

**PHASE II/III DATA RECOVERY OF 15FA290
ALONG KY 922 (NEWTOWN PIKE)
IN FAYETTE COUNTY, KENTUCKY**

(STATE ITEM NUMBER 7-261.00)

(UK-PAR PROJECT No. 08-13)



**UK University of Kentucky
Program for Archaeological Research
Department of Anthropology**

Technical Report No. 612

7 July 2008

Revised 11 January 2016

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Technical Report No. 612



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ABSTRACT

At the request of the Kentucky Transportation Cabinet (KYTC), archaeologists from the University of Kentucky's Program for Archaeological Research (UK-PAR) completed a Phase II archaeological testing project of 15FA290 a 19th-century historic site, located within the right of way (ROW) of the proposed realignment/widening of KY 922 (Newtown Pike) between the Interstate 75 interchange and Ironworks Road in Fayette County, Kentucky. The work was conducted as part of a Design-Build contract that was coordinated by ETRAN, an engineering company in Lexington, Kentucky. The Phase II archaeological assessment was conducted to evaluate the eligibility of that portion of 15FA290 that lies within the proposed new ROW alignment and adjacent construction easement for listing on the National Register of Historic Places (NRHP). The Phase II investigations included systematic shovel test excavation, test unit excavation, mechanical removal of plow zone, and hand excavation of selected exposed features. These Phase II tasks resulted in exposure of a complete house foundation and associated features in both inner yard and outer yard settings. As a result of these findings, an on-site evaluation was conducted by staff of the Kentucky Heritage Council (KHC), KYTC, and UK-PAR, resulting in the determination that 15FA290 was eligible for listing on the NRHP, and that data recovery excavations (Phase III investigations) should be done to mitigate the impact of the proposed highway realignment on the affected portion of the site.

Phase II investigations included excavation of 18 shovel tests in a limited area within the site boundaries to determine the location and extent of possible subplow zone midden that had been encountered during Phase I survey. No intact midden or features were found. This task was followed by hand-excavation of ten 1-x-1-m test units in areas of higher artifact concentration or likely topographic positions for encountering features or intact midden deposits. No features or architectural remains were found during the initial test unit excavations, but artifacts that dated from the early 19th century to the early 20th century were recovered, which confirmed the interpretations from the initial Phase I survey. Upon completion of the first ten hand excavated test units, plow zone was mechanically removed from three large blocks and four narrow trenches (500 m² of site area) to expose possible subsurface features or architectural remains. This effort exposed an entry/driveway feature, scattered historic postholes, small patches of remnant midden, and the stone foundation of a house and the brick outline of an adjacent cistern. The house foundation measured about 10 by 7.6 meters and contained two side by side rooms, each with a hearth/chimney base, and a long room along the common north side of the first two rooms. After the house foundation and cistern outline were completely exposed and mapped in detail, additional test units were excavated within and around the foundation to document stratigraphic sequences in specific areas of the site, obtain artifact samples from undisturbed contexts, and determine if features were present in the interior of the house. These excavations revealed between 30 and 70 cm of rubble fill in the house interior, underlain by discontinuous patches of subfloor accretional deposits capping the prepared subsoil cellar floor. A series of small subfloor pits were documented that intruded into the subsoil, as well as locally heavy rodent disturbances. One pit feature was also found in the inner yard area near the cistern. Presence of the intact features and deposits with artifacts dating to the early to late 19th century are factors that made 15FA290 eligible for listing on the NRHP.

After sampling the interior house fill, rubble fill was mechanically removed from the interior of the East and West rooms to expose the cellar floor and other possible features. A total of 22 additional interior features were mapped and excavated. All features located outside of the house foundation were documented and sampled. The cistern was bisected with a backhoe, and the resulting profile was drawn and photographed. A total of 52 features including the house foundation and the cistern were documented and either completely or partially excavated. Artifacts recovered from 15FA290 indicate an occupation that began in the early years of the 19th century and continued into the first decade of the 20th century. These artifacts and features are consistent with the documentary evidence relating to the site, which suggests that the house was built by 1803 and was demolished around 1910. Subsequent artifact analyses focused on linking specific features to early, middle, and late segments of the occupational span of the house and reconstructing the sequence of house construction, modification, and abandonment. The findings indicate that once the residence was constructed, there were no major modifications made to it in the subsequent century of occupation. The cistern was apparently emplaced in the 1830s, and there is evidence for a major repair

episode in the East Room, but otherwise, the footprint of the residence remained stable. Analyses of selected material classes and investigation of documentary records for the site owners indicate that the site occupants prior to the 1850s were probably of moderate to better than moderate economic standing. After 1854 the property is owned by more wealthy individuals who did not live in the 15FA290 residence. Instead, the house was occupied by a series of tenants or renters, all of whom were of low economic standing. Attempts were made to link artifacts and specific contexts to known or inferred racial or ethnic identities of the site occupants, but these were not successful.

Because field work conducted during Phase II and Phase III investigations mitigated the impact of proposed construction on the portion of 15FA290 which lies within the ROW and construction easement, no further fieldwork is recommended for this part of the site. However, we note that an additional unexcavated portion of 15FA290 lies on the University of Kentucky Maine Chance Farm just west of the current project area corridor. That portion of the site may contain additional features and intact deposits. Any construction activities that might affect this remaining portion of 15FA290 will require additional Phase II evaluation and possibly mitigation.

TABLE OF CONTENTS
(Authors names in parentheses)

	Page
Abstract	i
List of Figures	iv
List of Tables	vii
Chapter 1: Introduction (Melissa Ramsey)	1
Chapter 2: Environmental Setting (Melissa Ramsey).....	7
Chapter 3: Culture-Historical Context for 15FA290	
Prehistoric Context (Melissa Ramsey).....	11
General Historic Context of Fayette County (Michael L. Loughlin).....	13
Previous Archaeological Research at and Near 15FA290 (Brian Mabelitini).....	16
Chapter 4: Research Goals (Steven R. Ahler and Greg Maggard).....	31
Chapter 5: Field and Laboratory Methods	
Field Methods (Michael L. Loughlin and Greg Maggard)	35
Laboratory Methods (Christina Pappas and Steven R. Ahler).....	39
Curation	53
Chapter 6: Description and Analysis of Materials Recovered	
Prehistoric Artifacts (Steven R. Ahler).....	55
Historic Artifacts (Christina Pappas).....	63
Chapter 7: Results of Field Work (Michael L. Loughlin)	
Shovel Tests.....	115
Initial Test Unit Excavations	118
Mechanical Removal of Plow Zone	125
Additional Test Units within Block 3	132
Trenches and Supplemental Test Unit	151
Mechanical Removal of Rubble and Cleaning of Feature 1	156
Feature Descriptions	162
Chapter 8: Spatial, Functional, and Temporal Considerations (Steven R. Ahler)	
Diachronic and Functional Interpretations of the House at 15FA290	207
15FA290 in Regional Context	217
Summary	219
Chapter 9: Identity and Economic Status	
Racial/Ethnic Affiliation (Michael L. Loughlin)	221
Economic Status (Brian Mabelitini and Bruce L. Manzano).....	227
Conclusions (Michael L. Loughlin).....	246
Chapter 10: Summary and Recommendations (Michael L. Loughlin).....	247
References Cited	253
Appendices A and B	Back Pocket

