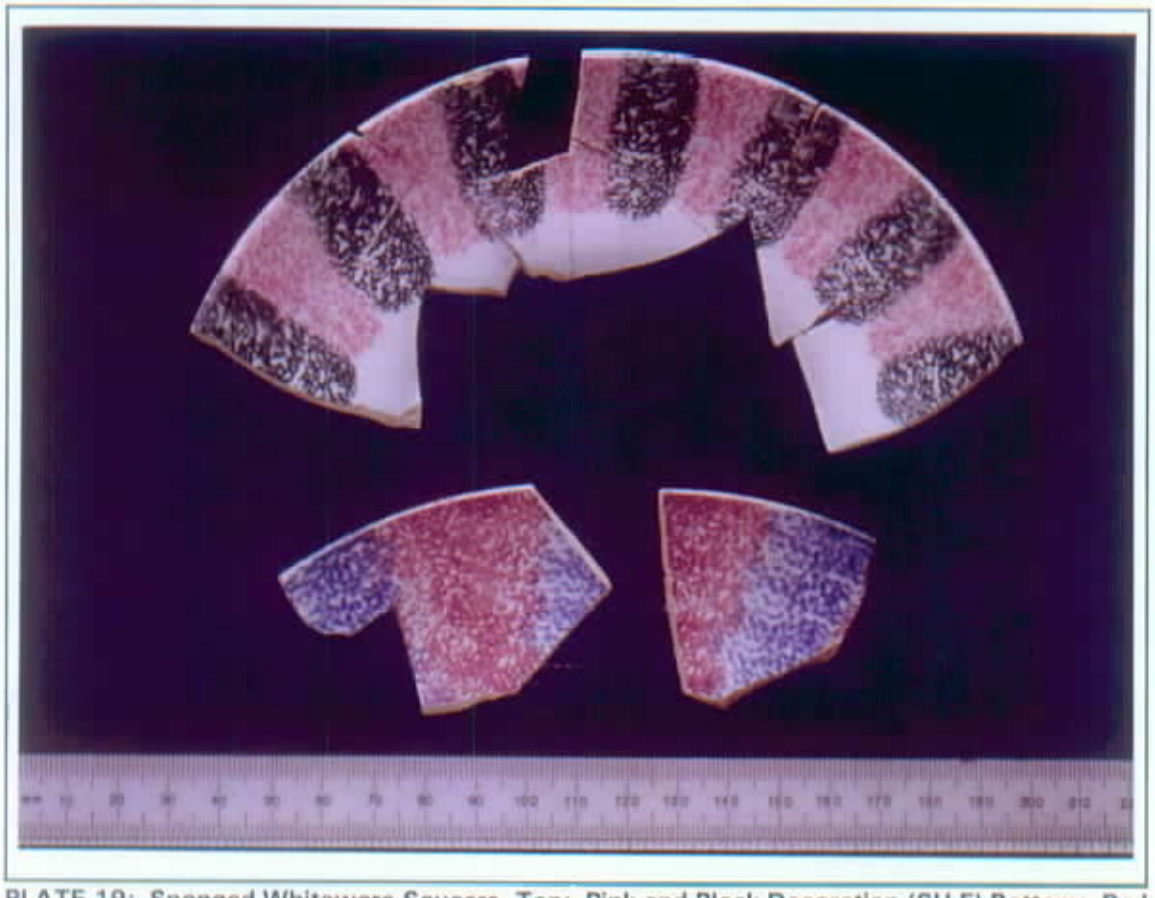

**PLATE 19: Sponged Whiteware Saucers. Top: Pink and Black Decoration (SU E) Bottom: Red and Blue Decoration (SU E)**

from Locust Grove. Eleven pharmaceutical bottles (5.9% of the glass MNVs), including mold-blown drugstore and patent/proprietary bottles (Plate 22) and hand-blown medicinal vials (Plate 23), were collected from the site, all from the East Block. The majority of these (N=7), including all but one of the vials, were recovered from two deposits, SU E and Feature 4 (see Table 14). In addition to the Radway's bottle noted above, only one other patent/proprietary medicine bottle with a legible embossment was recovered–a "Turlington's Balsam" bottle (see Plate 22) produced sometime after 1768. Turlington's Balsam, a cure-all of English origin, was patented in 1744, and was available in North America by the 1760s; it continued in production until the 1930s.

Drinking vessels, including tumblers (26 total) (Plate 24) and stemware (three total), were recovered from deposits in both blocks, and account for 15.6 percent of the Locust Grove glass MNVs. The tumblers, which were probably used on an everyday basis, were fairly evenly distributed among the various depositional contexts in the East Block; in the West Block, the six tumblers are evenly distributed between SU A and Feature 5. Of the three stemware vessels, two were recovered from landscaping deposits (SU A in the East and West Blocks), while the third was collected from Feature 5.

**PLATE 20: Blue Transfer Printed Whiteware Dish; *Columbus* Pattern by William Adams and Company (SU E)**

**PLATE 21: Blue Transfer Printed Whiteware Saucer; *Ruins* Pattern by William Adams and Company (SU E)**

Unidentifiable tableware vessels, which would include forms such as bowls or cake plates, account for 5.9 percent of the glass MNVs (N=11). Like the tumblers, tableware vessels recovered from the East Block were distributed more or less evenly among the major depositional contexts (see Table 14). In the West Block, tableware vessels were recovered from SU A and Feature 5 (see Table 15).

Lighting Glass, which falls under the Furnishings Group, represents 1.6 percent of the Locust Grove glass MNVs (N=3). All three are oil lamp globes or chimneys, and all were recovered from the West Block. One example was collected from SU A (landscaping deposit), and two from Feature 5 (see Table 15).

Other kitchen items recovered from Locust Grove include utensils (all recovered from the East Block) and crown caps. Among the former are two ferrous metal spoon or fork handle fragments collected from SU C1, three handle fragments with copper pins recovered from SU E, and a wood and ferrous metal knife or small cleaver handle from SU C1.


**FIGURE 24: Blue Transfer-Printed Whiteware Plate in the "Delphi" Pattern by W. Adams & Son, Tunstall and Stoke, Staffordshire, England**

*3. Architectural Artifacts*

A total of 3,353 architectural-related artifacts (not including brick and other building material) were recovered during all three phases of investigation at Locust Grove, accounting for 22.8 percent of the functionally identifiable assemblage (see Table 8). The majority of the site-wide architectural assemblage consists of nails (2,063, or 61.5% of the Architecture Group), most of (N=564) that were produced throughout the nineteenth century. Handwrought nails (N=276)

TABLE 14

SUMMARY OF GLASS MINIMUM NUMBER OF VESSELS
FUNCTIONAL CATEGORIES BY STRATIGRAPHIC UNIT AND FEATURE
EAST BLOCK
LOCUST GROVE SITE (7NC-F-73)

| FUNCTIONAL CATEGORY | STRATIGRAPHIC UNIT | | | | | | FEATURE[1] | | | TOTAL MNVs |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B1 | B2 | C1 | C2 | E | 4 | 10 | 12 | |
| *BOTTLE GLASS* | | | | | | | | | | |
| Beverage | | | | | | | | | | |
| Wines/Liquors | . | . | . | . | . | . | . | . | . | . |
| Miscellaneous | . | 1 | . | . | . | . | . | . | . | 1 |
| Pharmaceutical | | | | | | | | | | |
| Drugstore | . | . | . | . | . | 1 | . | . | . | 1 |
| Patent/Proprietary Medicines | 1 | . | . | 2 | . | . | . | . | . | 3 |
| Vials | 1 | . | . | . | . | 3 | 3 | . | . | 7 |
| Unidentified | | | | | | | | | | |
| Bottles/Containers | 11 | 14 | 5 | 9 | 4 | 7 | 17 | 3 | 5 | 75 |
| Bottle-Associated | 6 | . | . | . | . | . | . | . | . | 6 |
| *TABLE GLASS* | | | | | | | | | | |
| Drinking Vessels | | | | | | | | | | |
| Tumblers | 3 | 3 | 1 | 3 | . | 3 | 5 | 1 | 1 | 20 |
| Stemwares | 1 | . | . | . | . | . | . | . | . | 1 |
| Unidentified | | | | | | | | | | |
| Tablewares | 2 | 1 | . | 1 | . | 1 | 1 | . | . | 6 |
| Table-Associated | . | . | . | . | . | . | . | . | . | . |
| *LIGHTING GLASS* | | | | | | | | | | |
| Lamp Parts | . | . | . | . | . | . | . | . | . | . |
| *OTHER GLASS* | | | | | | | | | | |
| Totally Unidentified | 1 | 2 | 2 | . | . | 2 | 1 | . | . | 8 |
| TOTAL MNVs | 26 | 21 | 8 | 15 | 4 | 17 | 27 | 4 | 6 | 128 |

[1] No glass was associated with Features 2, 7, 8, and 9

make up just over a quarter of the identifiable nails, while wire nails (N=181), patented in the which are unidentifiable. Of the nails that could be identified, over half are machine cut nails mid-nineteenth century, account for just under 18 percent. Most of the wire nails recovered from the site were collected from excavation contexts to the rear of the house and are probably associated with the construction of the twentieth-century additions to the dwelling, the pool house, and other recent structures. Only 10 were retrieved from the block excavations (all in the East Block), eight of which were collected from SU A.

TABLE 15

SUMMARY OF GLASS MINIMUM NUMBER OF VESSELS
FUNCTIONAL CATEGORIES BY STRATIGRAPHIC UNIT AND FEATURE, WEST BLOCK
LOCUST GROVE SITE (7NC-F-73)

| FUNCTIONAL CATEGORY | STRATIGRAPHIC UNIT | | FEATURE | TOTAL MNVs |
|---|---|---|---|---|
| | A | B | 5 | |
| *BOTTLE GLASS* | | | | |
| Beverage | | | | |
| Wines/Liquors | 2 | . | 1 | 3 |
| Miscellaneous | . | . | . | . |
| Pharmaceutical | | | | |
| Drugstore | . | . | . | . |
| Patent/Proprietary Medicines | . | . | . | . |
| Vials | . | . | . | . |
| Unidentified | | | | |
| Bottles/Containers | 13 | 5 | 10 | 28 |
| Bottle-Associated | . | . | . | . |
| *TABLE GLASS* | | | | |
| Drinking Vessels | . | . | . | . |
| Tumblers | 3 | . | 3 | 6 |
| Stemwares | 1 | . | 1 | 2 |
| Unidentified | | | | |
| Tablewares | 3 | . | . | 3 |
| Table-Associated | . | . | 2 | 2 |
| *LIGHTING GLASS* | | | | |
| Lamp Parts | 1 | . | 2 | 3 |
| *OTHER GLASS* | | | | |
| Totally Unidentified | 2 | 7 | 2 | 11 |
| TOTAL MNVs | 25 | 12 | 21 | 58 |

Window glass constitutes the second largest category within the Architecture Group, accounting for 1,265 (37.7%) of the non-brick architectural items recovered from the site. The overwhelming majority of the window glass fragments are broad glass (994, or 78.5% of all window glass), produced between about 1820 and 1926, which were found scattered across the site during all three phases of fieldwork. Crown glass, produced throughout the eighteenth and early nineteenth centuries (terminal date=ca.1840), forms a minor percentage of the window glass recovered from the site (88, or 6.9%). However, most of the crown glass fragments from Locust Grove were collected from the front and west side yards, 62 of the 88 fragments having been recovered from the East (N=56) and West (N=6) blocks. The two highest concentrations of crown glass were encountered in the East Block in SU A (N=12) and in Feature 4 (N=16). Just under 15 percent of the window glass from the site falls into the "other" category, and consists mainly of modern (i.e., twentieth-century) types.