LIST OF FIGURES

Figure	Page
1.1. Location of Fayette County, Kentucky	1
1.2. Location of 15FA290 on the USGS 7.5' East Lexington, Kentucky Topographic Quadrangle	2
3.1. Sketch Map of 15FA290 Showing Phase I Investigations and Initial Site Boundaries.....	17
3.2. Portion of an 1861 Land Ownership Map of Fayette County (Hewitt 1861).....	18
3.3. Overlay of Historic Sites Documented in the Phase I Survey onto a Segment of the <i>Atlas of Bourbon, Clark, Fayette, Jessamine, and Woodford Counties, Kentucky</i> (Beers 1877).....	20
3.4. Location of 15AF290 and nearby Historic Sites on the <i>Map of Fayette County, Kentucky</i> (Wallis 1891).....	21
3.5. Overlay of Tracts of Early Land Sales on the Modern Topographic Context of 15FA290	23
3.6. Selected Historic Sites Shown on a Segment of the Mullin (1904) <i>Map of Fayette County, Kentucky</i>	28
5.1. General Site Plan for 15FA290 Showing Locations of Archaeological Investigations	36
6.1. Counts of Flake Types among Grades of Raw Material Types.....	58
6.2. Projectile Points Recovered during Phase II/III Investigations at 15FA290	60
6.3. Examples of Creamware Recovered from 15FA290.....	68
6.4. Transfer-Printed Pearlware from 15FA290.....	69
6.5. Edge-Decorated Pearlware from 15FA290	70
6.6. Hand-Painted Pearlware from 15FA290	70
6.7. Factory-Made Decorations on Pearlware Recovered from 15FA290	71
6.8. Factory-Made Decorations on Pearlware from 15FA290	71
6.9. Pearlware Lid Fragments from 15FA290.....	72
6.10. Decorated Whiteware from 15FA290	73
6.11. Ironstone from 15FA290 Showing Various Decorations	74
6.12. Maker's Marks on Whiteware and Ironstone from 15FA290	76
6.13. Porcelain from 15FA290.....	77
6.14. Yellowware from 15FA290.....	77
6.15. Redware from 15FA290.....	78
6.16. Stoneware from 15FA290	79
6.17. Weir Style Canning or Fruit Jar Lid Made from Stoneware with Bristol Glaze	79
6.18. Albany Slipped Stoneware Jug from Interior of Feature 1 at 15FA290.....	80
6.19. Complete Bottles from 15FA290 and Soda Bottle Fragment.....	81
6.20. Examples of Container Glass Bases and Finishes from 15FA290	83
6.21. Ricketts Bottle Base from Feature 1 Interior at 15FA290.....	83
6.22. Examples of Colored Glass Fragments Recovered from 15FA290	84
6.23. Scroll Flasks Recovered from 15FA290	85
6.24. Examples of Kitchen Group and Furniture Group Table Glass from 15FA290.....	86
6.25. Kitchen Utensils Recovered from Feature 1 at 15FA290.....	86
6.26. Knives Recovered from 15FA290.....	87
6.27. Frequency Distribution of Glass Fragments by Five-year Increment	89
6.28. Selected Architectural Artifacts from Feature 1 at 15FA290.....	91
6.29. Selected Furniture Group Artifacts Recovered from Feature 1 at 15FA290.....	93
6.30. Coins Recovered from Feature 1 at 15FA290	95
6.31. Locket Recovered from Feature 1 at 15FA290	95
6.32. Broach Recovered from Feature 1 at 15FA290.....	95
6.33. Examples of Marbles from Feature 1 at 15FA290	96
6.34. Porcelain Doll Face Fragments from Feature 1 at 15FA290.....	97
6.35. Personal Group Ceramics from 15FA290	97
6.36. Selected Pipe Fragments from Feature 1 at 15FA290.....	98
6.37. Personal Hygiene Items from 15FA290	99
6.38. Selected Personal Items from Feature 1 at 15FA290	99
6.39. Patent Medicine Bottle from Feature 1 at 15FA290.....	100

6.40.	Glass Syringe Plunger from Feature 1 at 15FA290	100
6.41.	Arms-related Artifacts from 15FA290.....	102
6.42.	Gun Flints from 15FA290.....	102
6.43.	Activities Group Artifacts from 15FA290.....	104
6.44.	Punch and Cold Chisel Set from Feature 1 at 15FA290.....	105
6.45.	Transportation-related Artifacts from Feature 1 at 15FA290	105
6.46.	Selected Buttons from Feature 1 at 15FA290.....	107
6.47.	Goodyear Vulcanized Rubber Button from Feature 1 at 15FA290	107
6.48.	Suspender Buckles from Feature 1 at 15FA290	108
6.49.	Date Ranges of Major Classes of Temporally Diagnostic Artifacts.....	111
7.1.	Site Plan and Archaeological Investigations at 15FA290.....	116
7.2.	Representative Shovel Test Profile for Phase II/III Investigations at 15FA290	117
7.3.	Representative Soil Profile for Initial Test Units Excavated at 15FA290	120
7.4.	Soil Profile for Test Unit 8 at 15FA290.....	123
7.5.	View of Block 1 at 15FA290 (looking east-northeast).....	126
7.6.	Detailed Site Plan of 15FA290 Showing Archaeological Investigations, Feature Locations, and Interpretations of Site Layout.....	127
7.7.	View of Block 2 at 15FA290 after Plow Zone Removal (looking northwest)	130
7.8.	Removal of Plow Zone Overburden from East Side of Block 3, Exposing Feature 1 Foundations and Interior Rubble Fill (looking grid northeast)	131
7.9.	Feature 1 in Block 3 at 15FA290 (looking northeast)	132
7.10.	East Profile of Test Unit 11 at 15FA290.....	133
7.11.	South Profile of Test Unit 12 at 15FA290	135
7.12.	Top of Subsoil in Test Unit 12 at 15FA290.....	136
7.13.	West Wall of Test Unit 13 at 15FA290	140
7.14.	Adjoining East and South Profiles of Test Unit 13 at 15FA290.....	141
7.15.	East Profile of Test Unit 14 at 15FA290.....	146
7.16.	Photograph of East Wall of Test Unit 14 at 15FA290.....	147
7.17.	East Profile of Test Unit 15 at 15FA290.....	149
7.18.	West Profile of Test Unit 17 at 15FA290	150
7.19.	Trench 1 South at 15FA290 (looking south)	152
7.20.	Trench 2 at 15FA290 (looking south).....	152
7.21.	Trench 3 at 15FA290 (looking south-southeast).....	154
7.22.	Trench 4 at 15FA290 (looking north).....	154
7.23.	Feature 1 House Foundation at 15FA290 after Excavation of Supplemental Test Units (looking southeast)	156
7.24.	Feature 1 House Foundation at 15FA290 after Removal of Rubble Fill from East and West Rooms (looking north)	161
7.25.	Red Pigment on Limestone Rock and South Interior Wall in Feature 1 at 15FA290.....	161
7.26.	Detailed Plan of Feature 1 at 15FA290 with Associated Interior and Exterior Features.....	163
7.27.	View of West and East Rooms of Feature 1 at 15FA290 after Rubble Removal and Cleaning (looking north).....	166
7.28.	Knife Blade Inserted into Interior Wall of Feature 1	167
7.29.	Segment of the North Wall Profile of Test Unit 13 Showing Feature 20 and Feature 31 Profiles	172
7.30.	Profiles of Features 30, 32, and 33 in the West Room of Feature 1 at 15FA290	176
7.31.	Profiles of Features 38, 39, and 40 in the West Room of Feature 1 at 15FA290	178
7.32.	Profiles of Features 41, 42, 43, 44, and 45 in the East Room of Feature 1 at 15FA290.....	185
7.33.	Plan View of Feature 44 in the East Room of Feature 1 at 15FA290.....	186
7.34.	Profiles of Features 46, 47, 48, 50, and 51 in the East Room of Feature 1 at 15FA290.....	188
7.35.	Profile of Feature 8 at 15FA290	191
7.36.	Outline of Feature 24 Cistern after Removal of Plow Zone from Block 3 at 15FA290 (looking southwest).....	193

7.37.	Cross-section of Feature 24 Cistern at 15FA290 (looking southwest).....	194
7.38.	Drawing and Description of South Portion of Feature 24 Cistern Profile at 15FA290.....	194
7.39.	Plan View of Feature 6 at 15FA290	198
7.40.	Profile of Feature 15 at 15FA290.....	200
7.41.	Profiles of Posthole Features 16 and 17 at 15FA290	200
7.42.	Plan View of Features 16, 17, and 18 in Block 2 at 15FA290	201
7.43.	West Profile of Excavated Section of Feature 18 at 15FA290.....	201
7.44.	Features at 15FA290 Assigned to Temporal Segments of the Feature 1 House Occupation.....	204
8.1.	Hand Wrought Nail Percentages by Functional Category from Feature 1 at 15FA290	211
8.2.	Early Machine-Cut Nail Percentages by Functional Category from Feature 1 at 15FA290	211
9.1.	Red Pigment in Rubble Fill Contexts near South Wall of Feature 1 at 15FA290.....	224
9.2.	Glass Bottle Recovered from Chimney Base in West Room of Feature 1 at 15FA290	224
9.3.	Gun Flint Made on Local Chert at Chimney Base in West Room of Feature 1	225
9.4.	Locket Recovered from Feature 1 at 15FA290	225
9.5.	Knife Placed in Interior Wall of Feature 1 over Builders' Trench in East Room	226