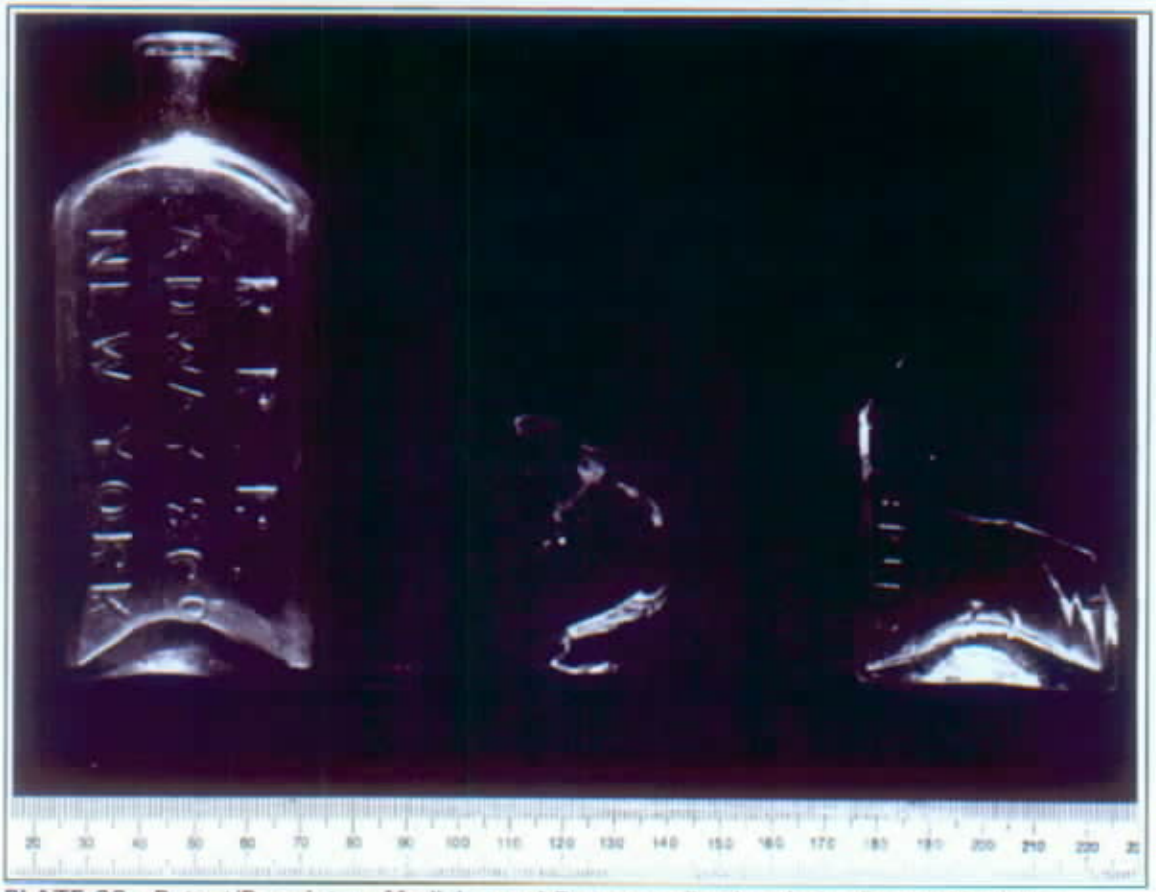

PLATE 22: Patent/Proprietary Medicine and Drugstore Bottles. Left: Patent Medicine Bottle Embossed "R.R.R./RADWAY & C°/NEW YORK/ENT$^{D}$. ACOR$^{D}$.TO/ACT. OF. CONGRESS" (SU C1) Center: Patent Medicine Bottle Embossed "TURLI[NG]/TON[S]/BALSA[M]" (SU C1) Right: Drugstore Bottle Embossed "SIME . . ./CH[EMI]STS/P . . . " (SU E)

The balance of the Architecture Group consists of hardware (strap hinges, door parts, etc.), tacks and staples, a lead spigot (from SU E), and plumbing/electrical hardware.

*4. Furnishings Artifacts*

Furnishings-related artifacts make up less than 0.2 percent of the functionally identifiable items recovered from the site. As already noted in the discussion of the glass vessels from Locust Grove, portions of three lamp globes or chimneys were recovered during the investigations. Altogether, a total of 15 fragments of lamp glass were collected, along with four brass pieces, including base fragments and an intact handle ring, of a probable whale oil lamp recovered from landscaping deposits (SU B1) in the East Block. Other furnishings include a glass and metal drawer pull from Feature 5; an iron leg, possibly from a chest or sewing machine cabinet, recovered from Feature 4; fragments of mirror glass; a castor; an ash shovel from SU C1; part of a fireplace poker from SU B2; and a decorative bracket recovered from Phase II Test Unit 16.

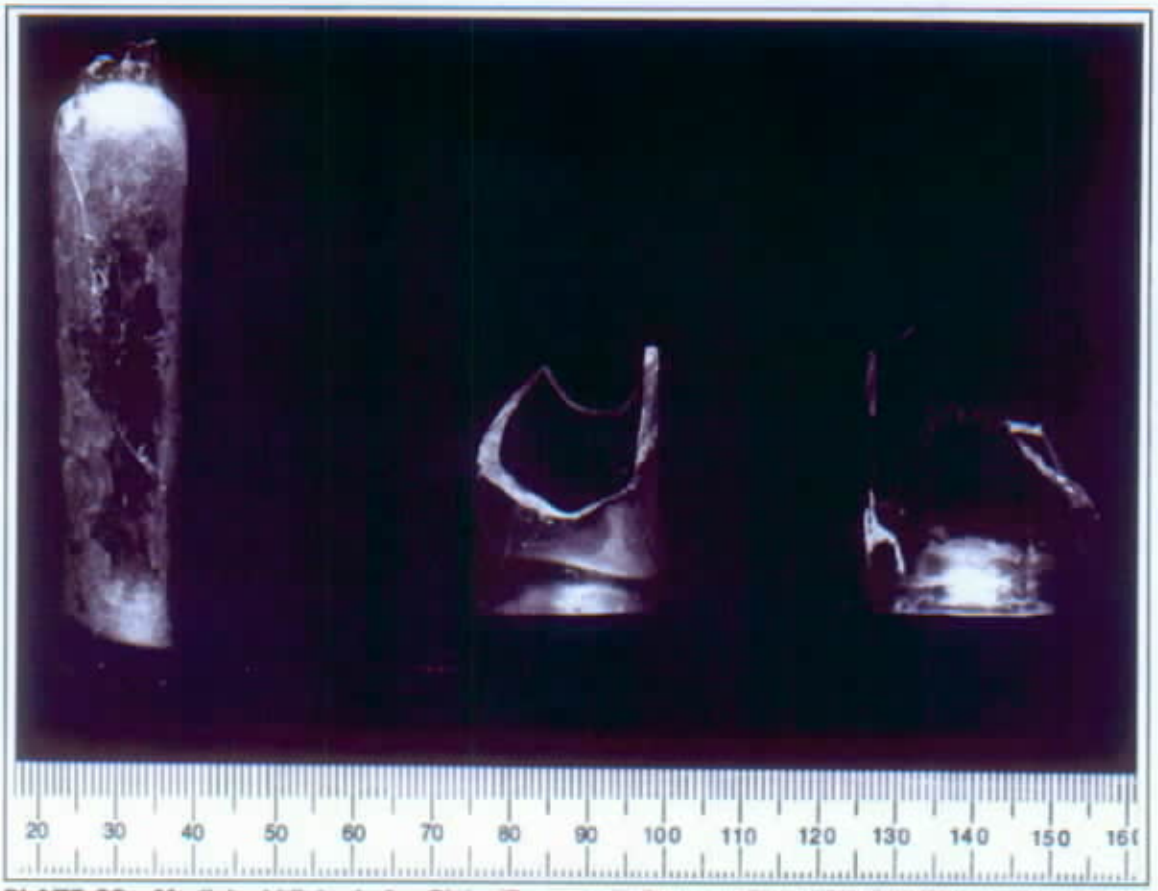


**PLATE 23: Medicinal Vials. Left: Plain (Feature 4) Center: Plain (SU C1) Right: Panelled (SU B2)**

*5. Arms*

The arms-related items from Locust Grove constitute only 0.06 percent of the Locust Grove assemblage. Of these, three are 12-gauge shotgun shells, four are .22-caliber rimfire bullet casings, and one is a .32-.40 shell casing. The ninth arms-related artifact is a gunflint fragment of European flint recovered from SU C1 in the East Block.

*6. Clothing Artifacts*

The 31 clothing-related artifacts from Site 7NC-F-73 (0.21% of the assemblage) consist primarily of fasteners, including buttons, snaps, and a hook. The buttons include a domed brass button, a brass button disk, four gilt brass one-piece buttons (including one from SU B2 and one from SU E) (ca. 1800-1850) (Plate 25), two ungilded brass one-piece buttons (one from SU B1), three plastic buttons, a bone button (see Plate 25), two small plain china buttons (beginning date of manufacture, ca. 1850), a pressed-glass button (Feature 5) (see Plate 25), a white metal button disk with evidence of a ferrous metal shank, and three brass tombac buttons (one from Feature 4; see Plate 25), with a terminal date of manufacture about 1800. Tombac was an alloy that combined brass with white copper and arsenic, creating an easily polished surface resembling

PLATE 24: Tumblers. Left: Undecorated (Feature 4) Center: Faceted (SU C1) Right: Faceted (SU E)

silver. Tombac buttons are also denoted by their manufacturing style; a wire shank with a raised extension for reinforcement and a lathe-smoothed disk are characteristic (see Plate 25).

Other fasteners include ferrous metal buckles, a clothing hook, and several snaps. Three shoe parts were also recovered, including a shoelace and two possible heel fragments, the latter collected from SU C2. The three sewing-related items include a brass straight pin (SU A in the East Block), a brass thimble, and a stainless steel needle cover (SU A in the West Block).

### 7. *Personal Artifacts*

The 75 personal items recovered during the three phases of study at Locust Grove represent 0.51 percent of the functionally identifiable artifacts. The majority (53; 70.6% of the Personal Group) consists of fragments of pharmaceutical vials and patent/proprietary medicine bottles discussed earlier in relation to the glass vessels from the site. The balance of the personal items include five coins, all recovered from topsoil/landscaping fill, consisting of three U.S. pennies (1901,

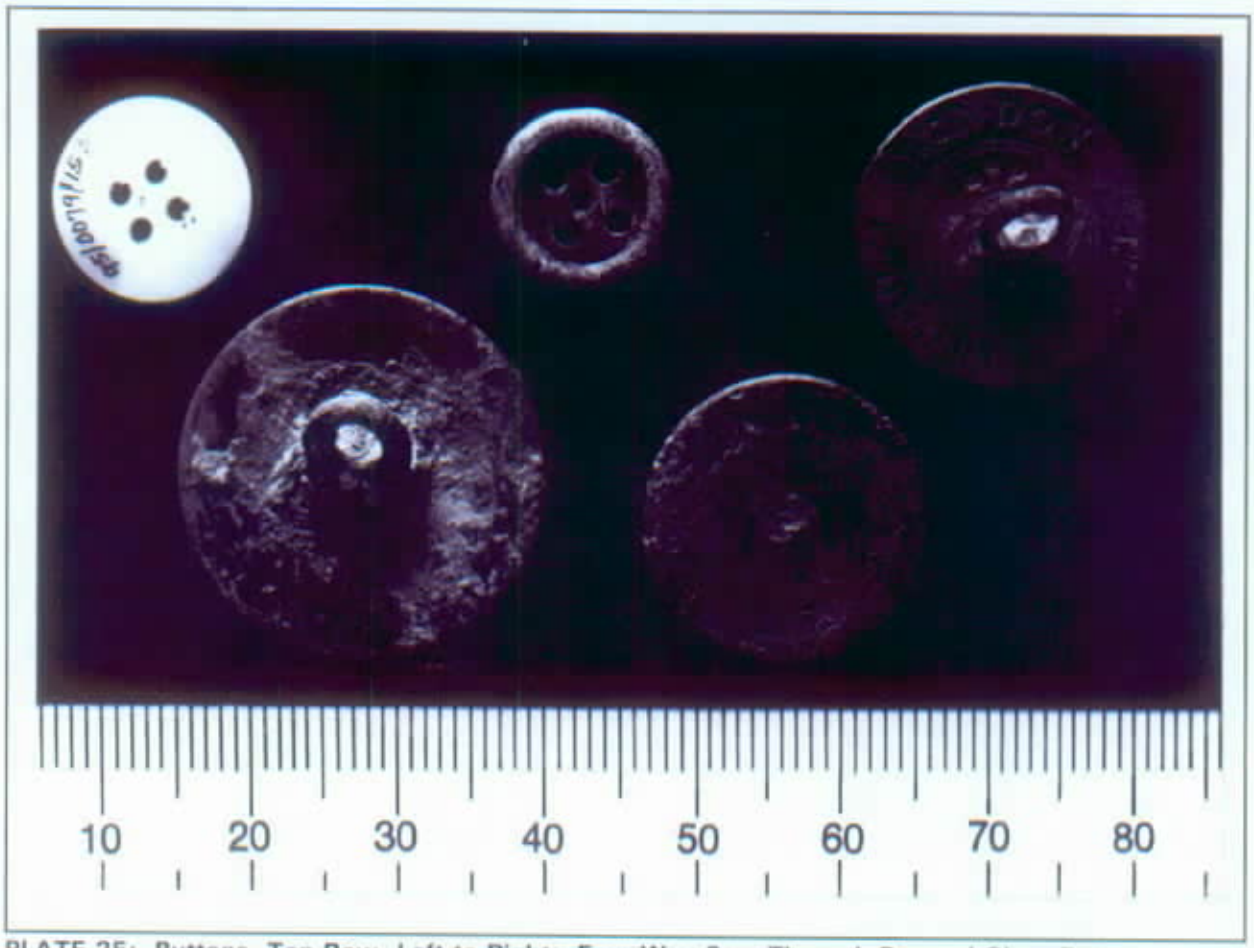


PLATE 25: Buttons. Top Row, Left to Right: Four-Way Sew-Through Pressed-Glass Button (Feature 5); Five-Way Sew-Through Bone Button (SU C1); Gilt1-Piece Brass Button (SU B2) Bottom Row, Left to Right: 1-Piece Tombac Button with Cone Shank (Feature 4); Gilt1-Piece Brass Button with Missing Shank (SU E)

1947, and 1968), a U.S. nickel (1898), and a U.S. dime (1965); plastic comb fragments; a plastic toothbrush; parts of two plastic and metal pocket knives; and the internal gear plate from a pocket watch or stopwatch. Jewelry items include a glass bead (SU B1), a brass one-piece bracelet (SU A, East Block), and a paste (glass) jewelry stone (SU C2). Miscellaneous personal artifacts include several ferrous metal skeleton keys, and a brass name plate stamped "C.T. Carpenter."