LIST OF TABLES

Table	Page
3.1. Chain of Title for 15FA290	22
6.1. Artifacts Recovered from Phase II/III Investigations at 15FA290	57
6.2. Lithic Modified Items Recovered from Phase II/III Investigations at 15FA290	60
6.3. Kitchen Group Artifact Categories Recovered from Phase II/III Excavations at 15FA290	64
6.4. Architecture Group Artifact Categories Recovered from Phase II/III Excavations at 15FA290...	88
6.5. Nail Penny Weight and Manufacturing Data for 15FA290	90
6.6. Furniture Group Artifact Categories from 15FA290	92
6.7. Personal Group Artifact Categories from 15FA290	94
6.8. Artifacts in the Arms Group from 15FA290.....	101
6.9. Artifacts from the Activities Group	104
6.10. Artifacts from 15FA290 Assigned to the Transportation Group	105
6.11. Clothing Group Artifact Categories Recovered from 15FA290	106
6.12. Artifacts from the Unassigned Materials Group	109
7.1. Historic Artifacts Recovered from Phase II/III Shovel Tests at 15FA290	117
7.2. Historic Artifacts Recovered from Initial Test Units at 15FA290	119
7.3. Artifact Density for Initial Test Units at 15FA290	124
7.4. Distribution of Selected Major Artifact Classes by Initial Test Unit at 15FA290	125
7.5. Distribution of Temporally Sensitive Artifact Categories by Initial Test Unit at 15FA290	125
7.6. Historic Artifacts Recovered from Mechanical Blocks 1, 2, and 3 at 15FA290.....	128
7.7. Historic Artifacts Recovered from Test Unit 11 at 15FA290	134
7.8. Correlation of Arbitrary Levels and Natural/Cultural Strata for Test Unit 12.....	136
7.9. Artifacts Recovered from Test Unit 12 at 15FA290.....	137
7.10. Correlations between Arbitrary Levels and Strata for Test Unit 13	140
7.11. Artifacts Recovered from Test Unit 13 at 15FA290.....	143
7.12. Correlations between Arbitrary Levels and Strata for Test Unit 14	146
7.13. Artifacts Recovered from Test Unit 14 at 15FA290.....	147
7.14. Correlations between Arbitrary Levels and Strata for Test Unit 15	149
7.15. Artifacts Recovered from Test Unit 15 at 15FA290.....	149
7.16. Correlations between Arbitrary Levels and Strata for Test Unit 17	150
7.17. Artifacts Recovered from Test Unit 17 at 15FA290.....	150
7.18. Historic Artifacts Recovered from Selected Trenches at 15FA290.....	153
7.19. Historic Artifacts Recovered from Unit 16 at 15FA290.....	155
7.20. Historic Artifacts Recovered During Rubble Fill Removal and Cleaning of Feature 1	158
7.21. Complete Nails Associated with Feature 1 by Pennyweight and Construction Usage.....	169
7.22. Nail Types Grouped by Construction Usage	170
7.23. Historic Artifacts Recovered from Features in the West Room of Feature 1 at 15FA290	173
7.24. Historic Artifacts Recovered from Features in the East Room of Feature 1 at 15FA290.....	181
7.25. Historic Artifacts Recovered from Features in the Inner Yard at 15FA290	192
7.26. Historic Artifacts Recovered from Features in the Outer Yard at 15FA290	197
7.27. Synopsis of Temporal Assignments for Discrete and Intact Excavation Contexts at 15FA290	202
8.1. Vessel Types from Features and Intact Deposits within East and West Rooms at 15FA290	208
8.2. East and West Room Artifact Types.....	208
8.3. Complete Nails Associated with Feature 1 by Pennyweight and Construction Usage.....	210
8.4. Nail Types Grouped by Construction Usage	210
8.5. Synopsis of Functional, Temporal, and Spatial Attributes of Features at 15FA290.....	214
9.1. Early Segment Features Mean Ceramic Index Value	230
9.2. Early-Middle Segment Features Mean Ceramic Index Value	230
9.3. Middle Segment Features Mean Ceramic Index Value	230
9.4. Middle-Late Segment Features Mean Ceramic Index Value.....	230

9.5.	Late Segment Feature Mean Ceramic Index Value.....	230
9.6.	15FA290 Ceramic Price Index Values for Each Segment of House Occupation at 15FA290	231
9.7.	Comparison of 15FA290 Ceramic Index Values with Other Sites.....	231
9.8.	Summary of Faunal Remains from Features at 15FA290	234
9.9.	Temporally Assigned Features at 15FA290 that Produced Faunal Remains	235
9.10.	Faunal Remains from Early Segment Feature Contexts at 15FA290.....	237
9.11.	Food Utility Indices (FUI) Generated for Cow and Pig Remains from the Early and Middle-Late Faunal Assemblages at 15FA290	238
9.12.	Faunal Remains from Middle and Late Segment Feature Contexts at 15FA290	240
9.13.	Faunal Groups from the Early and Middle-Late Faunal Assemblage at 15FA290	242
9.14.	Proportions of Wild and Domestic Faunal Groups in Faunal Assemblages at 15FA290	242
9.15.	Summary of Diet Type Based on Domestic vs. Wild Taxa Recovered from Selected Historic Farmsteads and Residences Excavated in Kentucky	245
9.16.	Summary of Rat (<i>Rattus</i> sp.) Identified from Selected Historic Farmsteads and Residences Excavated in Kentucky	245

CHAPTER 1

INTRODUCTION

At the request of the Kentucky Transportation Cabinet (KYTC), archaeologists from the University of Kentucky Program for Archaeological Research (UK-PAR) completed a Phase II archaeological testing project of 15FA290 a 19th-century historic site, located within the right of way (ROW) of the proposed realignment/widening of KY 922 (Newtown Pike) between the Interstate 75 interchange and Ironworks Road in northern Fayette County, Kentucky (Figures 1.1 and 1.2). Sites 15FA294 and 15FA295 were also investigated during the Phase II project, and these are discussed in a separate report.

The Phase II archaeological testing was conducted to evaluate the eligibility for listing on the National Register of Historic Places (NRHP) of that portion of 15FA290 that will be impacted by the proposed construction. This portion of the site lies within the proposed new ROW alignment and adjacent construction easement and is estimated to include about 60 to 70 percent of the site area. The Phase II investigations included systematic shovel test excavation, test unit excavation, mechanical removal of plow zone, and hand excavation of selected features exposed by mechanical excavations. These Phase II tasks resulted in exposure of a complete house foundation and associated features in both inner yard and outer yard settings. As a result of these findings, an on-site evaluation was conducted by staff of the Kentucky Heritage Council (KHC), KYTC, and UK-PAR. At that time, the determination was made that 15FA290 was eligible for listing on the NRHP, and that data recovery excavations (Phase III investigations) should be done to mitigate the impact of the proposed highway realignment on the site. The data recovery excavations commenced immediately, and the associated tasks included additional hand excavation of test units within and adjacent to the house, mechanical removal of rubble within the house foundation, and hand excavation of all features exposed within the house and in surrounding inner and outer yards.

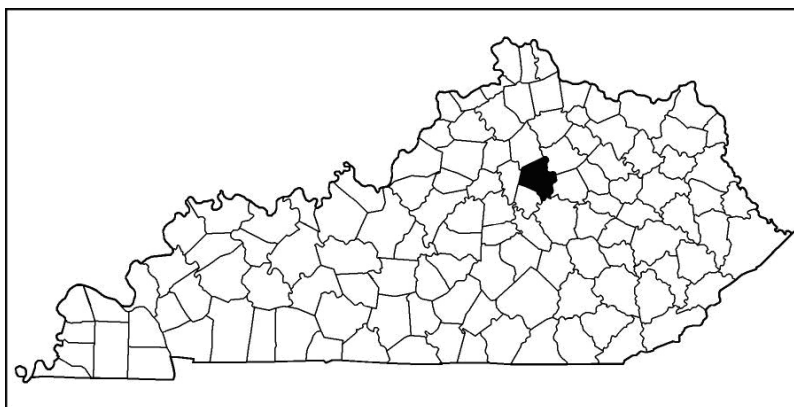


Figure 1.1. Location of Fayette County, Kentucky.