*8. Tobacco Pipes*

A total of 14 tobacco pipe fragments were recovered from Site 7NC-F-73, accounting for 0.09 percent of the functionally identifiable assemblage. Of these, 13 are white clay pipe stem or bowl fragments, nine of which were collected from landscaping deposits in the East Block. The fourteenth is a stem and bowl fragment from a red stoneware "Shaker pipe," recovered from

Shovel Test Pit 1 near the southeastern corner of the house. Shaker pipes, according to Sudbury (1986), are characterized by stems at a right angle to the bowl; the stem in this case was simply a short extension of the bowl and was designed to be fitted with a reed stem. Shaker pipes are dated to the period 1850 to 1940.

The white clay tobacco pipe fragments include nine bowl and four stem pieces. All but two of the bowl fragments are decorated with raised, curved flutes, and date from circa 1825-1875. One of the remaining bowl fragments, collected from Stratum A in Test Unit 44, is also fluted, but also has a linear vine motif along both the front and back mold seams. The ninth bowl fragment, recovered from STP 5, is undecorated, as are the stem pieces.

PLATE 26: Piney Island Point (Test Unit 48, Stratum A)

*9. Activities Artifacts*

The Activities Group at Locust Grove is represented by 783 artifacts (5.3% of the identifiable artifacts); the overwhelming majority of these items consist of unglazed redware flowerpot fragments (599; 76.6% of this group), noted earlier in the discussion of ceramic vessels. Of the remaining artifacts, the bulk (N=145) consist of assorted hardware items such as nuts, bolts, washers, S-hooks, and the like. Farm-related artifacts consist of barbed wire fragments, while livestock-related artifacts include two horseshoes and an iron stirrup (from SU C1). Tools recovered from the site include the head from a small claw hammer, the plastic handle of a screwdriver, a ferrous metal pritchel or punch, and miscellaneous tool parts. The remainder of the activities-related items include two slate pencils, clothespin springs, battery parts, a lead fishing weight, and toys. The latter consist of four marbles (one clay, two machine-made glass, and one stone [marble]), two plastic wheels, a porcelain doll fragment, and part of a sponge rubber ball.

*10. Prehistoric Artifacts*

As noted previously, 10 prehistoric artifacts were recovered during the Phase III excavations. Of these, only one is temporally diagnostic–a quartz Piney Island point recovered from the topsoil in Test Unit 48 (Plate 26). These narrow-bladed points are attributable to the Archaic-Woodland I periods, most likely dating between 3000 BC and AD 500 (Custer 1996). A chert uniface fragment was present in SU A in Test Unit 29. The remainder of the prehistoric assemblage

includes three pieces of debitage–a quartz flake fragment from SU B2; a jasper decortication flake collected from a rodent-disturbed area in Test Units 22 and 22; and a piece of quartz block shatter recovered from the subsoil in Test Unit 49. Also collected were three pieces of cracked rock, two of which were recovered from SU A in Test Unit 24, while the third was found in Feature 4. Two pieces of mica round out the prehistoric assemblage; one was collected from landscaping deposits in Test Unit 42, and the other from SU B1 in Test Unit 55. Except for the piece of block shatter recovered from the upper 10 cm of the subsoil in Test Unit 49, all of the prehistoric artifacts from Locust Grove were found in historic or otherwise disturbed deposits.

## C. FAUNAL REMAINS

As shown in Table 16, a total of 530 bone and teeth fragments were recovered from Locust Grove. Due to the highly fragmented condition of most of this material, only 129 of these elements could be identified by species. Pig is the most highly represented, with 17.74 percent of the total number of elements, followed by cow (5.09%), sheep/goat (0.75%), and chicken (0.75%). Of the unidentified elements, 190 (35.85%) are classified as medium mammal (which could represent pig or sheep/goat), and 171 are unidentified mammal (32.26%). Neither fish nor any other wild taxa, such as deer or goose, were identified in the Locust Grove faunal assemblage.

Despite the limitations of the faunal assemblage, some tentative conclusions can be drawn concerning the foodways of the Locust Grove inhabitants. Tables 17 and 18 summarize the pig and cow remains recovered from the two block excavations. Of the 43 pig elements recovered, 37 are teeth or jaw fragments (17 of which were concentrated in SU E), while the remainder include two metacarpal/tarsal fragments, an astragalus, one tibia fragment, and two humerus fragments, one of which shows evidence of having been cut. The majority of these remains represent butchering refuse, i.e., the teeth and jaw fragments as well as the foot elements (the metacarpal/tarsal and astragalus). The tibia and humerus fragments, on the other hand, are most likely food waste, possibly from hams (picnic ham in the case of the tibia, and shank portion in the case of the humeri). The cut mark on the humerus fragment recovered from SU A (East Block) was probably produced during removal of the meat after cooking.

The 17 diagnostic cow teeth and bone fragments from the block excavations, over half of which are from SU C1, are more evenly split between probable butchering waste and food remains. The four teeth, the mandible fragment, the phalanges, metatarsal, and metacarpal/tarsal were probably discarded after butchering, although none display butcher marks. The scapula, ribs, humerus, tibia, femur, and radii were most likely food remains. Cut marks were found on only two of these elements–the rib fragment and radius recovered from SU A (West Block); the tibia from SU C1 had been sawed. Beef cuts represented by the butchered elements include ribs, foreshank, and hindshank. The elements present also suggest the consumption of meat cuts such as shoulder (or chuck) and round.

Three of the four sheep/goat elements recovered during the investigations were collected from the East Block, all from SU B1. The two identifiable fragments are cranial elements and

TABLE 16

SUMMARY OF FAUNAL REMAINS,* LOCUST GROVE SITE (7NC-F-73)

| SPECIES | NO. OF BONE AND TOOTH FRAGMENTS | PERCENTAGE OF TOTAL |
|---|---|---|
| Pig | 94 | 17.7 |
| Cow | 27 | 5.1 |
| Sheep/Goat | 4 | 0.7 |
| Small Mammal | 4 | 0.7 |
| Medium Mammal | 190 | 35.9 |
| Large Mammal | 23 | 4.3 |
| Unidentified Mammal | 171 | 32.3 |
| Chicken | 4 | 0.7 |
| Unidentified Bird | 11 | 2.1 |
| Unidentified Bone | 2 | 0.4 |
| TOTAL | 530 | 100.0 |

* Does not include shell

probably represent butchering waste. The sole chicken element recovered from SU E in the East Block is a fragment of a tibiotarsus (lower leg/foot).

By far the most frequently represented category of faunal remains at Site 7NC-F-73 is oyster shell. A total of 874 whole shells and/or valves were recovered during the various phases of investigation. Although only whole shells and valves were counted, all shell from the site was weighed, yielding 35.663 kilograms of oyster shell, 0.685 kilograms of clam shell (including six whole shells/valves), and 0.262 kilograms of hard shell clam.

All but 1.5 kilograms of oyster shell was recovered from the two block excavations; the shell weights from the East and West Blocks are summarized in Table 19. Over half of the 34.163 kilograms of oyster shell recovered from the block excavations was collected from the landscaping deposits (SU A and B) in the West Block, while a relatively insignificant amount was present in Feature 5. No clam shell was collected from the West Block (see Table 19). Nearly 15 kilograms of oyster shell were recovered from the East Block, and oyster shell was present in every depositional context. The densest concentration in the East Block was present in Feature 10, which yielded over three kilograms of shell. A similar amount was recovered from the rather larger Feature 4.

## D. FLORAL ANALYSIS

Fourteen flotation samples were submitted to the Ethnobotany Laboratory at the State Historical Society of Wisconsin for processing and floral analysis. The analysis of the archaeobotanical assemblage from Locust Grove was aimed at identifying subsistence activities and feature

TABLE 17

DIAGNOSTIC PIG REMAINS, BLOCK EXCAVATIONS, LOCUST GROVE SITE (7NC-F-73)

| STRATIGRAPHIC UNIT/FEATURE | EAST BLOCK | | | | | | | WEST BLOCK | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B1 | C1 | C2 | E | 4 | 10 | A | 5 | TOTAL |
| *ELEMENT* | | | | | | | | | | |
| Molar | 1 | . | 4 | . | 8 | 2 | 2 | . | 1 | 12 |
| Premolar | . | 1 | . | . | . | . | . | . | . | 1 |
| Canine | 1 | . | . | . | 3 | 5 | . | . | . | 9 |
| Incisor | . | . | . | . | 6 | . | . | . | . | 6 |
| Tusk | . | . | 2 | . | 2 | . | . | . | . | 4 |
| Mandible | . | . | . | . | 4 | . | . | . | . | 4 |
| Maxilla | . | . | 1 | . | . | . | . | . | . | 1 |
| Humerus | 1* | . | . | . | . | . | . | 1 | . | 2 |
| Tibia | . | . | . | . | . | 1 | . | . | . | 1 |
| Astragalus | . | . | . | . | . | 1 | . | . | . | 1 |
| Metacarpal/Tarsal | 1 | . | . | 1 | . | . | . | . | . | 2 |
| TOTAL | 4 | 1 | 7 | 1 | 17 | 9 | 2 | 1 | 1 | 43 |

*Cut

TABLE 18

DIAGNOSTIC COW REMAINS, BLOCK EXCAVATIONS, LOCUST GROVE SITE (7NC-F-73)

| STRATIGRAPHIC UNIT/FEATURE | EAST BLOCK | | | | WEST BLOCK | |
|---|---|---|---|---|---|---|
| | A | C1 | E | 4 | A | TOTAL |
| *ELEMENT* | | | | | | |
| Molar | 1 | 1 | . | . | . | 2 |
| Incisor | . | 1 | 1 | . | . | 2 |
| Mandible | . | 1 | . | . | . | 1 |
| Scapula | . | . | . | 1 | . | 1 |
| Rib | 1 | 1 | . | . | 1** | 3 |
| Humerus | . | 1 | . | . | . | 1 |
| Tibia | . | 1* | . | . | . | 1 |
| Femur | . | 1 | . | . | . | 1 |
| Radius | . | . | . | . | 1** | 1 |
| Phalange | . | 1 | 1 | . | . | 2 |
| Metatarsal | . | . | 1 | . | . | 1 |
| Metacarpal/Tarsal | . | 1 | . | . | . | 1 |
| TOTAL | 2 | 9 | 3 | 1 | 2 | 17 |

*Sawed **Cut Marks

TABLE 19

SHELL WEIGHTS FROM EAST AND WEST BLOCKS, LOCUST GROVE SITE (7NC-F-73)

| PROVENIENCE | OYSTER SHELL (kg) | CLAM SHELL (kg) |
|---|---|---|
| *EAST BLOCK* | | |
| Stratigraphic Unit A | 0.999 | . |
| Stratigraphic Unit B1 | 1.142 | 0.06 |
| Stratigraphic Unit B2 | 0.530 | . |
| Stratigraphic Unit C1 | 1.528 | 0.09 |
| Stratigraphic Unit C2 | 0.350 | . |
| Stratigraphic Unit E | 2.570 | 0.29 |
| Feature 2 | 0.200 | . |
| Feature 4 | 3.317 | 0.09 |
| Feature 7 | 0.010 | . |
| Feature 8 | 0.075 | . |
| Feature 9 | 0.200 | . |
| Feature 10 | 3.231 | 0.04 |
| Feature 12 | 1.070 | 0.08 |
| *WEST BLOCK* | | |
| Stratigraphic Unit A | 9.519 | . |
| Stratigraphic Unit B | 9.160 | . |
| Feature 5 | 0.240 | . |

function, as well as reconstructing the prehistoric and nineteenth-century environments. Unfortunately, the flotation-recovered archaeobotanical assemblage was insubstantial. As a result, the assemblage provides limited information regarding environment and subsistence activities during the prehistoric and historic occupations. The analytical methods and the results of analysis are presented in detail in Appendix G.

The 14 samples (approximately 22.7 liters) were collected from Features 4, 5, 7 and 9, and from Strata B, C, E, and F (SUs B1, C1, E, and F) of the East Block. These samples were recovered from refuse pits, a prehistoric pit house/treefall, and sheet midden/landscaping contexts. The archaeobotanical assemblage from the site includes wood charcoal, nutshell, and fruit and weed seeds.