All archaeological investigations were conducted in compliance with provisions of the National Historic Preservation Act of 1966 (as amended), the National Environmental Policy Act of 1969, Procedures of the Advisory Council on Historic Preservation, Executive Order 11593 (Protection and Enhancement of the Cultural Environment), and the Kentucky Heritage Council's (KHC) *Specifications for Conducting Fieldwork and Preparing Cultural Assessment Reports* (revised June 2001). All artifacts collected during the survey were washed, sorted, and catalogued at the University of Kentucky Program for Archaeological Research laboratory in Lexington. All artifacts, field notes, photographs, and other project-related materials will be curated at the University of Kentucky William S. Webb Museum of Anthropology in Lexington.

The project was carried out under the supervision of UK-PAR director Dr. Steven Ahler. Project archaeologist Greg Maggard oversaw the field investigations. Field technicians included R. Matt Byron, Ronnie Hazlett, Edward Henry, Logan Kistler, Brian Mabelitini, Melissa Ramsey, Carrell Rush, and Emily

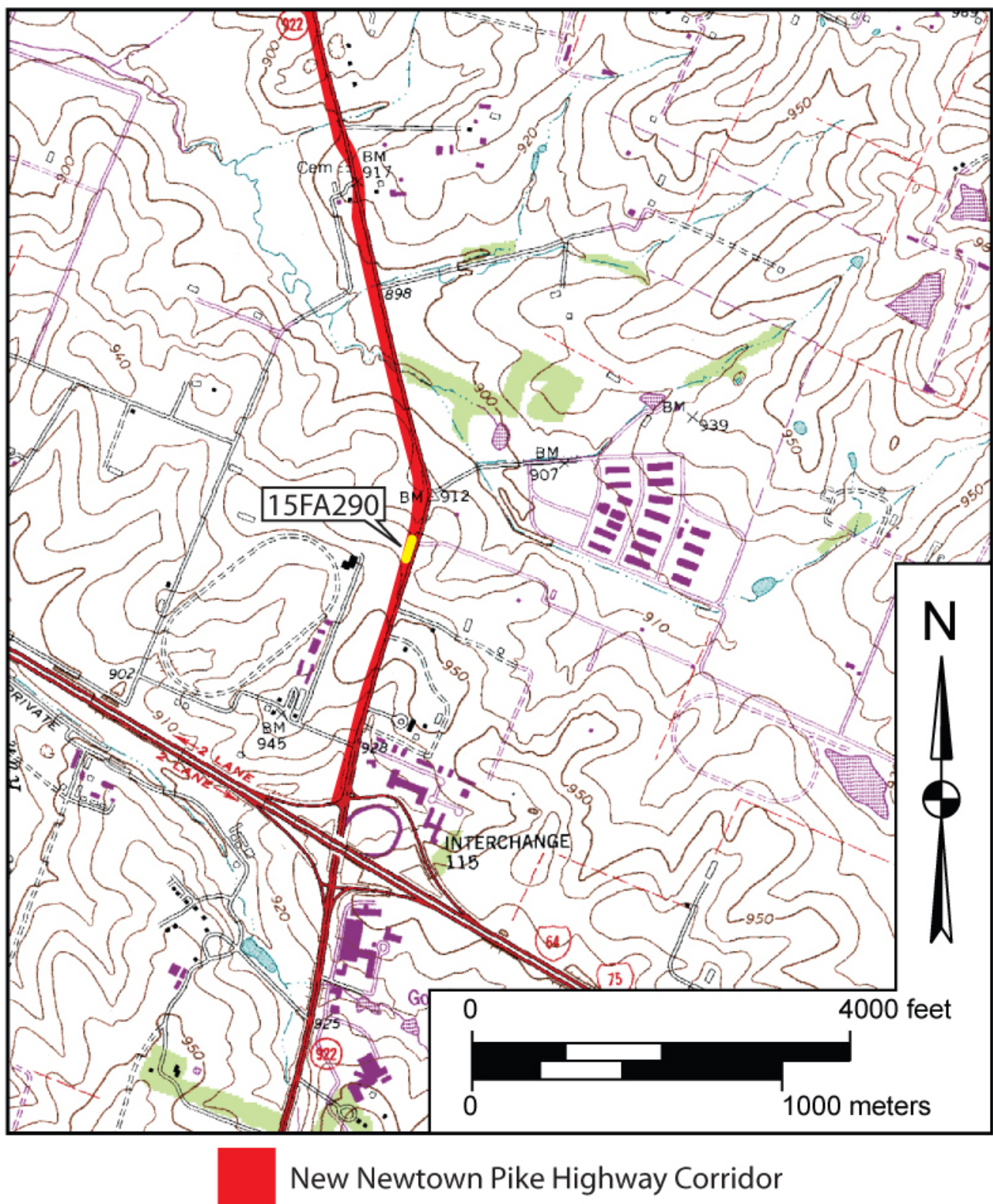


Figure1.2. Location of 15FA290 on the USGS 7.5' East Lexington, Kentucky Topographic Quadrangle.

Swintosky. The combined Phase II and Phase III field investigations were conducted between 23 February and 10 April 2007 and took approximately 1056 person hours to complete. Michael Loughlin, Christina Pappas, and Steven Ahler were primarily responsible for preparing the final report, though many others aided

their efforts. Steven Ahler analyzed prehistoric artifacts and edited the report. Christine Pappas and Brian Mabelitini analyzed historic artifacts, with the assistance of Logan Kistler and Emily Swintosky, and Nancy O'Malley of the William S. Webb Museum of Anthropology provided crucial interpretive assistance. Michael Loughlin described and interpreted the excavation contexts, which could not have been accomplished without the field notes and subsequent aid and consultation of Greg Maggard. Bruce Manzano described and analyzed the faunal remains. Henry Francis of the Kentucky Geological Survey conducted X-ray diffraction analysis of pigment samples. Hayward Wilkerson prepared images for this report, while Brian Mabelitini, Christina Pappas, Emily Swintosky, Jason Ross, Matt Byron and Nancy O'Malley conducted deed and documentary records research. Authorship of individual chapters and sections is shown in the Table of Contents.

PROJECT AREA DESCRIPTION

Site 15FA290 is situated along Newtown Pike in northern Fayette County, on the upper shoulder and northern sideslope of a large, low upland rise at approximately 940 feet above mean sea level (Figure 1.2). The site overlooks an extensive bottomland to the north, which is at a major turn in Newtown Pike opposite the Fasig-Tipton Farm entrance (Byron et al. 2007). Site 15FA290 is a historic site defined by an artifact scatter in an agricultural field and twelve positive shovel tests in adjacent pastureland. Two of the shovel tests excavated in the Phase I survey showed potentially intact cultural deposits at the base of the plow zone, which suggested that the potential was high for preservation of intact features or midden. The site covers an area of approximately 8,400 m² and measures a maximum of 150 meters north-south (generally parallel to Newtown Pike) and about 60-70 meters east-west. The site continues west for about 10 meters beyond the west edge of the project area, and this part of the site was only minimally investigated. The site represents the remains of a farmstead/residence that was occupied throughout the 19th century and into the first decade of the 20th century. Artifact density was moderate, and materials recovered in the Phase I survey included mid-19th-century transfer-printed whiteware and machine-cut nails. Historic maps consulted during the Phase I survey showed a structure at the location of 15FA290 on the Beers (1877) atlas, on an 1891 map, and on a 1904 map of Fayette County. However, no structure is shown in this location on the 1912 map of Fayette County, which indicates that the structure was razed in the first decade of the 20th century. Occupation of 15FA290 probably spans about a century.

The project area is within the Inner Bluegrass physiographic region and is contained within the Bluegrass Management Area as described in the State Historic Preservation Comprehensive Plan for archaeology (Pollack 1990:11; Pollack 2008). Specifically, the project area is located on the USGS Lexington East, KY 7.5' topographic quadrangle map (1965, photorevised 1993). The project area and site location are shown in Figure 1.2 in relation to a portion of the Lexington East quadrangle map.

The proposed realigned Newtown Pike construction corridor is about 30 meters wide at the location of 15FA290, and all of the new ROW is positioned on the west side of the existing Newtown Pike. A temporary construction easement for utility line relocation runs adjacent to the new ROW corridor and widens the area that will be disturbed by construction an additional 12 meters to the west of the new ROW line. Portions of 15FA290 extend just west of the temporary construction easement boundary, and we estimate the site continues for at least 10 meters in that direction, especially near the house remains. However, the UK-PAR Phase II and Phase III work was strictly confined to that portion of 15FA290 that lay within the new ROW and construction easement corridor. The remaining part of the site is located on the Maine Chance Farm, an experimental agriculture farm operated by the University of Kentucky.

PHASE II/PHASE III EVALUATION AND SUMMARY

Phase II investigations of the site began with the excavation of 18 shovel tests on a 5-meter grid, covering a limited area within the site boundaries to determine the extent of possible subplow zone midden

that had been documented during the Phase I survey (Byron et al. 2007). No intact midden or features were found during the shovel test excavations, so the presence of intact subplow zone cultural deposits could not be confirmed. Subsequently, ten hand-excavated 1-x-1-m test units (TU1 through TU10) were placed in areas of higher artifact concentration or in topographic positions that were viewed as likely to contain intact deposits on the north shoulder and upper sideslope of the principal site landform. No features or architectural remains were uncovered during the initial test unit excavations, and artifacts were recovered only from plow zone contexts. Kitchen, architectural, and personal artifacts that dated from the mid 19th century to the early 20th century were recovered from these test units, which confirmed results of the Phase I survey (Byron et al. 2007) regarding the general date range of the site and its interpretation as a residential location.

Upon completion of the first ten hand-excavated test units, and the subsequent absence of any intact architectural remains or midden to guide additional excavations, plow zone was mechanically removed to expose possible subsurface features and structural elements. Approximately 500 m² of plow zone sediment was removed in three large blocks and four narrow trenches in areas that were considered most likely to contain subsurface features. These mechanical excavations exposed an entryway feature, scattered historic postholes (given feature numbers for this project), small patches of remnant midden, the stone foundation of a house, and the brick outline of an adjacent cistern. The house foundation measured approximately ten by ten meters (32 x 32 feet) and contained two side-by-side rooms (East Room and West Room), each with a chimney base, and a long room or porch foundation along the common north side of the first two rooms (North Room). The cistern outline measured about 3 meters in diameter, and the upper portion of the cistern had been previously removed. After the house foundation and cistern outline were completely exposed and mapped in detail, four additional test units (TU11, TU12, TU13, and TU17) were placed interior to the foundation to gain a better sense of the stratigraphic sequence within the house fill and to evaluate the potential for additional subsurface features on the interior of the house (such as small trash disposal pits or deeper pit cellars). Two more test units (TU14 and TU15) were placed near the cistern where backdirt from its construction had sealed an original A horizon containing early 19th century artifacts. Another test unit (TU16) was placed in a possible trash dump area in a shallow draw/depression some 60 meters north of the house. These excavations revealed between 30 and 70 cm of rubble fill in the house interior, underlain by about 10-15 cm of superimposed thin layers of accretional deposits, all of which capped the prepared subsoil cellar floor. A series of small subfloor pits were documented that intruded into the subsoil, as well as locally heavy rodent disturbances. One pit feature was found in TU15 excavated near the cistern and exterior to the house.

After sampling the interior fill and determining the general stratigraphic sequence, staff of UK-PAR met on-site with representatives from KYTC and the Kentucky Heritage Council. In the on-site meeting, it was mutually determined that 15FA290 was eligible for listing on the NRHP, that the site could not be avoided, and that data recovery excavations should proceed to mitigate the adverse impact to the site created by the realignment of Newtown Pike. The decision was also made by mutual consent to abandon hand excavation of the interior house fill in favor of mechanical removal of the rubble fill from the interior of the east and west rooms. This mechanical excavation exposed the cellar floor and some of the accretional deposits that had accumulated on the floor during site occupation, as well as multiple additional potential features. A total of 22 additional interior features were mapped and excavated. All features located outside the house foundation were documented and at least partially excavated. The cistern was bisected with a backhoe, and the resulting profile was drawn and photographed. A total of 51 features including the house foundation (Feature 1), the cistern, and postholes that were numbered as features, were documented and either completely or partially excavated. Artifacts recovered from 15FA290 indicate an occupation that began in either the very late 18th century or very early 19th century and continued into the first decade of the 20th century. These artifacts and features are consistent with the documentary evidence relating to the site, which suggests that the house was built by 1803 and was demolished between 1904 and 1911. During that time span it was both an owner-occupied residence and a rental property.

Because field work conducted during Phase II and Phase III investigations mitigated the impact of proposed construction on the portion of 15FA290 which lies within the ROW and construction easement for

KY 922, no further field work is recommended. However, we note that an additional unexcavated portion of 15FA290 lies on the University of Kentucky Maine Chance Farm just west of the construction easement corridor. That portion of the site likely contains additional features and intact deposits, in particular the remains of a detached kitchen associated with the Feature 1 residence at 15FA290. Any construction activities that might affect this remaining portion of 15FA290 will likely require additional investigation and evaluation, and the University of Kentucky should be advised of their responsibilities, under both federal and state law, regarding evaluation or avoidance of this NRHP-eligible site.

CHAPTER 2

ENVIRONMENTAL SETTING

This chapter provides a summary of the environmental setting of the project area, including information on the physiography, geology, soils, climate, flora, and fauna. In general and when possible, this information is provided with a historical perspective that provides information on how the environmental setting has changed in the time that the project area has been inhabited by humans.

PHYSIOGRAPHY

Encompassing 280 square miles, Fayette County lies in the heart of the Inner Bluegrass region of Kentucky (Withington 1992). The Kentucky River provides the primary drainage system for the county (McGrain and Currens 1978:27). However, the closest water source to the project area is Cane Run, currently an intermittent stream but possibly a permanent stream in the historic past. With the exception of areas in this region near the Kentucky River, the locality is marked by gently rolling uplands that generally have local relief of less than 100 feet (McGrain and Currens 1978:27). The lowest elevation in Fayette County is 549 feet AMSL, the normal pool elevation of the Kentucky River at Valley View Ferry, and the highest elevation is 1070 feet AMSL at the west end of Athens-Walnut Hill Road (McGrain and Currens 1978:27). The elevation at 15FA290 ranges between about 925 and 940 feet AMSL.

GEOLOGY

The Inner Bluegrass physiographic region contains the oldest rocks exposed in Kentucky. They are predominately composed of thick-bedded limestones of Middle Ordovician age (McGrain 1983:38). This bedrock geology characterizes the famous “horse farm” region with gently rolling hills and thick residual soil. Some limestone strata in the region are phosphatic, causing greater soil fertility from weathering (McGrain 1983). Of interest for prehistoric occupants of the region (and later archaeologists) is the widespread availability of chert raw material for stone tool production. Most of the bedrock formations exposed in the Bluegrass region, including both the local Ordovician formations and overlying Mississippian- and Silurian-age formations, contain chert of sufficient quality for making stone tools. Thus availability of raw materials was not a factor that limited prehistoric settlement location in the region.

The limestone bedrock underlying the project area is soluble, and this helps create a karstic landscape for the Inner Bluegrass region. Characteristics of karst landscapes normally include abundant and prominent sinkholes and caves as well as underground drainageways. However, this landscape is old, and there are fewer prominently visible karst features compared to more recent karst landscapes located farther west in Kentucky (McGrain 1983:38). Still, local effects are visible, and include the intermittent nature of many of the streams (including Cane Run and its tributaries), presence of underground drainageways, and a few widely scattered and relatively shallow, partially filled sinkholes. Availability of surface water undoubtedly affected locations of both historic and prehistoric settlements in the region.

SOILS

The soils at 15FA290 and the immediately adjacent areas along the Newtown Pike ROW corridor are composed of the Maury-McAfee soil association, which is the predominant soil association in Fayette County. It is characterized by undulating, deep and moderately deep, well-drained soils high in phosphate (Sims et al. 1968). The Maury series and the McAfee series dominate this association; minor series include Donerail, Fairmount, and Salvisa soils on uplands and Huntington, Lindside, Egam, and Lanton soils on flood plains. Specifically, the soils in the project area include McAfee silt loam and Huntington silt loam.

Soils that are present at and near 15FA290 include McAfee silt loam, 2 to 6 percent slopes and McAfee silt loam, 6 to 12 percent slopes. The former soil type is found on the summit and shoulder of the upland landform on which the site rests. The latter soil type is found on the northern side slope, which also contains part of 15FA290. Both of these soil types have moderate organic content and are slight to medium acid (Sims et al 1968). The acidic nature of these soils will adversely affect bone preservation on archaeological sites. Huntington silt loam, a flood plain soil, is also present in the low flood plain area north of the site at the base of the upland slope. Huntington silt loam has a deep and well-drained A horizon that is underlain by well-drained silty clay loam B horizons (Sims et al. 1968). This soil type occurs in a small, isolated patch that was probably once the flood plain of a spring or intermittent stream, but which has since been covered with silt and no longer contains an active drainage. During the early 19th century this area may have contained springs that served as initial water sources for the inhabitants of 15FA290, and for prehistoric occupants of the site in the more distant past.