A single control sample was collected from Stratum F, the subsoil beneath Feature 9. This sample contained wood charcoal and modern weed seeds (Table 20). The wood charcoal could not be identified to taxon, and its presence in a sterile subsoil context suggests bioturbative disturbance. The 12 seeds in the sample were uncarbonized and modern and include amaranth (*Amaranthus* sp.), goosegrass (*Eleusine* sp.), pokeweed (*Phytolacca americana*), and purslane (*Portulacca* sp.) (see Table 20). It is likely that these specimens are contaminants introduced during the collection and processing of the flotation sample.

TABLE 20

IDENTIFIED FLORA FROM FLOTATION SAMPLES, LOCUST GROVE SITE (7NC-F-73)

| SPECIES | FLOTATION SAMPLES | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | FEATURE | | | | STRATUM | | | |
| | 4 | 5 | 7 | 9 | B | C | E | F |
| Maple (*Acer*) | X | . | . | . | . | . | . | . |
| Hickory (*Carya*) | X | . | . | X | . | . | . | . |
| American Chestnut (*Castenea*) | . | . | X | . | . | . | . | . |
| Ash (*Fraxinus*) | X | . | . | X | . | X | . | . |
| Oak (*Quercus*) | X | . | . | X | . | X | X | . |
| Deciduous-ring porous | X | . | X | X | X | X | X | . |
| Deciduous-diffuse porous | . | . | . | . | . | . | X | . |
| Coniferous | X | . | . | . | . | . | . | . |
| Chokeberry (*Aronia sp.*) | X | . | . | . | . | . | . | . |
| Blackberry (*Rubus sp.*) | . | X | . | . | . | . | X | . |
| Nannyberry (*Viburnum sp.*) | . | . | . | . | X | . | . | . |
| Grape (*Vitis sp.*) | . | X | . | . | X | . | . | . |
| Copperleaf (*Acalypha sp.*) | X | X | . | . | . | X | X | . |
| Amaranth (*Amaranthus sp.*) | . | X | . | . | X | X | . | X |
| Aster family (*Asteraceae*) | . | . | . | . | . | . | X | . |
| Turtlehead (*Chelone sp.*) | . | . | . | . | . | . | X | . |
| Dogwood (*Comus sp.*) | . | . | . | . | X | . | . | . |
| Goosegrass (*Eleusine sp.*) | X | . | . | . | . | . | . | X |
| Bean family (*Fabaceae*) | . | . | . | . | . | X | . | . |
| Carpetweed (*Mollugo verticillata*) | X | . | . | . | . | . | . | . |
| Sorrel (*Oxalis sp.*) | . | . | . | X | . | X | . | . |
| Pokeweed (*Phytolacca americana*) | X | X | . | X | X | . | X | X |
| Grass family (*Poaceae*) | . | . | . | . | . | X | . | . |
| Buckwheat family (*Polygonaceae*) | . | X | . | . | . | . | . | . |
| Purslane (*Portulaca sp.*) | X | X | . | . | X | X | X | X |
| Cinquefoil (*Potentilla sp.*) | . | . | . | . | . | X | . | . |
| Nightshade (*Solanum sp.*) | . | X | . | . | . | . | . | . |
| Vervain (*Verbena sp.*) | . | . | . | . | . | X | . | . |
| Violet (*Viola sp.*) | X | . | . | X | . | . | . | . |

The flotation sample from Feature 9, the possible prehistoric pit house or a natural treefall, yielded 43 pieces of wood charcoal and 15 uncarbonized modern seeds. The wood charcoal included a small number of identifiable taxa, consisting of ash (*Fraxinus* sp.), hickory (*Carya* sp.) and oak (*Quercus* sp.), as well as fragments of unidentifiable ring porous wood (e.g., oak, ash, and hickory) and unidentifiable specimens. No conclusions about forest type can be posited from this small assemblage, nor is it clear if the wood charcoal assemblage is a byproduct of the

prehistoric occupation of the site or incidental wood charcoal introduced during historic land clearing at Locust Grove. The seeds from the Feature 9 sample include violet (*Viola* sp.) and sorrel (*Oxalis* sp.) (see Appendix G). As noted above, these specimens are not considered potentially prehistoric and are more likely contaminants introduced during the collection and processing of the flotation sample.

Flotation samples from nineteenth-century pit features (Features 4, 5, and 7) and sheet midden/landscaping contexts (Strata B, C, and E) contained wood and wood charcoal, carbonized nutshell, and uncarbonized seeds (see Appendix G). Two hundred sixty-four fragments of wood and 132 fragments of wood charcoal were recovered from the feature and midden samples (see Appendix G). The amount of wood from Feature 4 is moderately high, although the identifications suggest that all the fragments are from a single piece of decaying wood (see discussion below). The amount of wood charcoal among the features and midden is moderate to low, suggesting secondary deposition.

The wood recovered from Feature 4 is slightly decomposed and difficult to identify; however, the specimens that were examined exhibit consistent morphological characteristics. They are all a ring porous wood type with numerous tyloses, attributes characteristic of oaks and chestnut (*Castenea dentata*). The wood charcoal assemblage contains a small number of identifiable specimens, including hickory, ash, oak, and maple (*Acer* sp.), as well as fragments of unidentifiable ring porous (e.g., oak, ash, and hickory), diffuse porous (e.g., maple), and coniferous woods, and unidentifiable specimens (see Table 20). No conclusions regarding forest type can be posited from this small assemblage, although the general composition suggests that a mixed hardwood forest was present in the vicinity of the site.

Two fragments of carbonized hickory nutshell were recovered from one of the Feature 4 samples (see Table 20). The context and the carbonized nature of the specimens suggest that they may represent food refuse.

Weed seeds are ubiquitous among the historic samples, occurring in 83 percent of the samples; seeds from edible fruits occur in 42 percent of the samples, and a single seed from a shrub that produces an extremely bitter fruit was recovered in one sample. Although some of the weed seeds may be associated with the historic occupation of the site, the majority had intact epidermis and embryos that appeared relatively fresh. These specimens are probably contaminants that were introduced during the collection and processing of the flotation samples. Many of the fruit seeds, including blackberry (*Rubus* sp.), nannyberry (*Viburnum* sp.), and grape (*Vitis* sp.), appear to be somewhat deteriorated, and may be refuse associated with historic subsistence activities. The single chokeberry (*Aronia* sp.) seed is considered to be an incidental inclusion.