Overall, the soils present in and near the site area would be useful for early pioneer and frontier settlement in the Bluegrass region. These soil series would also sustain intensive agricultural practices for extended periods of time, including production of corn, tobacco, and other crops that ordinarily deplete soil nutrients. These soils would be attractive for early settlers in the area and may also have been used by late prehistoric horticulturalists.

CLIMATE

Fayette County has a temperate climate, creating warm humid summers and cool winters. Average daily humidity is 69 percent. Average daily high temperatures are 44° F during winter, 65° F during spring, 86° F during summer, and 68° F during the fall (Sims et. al. 1968). Rainfall averages total approximately 3.73 inches per month, and is distributed fairly evenly throughout the year. August through October tend to be the drier months.

Since the arrival of the first people in the region more than 11,000 years ago, climatic conditions have changed substantially. Pleistocene glacial advances had ended at this time, and glaciers were in retreat, causing the onset of generally warmer and drier conditions in the region. Retreat of the glaciers also promoted the replacement of the pine-spruce-fir floral communities with oak and hardwood species previously found in lower elevations and more southerly latitudes. A cooling trend with increased precipitation began at about 5,000 years ago, following an extended warming and drying trend associated with the Hypsithermal period of the mid-Holocene from about 8,500 to 5,000 years ago (Delcourt and Delcourt 1981, 1985; Martin 1958).

FLORA AND FAUNA

Fayette County lies within the Inner Bluegrass region. Deciduous trees, canebrakes, and grassy glades comprised the county's early vegetation cover (Morrill 1968: 60). Deep upland soils allowed hardwood forests composed of white oak, poplar, northern red oak, hickory, burr oak, and black walnut trees to thrive. Eastern red cedar, white ash, and chestnut oak trees flourished in shallow upland soils. In the lower stream valleys, trees tolerant of water-rich environments such as pin oak, sweet gum, red maple, sycamore, and willow were plentiful (Morrill 1968).

Habitat conditions in Fayette County are suitable for open land and woodland wildlife (Sims et al. 1968). Early settlers in the area noted white-tailed deer, elk, bison, rabbit, squirrel, raccoon, opossum, wild turkey, passenger pigeon, otter, muskrat, and beaver as economically significant species. Also mentioned are a variety of predators and other fauna considered deleterious for human settlement, including rattlesnake, panther, fox, wolf, and black bear. These modern fauna replaced cold-adapted species such as ground sloth, horse, tapir, reindeer, caribou, musk ox, mastodon, peccary, and grizzly bear common to the area during the

Pleistocene Epoch. However, since initial settlement of the region by Euroamericans, several of the once-abundant terrestrial mammal species have been extirpated, especially those that were either of primary interest as game animals (bison and elk) or were considered unwanted predators (wolf, panther, and black bear) or nuisance species (passenger pigeon). The period during which 15FA295 was occupied would coincide with the time frame during which many of the mammalian predators were extirpated.

CHAPTER 3

CULTURE-HISTORICAL CONTEXT FOR 15FA290

This chapter presents background on cultural developments that have taken place in the region and which may affect the expression and our understanding of cultural resources at 15FA290. A brief summary of the prehistoric context of the region is presented, followed by a synopsis of historic trends and events for the Bluegrass and the project area in particular. These general contextual statements provide a framework for interpreting the specific site that is investigated for this report. These resources and their local contexts are summarized in the third section. A review of archival documents associated with the project area and specifically with 15FA290 provides additional interpretive data.

PREHISTORIC CONTEXT

The prehistoric cultural chronology of the eastern United States is divided into a series of periods that broadly correspond to major shifts in subsistence and procurement strategies, social organization, and settlement patterns. These periods are linked to distinct material culture styles, especially in projectile point morphology, and in later times ceramic vessel form and decoration. The periods presented below form a general framework for discussing the prehistoric chronology of the study area. These periods are referred to throughout this report to place the materials recovered into the broad contexts of Kentucky's past. The following discussion includes only those periods represented in the artifact assemblage from 15FA290.

ARCHAIC PERIOD

Subsequent to the initial colonization and settlement of North America during the Paleoindian period, the Archaic period saw increasing regional specialization of cultural groups in the Eastern United States and an increase in the diversity of stone tool assemblages. Based partly on these changes, the Archaic period is divided into three subperiods designated as Early, Middle, and Late Archaic.

During the Early Archaic (10,000 to 8,000 years ago), many of the modern species of fauna appeared in Kentucky. This was due in part to a shift from boreal forest to an eastern deciduous hardwood forest (Jefferies 1990; Niquette and Henderson 1984). Subsistence procurement activities shifted from hunting larger game to focus on deer and smaller mammals, and the collection of nuts and other plant foods probably increased as well. The Early Archaic period can be seen as a continuation of many of the Paleoindian hunter/gatherer lifeways. With the exception of changes in projectile point morphology, the Early Archaic tool kit closely resembles that of the Late Paleoindian subperiod. It has been suggested that Early Archaic populations lived in small, highly mobile groups, much like their Paleoindian predecessors (Jefferies 1990: 150-151). The absence of midden accumulation and substantial features, such as hearths and posts, indicates that most sites were short-term occupations.

The Middle Archaic (8,000 to 5,000 years ago) saw further regional differentiation in stone tool assemblages, subsistence, and settlement patterns. By the start of the Middle Archaic, the forest environment had shifted from the earlier boreal forest to deciduous communities similar to those seen today. Plant communities began to further differentiate near the onset of the Hypsithermal Interval (ca. 8,500 years ago), with an increase in grasses and herbs evident in pollen records from the Midwest (King and Allen 1977). The Middle Archaic cultural period is seen as generally coincident with the warmer and drier mid-Holocene Hypsithermal Interval. During the Middle Archaic, a number of specialized tools appeared that suggest the exploitation of previously unused resources and the development of new processing techniques. In particular, there was an increase in the use of ground stone tools associated with plant food processing. By the end of the Middle Archaic, the presence of deep, rich midden deposits suggests that some sites were occupied for long periods of time (Jefferies 1990:151).

The Late Archaic (5,000 to 3,000 years ago) witnessed the continuation of Middle Archaic trends and also included some important changes. In some portions of Kentucky, there is a marked increase in the number and size of sites, suggesting population increase or aggregation and more permanent settlements (Jefferies 1990). Research in eastern Kentucky rock shelters indicates that by the Late Archaic people had begun to cultivate plants, specifically a set of starchy- and oily-seeded native plants such as chenopod or lambsquarters (*Chenopodium berlandieri*), marshelder (*Iva annua*), and erect knotweed (*Polygonum erectum*) (Cowan 1985:229-230; Ison 1988). Squash (*Cucurbita* sp.) was also present during this time, although it remains unclear if it was an introduced tropical plant or a native cucurbit (Heiser 1989). Most researchers believe that, despite the presence of cultivated plants, Late Archaic subsistence was based primarily on wild resources. The cultural trends that began in the Late Archaic period—increasing reliance on plant cultivation, general population increases, increased sedentism, and shifts in social and political organization to accommodate the growing demands of large and more sedentary populations—continued and intensified through the subsequent Woodland period. The Woodland period lasted for about 2,000 years, from about 1000 BC to about AD 1000.

LATE PREHISTORIC PERIOD

The Late Prehistoric period dates from about 1,100 to 300 years ago (Lewis 1990). During this time, large, permanently settled villages began to appear in many parts of the state, and large earthen mounds were constructed that served both as mortuary facilities and as platforms for residences of higher-status individuals.

The Late Prehistoric period in Kentucky is distinguished by two different cultural traditions—Mississippian and Fort Ancient. Mississippian peoples occupied western Kentucky as well as portions of extreme southern and southeastern Kentucky, and inhabitants of these areas are closer culturally to the Late Prehistoric inhabitants of the southeastern United States. The Fort Ancient culture flourished in central and eastern Kentucky, and is linked more closely to portions of southeastern Ohio and western West Virginia. We focus here on Fort Ancient groups as the project area is in central Kentucky.

Fort Ancient peoples lived in large nucleated villages numbering between 100 and 300 people (Sharp 1996:182). In contrast to preceding periods, hunting and gathering were not the primary subsistence strategies, though they did continue to be practiced less intensively. Rather, with the increased reliance on corn near the end of the Woodland period, agriculture became the dominant subsistence strategy. Fort Ancient village sites were situated on broad ridge tops in the Bluegrass region or in valley bottoms along the main stems of the region's larger rivers. Villages often contained central plazas, and some have associated burial mounds. It is believed that these villages were occupied year-round by at least a portion of the site's population. Some data suggest Fort Ancient groups, especially in the early Fort Ancient period, followed a pattern of seasonal movement known as the Miami-Potawatomi pattern (Turnbow and Sharp 1988). During the winter most households would leave a village to establish winter camps in good hunting territories, but would aggregate in the villages again in the spring.

Fort Ancient artifact assemblages include small triangular arrow points and coarse, shell-tempered ceramics with cordmarked or plain exterior surfaces. Fort Ancient projectile points are generally triangular in shape. Henderson (2008:742) notes that typologies for these artifacts have been developed by Graybill (1981), Liftin et al. (1993), and Railey (1990, 1992). Of these, Railey's has seen the most widespread use. This typology, which was developed based on Fort Ancient sites in northern Kentucky, divides Fort Ancient triangular points into eight types based on morphological attributes (Henderson 2008:742; Railey 1990, 1992). Several of these morphological types are temporally sensitive, and others are less so. Because of this variability in temporal sensitivity, the typology is useful as a temporal indicator of Fort Ancient occupation only when comparing assemblages, in contrast to individual point examples.

Early Fort Ancient ceramics were probably tempered with a mixture of limestone and other materials, which were gradually replaced by shell tempering (Turnbow 1988). Based on excavations at the Muir Site,

Turnbow (1988) defined the Jessamine ceramic series. These ceramics were initially defined as having limestone temper and a cordmarked, plain, or roughened exterior surface (Turnbow 1988). Henderson (2008:764) notes that Turnbow as well as other researchers (e.g. Henderson 1998; Sharp and Pollack 1992) expanded the type to include shell and mixed limestone/shell tempers. Jessamine series vessel forms include jars with rounded or angular shoulders; vertical, recurved or slightly everted rims; and flattened rims that are often cordmarked (Henderson 2008:764).

Some shell-tempered vessels have incised designs on their necks, especially during the middle and later Fort Ancient periods. Like their Mississippian counterparts to the west and south, the Fort Ancient peoples produced pendants, beads, and elaborate gorgets made from freshwater and marine shell. Some of the motifs on the gorgets are associated with the Southern Cult or Southeastern Ceremonial Complex, a suite of religious imagery and associated beliefs that was prominent throughout the Southeast and Midwest during the Late Prehistoric period (Hudson 1976).

In Kentucky, the final segment of the prehistoric era is known as the Contact Period. It begins when the first indirect effects of European presence were felt by Native American cultures in the area (ca. AD 1540) and continues to the signing of the Greenville Treaty in 1795 (Henderson et al. 1986:1). During this period, Europeans traded goods such as firearms, metal tools, trinkets and cloth, first indirectly and after the 1730s directly to the indigenous inhabitants (Henderson et al. 1986:2). In return, native peoples provided the Europeans with information about the expanding frontier environment that was important for survival, such as aboriginal hunting methods, the uses of native materials for shelters and canoes, and the uses of native plants for nourishment and medicinal cures (Henderson et al. 1986:2).

European households that moved to the Ohio Valley and Kentucky invaded the territories of the Chickasaw and Shawnee (Schenian and Mocas 1993). The Shawnee, who struggled with early Kentucky settlers more than any other tribe, probably numbered no more than three or four thousand by 1750 (Harrison and Klotter 1997). Many Shawnee and other indigenous groups left Kentucky by the end of the 1700s. Those who remained were absorbed into the culture of the new Commonwealth of Kentucky, although some kept alive the memories of their traditional ways of life.

GENERAL HISTORIC CONTEXT OF FAYETTE COUNTY

The initial settlement of the central Kentucky region by Europeans occurred just prior to the onset of the Revolutionary War in 1774-1775 by pioneers who had crossed the Appalachian Mountains on foot, by way of the Cumberland Gap. About this same time, other early settlers began moving down the Ohio River beyond existing Native American encampments towards the Falls of the Ohio River (Giles and Schlarb 2004:13).

The first pioneers to visit what is known today as Fayette County arrived in 1774, when a claim on what Boone's Creek was settled by Jacob Baughman. A party of Pennsylvania explorers led by William McConnell arrived in 1775 and established one of the early stations at McConnell Springs, located about three miles south of 15FA290. McConnell is credited with selecting the name of the prospective town "Lexington" in reference to the Revolutionary War activity at Lexington, Massachusetts (Kleber 1992:310, 549). Permanent settlement in the area began in 1779, when a group of settlers led by Col. Robert Patterson constructed Fort Lexington as a defensive position against British and Indian aggression in the later years of the Revolutionary War (Kleber 1992:549).

Fayette County was originally formed by the state of Virginia on June 30, 1780. The county was named in honor of General Lafayette, who served during the Revolutionary War. Lexington, the county seat of Fayette County, was created by the state of Virginia on May 5, 1782. On June 1, 1792, Kentucky was admitted to the Union as a separate independent state, and by 1800 the town of Lexington was transformed from a frontier post into an attractive community (Kleber 1992:549, 849). Lexington could boast to be the

“Athens of the West” by the 1820s (Kleber 1992: 310, 549). By this time, the landscape around Lexington was generally filled with Euroamerican settlers and some longer-established families. Farmland was divided into several large plantations and more numerous smaller holdings. Newtown Pike was in existence at or very near its present location in the early 1800s, and it is called Henry’s Mill Road on early maps and deeds.

At the onset of the Civil War in 1861, the majority of Kentuckians were proponents of slavery while also adamantly in favor of the Union. Lexington was a deeply divided town throughout the war. The first Union troops arrived in Lexington on September 19, 1861, and camped at the Fair Grounds. Shortly after their arrival, Captain John Hunt Morgan and his Lexington Rifles fled Lexington to fight for the Confederacy (Wright 1982:87). Although Union forces appropriated many large buildings, such as Morrison Hall at Transylvania, the Medical Department building, and the Grand Masonic Lodge Hall, for use as hospitals, Lexington appeared relatively untouched by the war throughout the winter of 1861-62 (Wright 1982:88). However, Confederate victories at Richmond led the Union army to depart from Lexington in the late summer of 1862. Confederate troops entered the city and captured a large supply of Union equipment and food before departing. On October 18, 1862, Morgan and his troops returned to Lexington and captured a contingent of 300 to 500 Union soldiers encamped at Ashland. With this final departure of the Confederate forces, life in Lexington returned to a reasonably normal pace (Wright 1982:90). In March 1863, the Forty-Eighth Pennsylvania Regiment was detached from the Army of the Potomac and sent to Lexington for provost guard duty (Wright 1982:90). Following the end of the Civil War in April 1865, Lexington faced the difficult period of Reconstruction.

After the Civil War and with the construction of several railroads in the region, the Lexington area became more fully integrated into national and regional economies. The abundant crops produced in the area, including corn (and whisky, a portable and potable corn by-product), hemp, and tobacco, were prominent exports of the region, and these same crops/products had been a mainstay of agricultural economies prior to the Civil War. This region also became well-known after the Civil War for its horse farms, particularly Thoroughbred racing horses. Even today there is a concerted effort to conserve the image of the Lexington area as primarily rural and bucolic. This imagery is actively promoted in spite of the growth of light industry and service economies in the region during the 20th century, sectors that now employ far more persons than do the horse and agricultural farms of the Bluegrass.

HISTORY OF AGRICULTURE IN THE BLUEGRASS

The development of the agricultural economy of the Bluegrass has been influenced by both the region’s fertility and the social events and shifts that transformed its traditions (Amos 1994:60). This review focuses on changes that took place between the very late 18th century to the very early 20th century.