The floral assemblage from Features 4, 5, 7, and 9 and Strata B, C, E, and F (SUs B1, C1, E, and F) at the Locust Grove Site is insubstantial, and provides limited information regarding the historic occupation of the site. In particular, the results suggest that a mixed hardwood forest was present in the vicinity of the site and that fruits (blackberry, nannyberry, and grape) and nuts were part of the historic diet. The relatively low density of floral remains from the historic

contexts is reflective of their secondary depositional context. The single sample for the one prehistoric/natural pit (Feature 9) provides inconclusive information. Finally, the single control sample from the sterile subsoil (Stratum F) indicates that there is minor contamination from bioturbation and complements the interpretation that many of the seeds are modern contaminants.

## E. SOIL CHEMISTRY ANALYSIS

Nine soil samples were submitted to the University of Delaware Soil Testing Laboratory for chemical analysis. Because concentrations of particular soil trace elements can be correlated with certain activities, soil chemical analysis can aid in identifying activity areas and general patterns in the use of space at a site. Historic activities at Locust Grove became fairly evident as the fieldwork progressed, so the principal objective of the soil chemical analysis was to assess, if possible, the association of Feature 9 (pit house/treefall) with human activities. Soil samples were, therefore, taken from the feature as well as from the surrounding subsoil. Several samples were also taken from historic deposits, mainly for comparative purposes.

TABLE 21

RESULTS OF SOIL CHEMISTRY ANALYSIS, LOCUST GROVE SITE (7NC-F-73)

| PROVENIENCE | CHEMICAL TEST* | | | | | |
|---|---|---|---|---|---|---|
| | Org.% | P | K | Mg | Ca | pH |
| Unit 27/Stratigraphic Unit C1 | 1.1 | 47.9 | 68.1 | 71.4 | 656.7 | 6.0 |
| Unit 30 /Stratigraphic Unit F | 1.2 | 28.5 | 55.4 | 102.5 | 660.7 | 5.9 |
| Unit 35/Feature 5, Level 1 | 1.4 | 13.9 | 38.1 | 42.7 | 880.9 | 7.2 |
| Unit 50/Stratigraphic Unit C1 | 0.6 | 25.6 | 50.4 | 47.8 | 390.6 | 6.0 |
| Feature 4, Level 1 | 1.8 | 162.2 | 117.0 | 78.5 | 1,219.3 | 6.3 |
| Feature 9, Level 2 | 1.2 | 45.3 | 90.4 | 68.1 | 624.4 | 6.5 |
| Feature 9, Level 2 | 1.1 | 16.8 | 38.3 | 99.7 | 457.0 | 5.6 |
| Feature 9, Level 1 | 1.2 | 46.0 | 77.8 | 57.6 | 689.4 | 6.4 |
| Unit 52/Stratigraphic Unit F | 1.2 | 94.0 | 118.3 | 80.4 | 1,042.1 | 6.7 |

* Chemical Tests: Org.%–percent of organic matter; P–available phosphorous; K–potassium, Mg–magnesium; Ca–calcium; pH–soil acidity

The relative frequencies of phosphorous, potassium, magnesium, calcium, and soil pH were examined for the nine samples submitted for analysis (Table 21). Phosphorous levels are probably the most important of the chemical markers indicative of human activities on an archaeological site. High phosphorous levels are often caused by the deposition of feces, urine, or organic matter, and could result from the deposition of organic waste or purposeful manuring, or could indicate an area where animals were confined (Custer et al. 1986; Hoseth et al. 1994). Because phosphorous does not readily move within a soil profile, elevated phosphorous levels in non-historic depositional contexts are commonly associated with prehistoric occupation (Wagner 1992). Concentrations of potassium result from the deposition of wood ash either through surface burning or by the dumping of ash from a stove or fireplace. Calcium concentrations can result

from agricultural liming, the deposition of shell, or the presence of lime-based building materials such as cement or mortar. Concentrations of magnesium are affected by most of the processes or variables that control the levels of calcium, although magnesium is especially elevated if dolomitic limestone fertilizer has been applied. Samples with a pH reading of greater than 7.0 indicate alkaline soils, while readings below 7.0 indicate acidic soils (Custer et al. 1986:90-91); the soils of Delaware are naturally acidic (Mathews and Lavoie 1970).

As shown in Table 21, the highest phosphorous levels of those portions of the site analyzed occur in Feature 4 and in SU F (subsoil) in Test Unit 52, the latter deposit being located near the western edge of the East Block. The presence of 67 bone fragments (the majority of which were unidentifiable) and teeth in Feature 4, together with the high phosphorous content, suggests that this deposit had contained a relatively high concentration of organic refuse compared to some of the other deposits tested. The subsoil in Test Unit 52, on the other hand, did not yield any prehistoric cultural material, even though its phosphorous level was the second highest of the nine samples tested. The rather low concentration of phosphorous in Feature 5 (see Table 21) in the west yard, on the other hand, suggests that this deposit did not contain much in the way of organic refuse, a notion supported by the sparse faunal assemblage from the feature (N=8). Soil samples taken from Feature 9 yielded phosphorous levels in the low to middle range, while the subsoil just outside the feature (SU F in Test Unit 3) produced similar results.

Potassium levels for the nine samples more or less mirrored those for phosphorous (see Table 21). The highest concentrations of potassium occurred in Feature 4, SU F in Test Unit 52, and Feature 9, Level 2. The high potassium level in Feature 4 (and the more modest levels in Feature 5 and SU C1) is probably the result of ash dumping; potassium concentrations in Feature 9 and in the subsoil are less easily explainable, but may be from surface burning.

Of the nine samples, calcium was most heavily concentrated in the sample taken from Feature 4, and is probably due to the large number of oyster shells present in that deposit. As shown in Table 21, a high calcium level also characterizes SU F in Test Unit 52. Although no shell was recovered from SU F, it directly underlay SU E, the nineteenth-century deposit that yielded six pieces of lime and over 2.5 kilograms of oyster shell; the calcium concentration in SU F may, therefore, be the result of leaching. Leaching may also account for the calcium levels in Features 5 and 9. Feature 5, which yielded only modest quantities of shell, was overlain by SU B, which produced over nine kilograms of this material. Feature 9, which likewise contained only a small amount of shell, was directly overlain by Feature 4, which contained 3.317 kilograms of oyster shell as well as 18 pieces of lime. Magnesium concentrations are fairly varied and do not correspond very closely with the levels derived for calcium.

Given the amount of shell recovered from several of these deposits, pH values might be expected to be higher (i.e., over 7.0). In fact, only one sample, that taken from Feature 5, yielded a pH over 7.0. In some instances, such as Feature 4, which yielded both the highest phosphorous and calcium levels of the deposits analyzed, the pH may be offset by the concentration of organic remains.