The earliest period in Bluegrass agricultural history is the Settlement Era, which lasts from approximately the late 18th century until about 1820. Settlers were drawn to Kentucky and the Bluegrass by stories of an Eden beyond the mountains. Once land was cleared, farmers in the Bluegrass were successful in producing both crops and livestock (McBride and McBride 1990). Livestock thrived on the pasture, and the Bluegrass soon became known as one of the premier cattle regions of the United States. The Thoroughbred horse industry also had its roots in this period. Wealthy Bluegrass gentlemen invested time and money to import and improve the bloodstock. Growing interests in Thoroughbred bloodstock led to the creation of the Kentucky Association in the early 1820s by individuals such as Henry Clay. This organization promoted early Thoroughbred interests and established much of the foundation for this industry that is still in place today. Most farmers grew corn, wheat, hemp, and tobacco with hemp becoming one of the main crops exported for cash (Harrison and Klotter 1997). Hemp was becoming a major industry in the state even in the early 1790s, with this product contributing to a growing and diversified industrial base for the region. Both small and large farms were involved in systematic hemp production (McBride and McBride 2008:913-916). The hemp industry grew substantially in the 1810s, spurred by the demands for rope during the War of 1812 and in the late 1810s by the need for rope and sacking for the expanding cotton industry (McBride and

McBride 2008:919). However, the hemp industry in the Bluegrass was severely impacted by the Panic of 1819 and the subsequent economic depression that greatly diminished demand. The linkage between hemp and cotton resulted in generally linked price cycles that began in the 1810s and continues through at least the remainder of the antebellum period. Periods of high prices for both cotton and hemp are documented for the 1810s, 1830s, and the late 1840s to the Civil War, while prices for both cotton and hemp were low in the 1820s and the early-mid 1840s (McBride and McBride 2008:924). These economic cycles can be expressed at both the regional and household levels, McBride and McBride (2008:924) recommend studies of these effects in the archaeological record when possible. However, for the current investigation of 15FA290, the available county tax data and agricultural census data from the antebellum period indicate that the site occupants were hemp growers. However, these same data do not show a heavy investment in this industry. In contrast, hemp was apparently one of several cash crops that were grown on this diversified farm. Due to this apparent diversification, the effects of these antebellum price cycles were likely buffered and poorly expressed at the household level of analysis.

The span between approximately 1820 and 1861 in the Bluegrass has been characterized as the Farmer's Age (Amos 1994). The Bluegrass was the wealthiest region in one of America's leading agricultural states, with its counties maintaining and increasing agricultural revenues over this temporal span (McBride and McBride 1990). Kentucky's geographical location gave it a central role in a developing national land and water transportation network, while politicians from Kentucky played major roles in American politics. Hemp remained an important cash crop in the Bluegrass, subject to the price cycles mentioned above, and the region gained a reputation for producing the finest livestock, including horses, cattle, sheep, jacks, mules, and swine. The first livestock fair was held outside Lexington in 1816; soon other fairs were held across the state, and their scope was expanded to include crops and the latest in farm equipment (Harrison and Klotter 1997). Fairs and other state-sponsored activities, such as the formation of the Kentucky Agricultural Society in 1838, helped to promote innovation in Bluegrass farms and added to the prosperity of many of the region's residents.

Bluegrass farms fell into three size categories during the Farmer's Age. The largest farms were more than 500 acres in size, with the larger farms usually also being the residences of gentlemen active in the bloodstock trade, agricultural experimentation and competition, and politics. These men owned slaves, were viewed as the ideal for their contemporaries, and have typically been the image of antebellum agrarian Bluegrass farmer. While the number of these large farms was very small, they and their owners were disproportionately influential in the political, economic, and social arenas. The more common farm type was the second size class, ranging from 100 to 500 acres. Approximately two-thirds of all Bluegrass farms in the Farmer's Age fall into this size class (Amos 1994: 66), and the farm associated with 15FA290 falls into this size class. These were the farms of the middle-class farmer who enjoyed a rather dependable income. This income allowed these farmers to build new homes of brick and wood, or to make improvements and additions to existing homes. This is precisely the situation of the property and owners associated with 15FA290, and the deed and archival research (discussed below) are in many ways exemplary of farms of this size class, especially for the first half of its occupational history. The third size class includes farm of less than 100 acres, and this class accounts for approximately 30 percent of all Bluegrass farms during this period. These farms were limited in their production capabilities due to their size, but they were operated in much the same way as middle-class farms. Those who did not own land were more likely to work as a tenant than as a hired hand (Harrison and Klotter 1997:133).

The Post-bellum era in the Bluegrass and Kentucky lasted from 1865 to the beginning of World War I. The Reconstruction Era was marked nationally by a gradual shift from an agricultural-based economy to an industrial one (McBride and McBride 1990). Within Kentucky, political parties fought over the future of the state's economy, with agricultural-minded parties retaining control. The Bluegrass region remained essentially rural and agrarian but was faced with responding to a sharp drop in the demand for hemp and a westward shift in the formerly robust cattle industry. The introduction of burley tobacco as a cash crop and the expansion of the horse bloodstock industry together helped revitalize the Bluegrass agricultural economy. Burley was so profitable that pasture that had never been plowed was planted with this tobacco variety, and

by the beginning of World War I, Kentucky raised one-third of all burley in the nation and one-fifth of the crop worldwide (Amos 1994:70). The continually high returns of burley allowed smaller average-sized farms to survive. Between 1880 and 1920, there was a 40 percent increase in the number of farms in the Bluegrass while the average farm size decreased. The free black labor class and the established white tenant class were combined by economic forces of the labor and agricultural commodities markets, creating a biracial sharecropping and tenant class. This population class provided much of the labor for tobacco cultivation as well as general farm and domestic labor (Amos 1994:70). These individuals and their families would live in older dwellings or in newly built ‘tenant houses’ on larger consolidated farms.

Bluegrass farms that specialized in the development of fine bloodstock, primarily Thoroughbred, Standardbred, and Saddlebred horses, became more common after the Civil War and can be identified by a very similar set of characteristics. The owners of these farms were often from out-of-state, but included a number of wealthy Bluegrass residents. These relatively wealthy farm owners would fund their bloodstock interests with income from other diverse agricultural and nonagricultural investments. These types of farms were created by combining two or more individual, smaller, diversified farms, most often those of the second and third size class discussed above for the Farmer’s Age. The overall look of the combined farm would be changed to create a unified appearance, and older dwellings and buildings were often razed. These would be replaced with new dwellings and state-of-art barns in the signature architectural style of a particular owner. Expenses were rarely spared in the creation of these farms, and they were the early prototypes for today’s Thoroughbred farm in the Bluegrass.

This brief overview of the agricultural history of the Bluegrass shows the region’s overall ability to adapt to societal and economic changes. However, a general decline in agricultural revenues in the Bluegrass began after the Civil War and intensified after 1920 (Amos 1994:72). Some individuals benefited greatly from the historical trends in the Bluegrass, mostly those with the largest land holdings or investments outside agriculture. However, those with small farms or no land would have been faced with greater difficulties. While the Bluegrass is generally a fertile area for agriculture, smaller farms were limited in the amount of acreage available to them for cultivation, and the owners of these small farms therefore would have had a smaller overall income and limited potential for growth. The small farm owners’ access to cash and credit would have been tenuous at times, especially during the depression phase of the numerous economic cycles, and this would have limited their availability to purchase additional land or new equipment. The introduction of highly profitable cash crops, such as burley tobacco, helped keep these small farms economically viable even as average farm size decreased over time. However, the consolidation of smaller, diversified farms into larger, specialized farms eventually would drastically change the overall appearance and nature of agriculture in the Bluegrass. The small, diversified, family farm gave way to the large specialized farm and to urban sprawl by the early 20th century. This agricultural shift was accompanied by a trend toward increasing industrialization and growth of service industries, and these economic trends continue to the present.

PREVIOUS ARCHAEOLOGICAL RESEARCH AT AND NEAR 15FA290

Site 15FA290 was recorded by UK-PAR during Phase I survey of the proposed Newtown Pike realignment/widening corridor (Byron et al. 2007). Site 15FA290 is located on the summit, north shoulder, and north sideslope of a dissected upland mass that overlooks a broad alluvial area to the north. The boundary of 15FA290 extends west beyond the proposed ROW and adjacent utility easement corridor, which collectively measure between 30 and 42 meters wide in the vicinity of the site. As presently defined by the Phase I survey (Figure 3.1) and subsequent work, the site measures about 150 meters NNW-SSE (parallel to Newtown Pike) and 60 meters ENE-WSW; it covers a total area of approximately 7,500 m². Portions of the site are located in both an active agricultural field (southern 30 percent of site area) and a pasture (northern 70 percent; see Figure 3.1). About 70 percent of the site area lies within the proposed construction corridor.

Surface visibility in the pasture was nearly nil, while visibility in the agricultural field was patchy but adequate for surface collection. Even so, few artifacts were recovered from the surface. Of the 71 artifacts

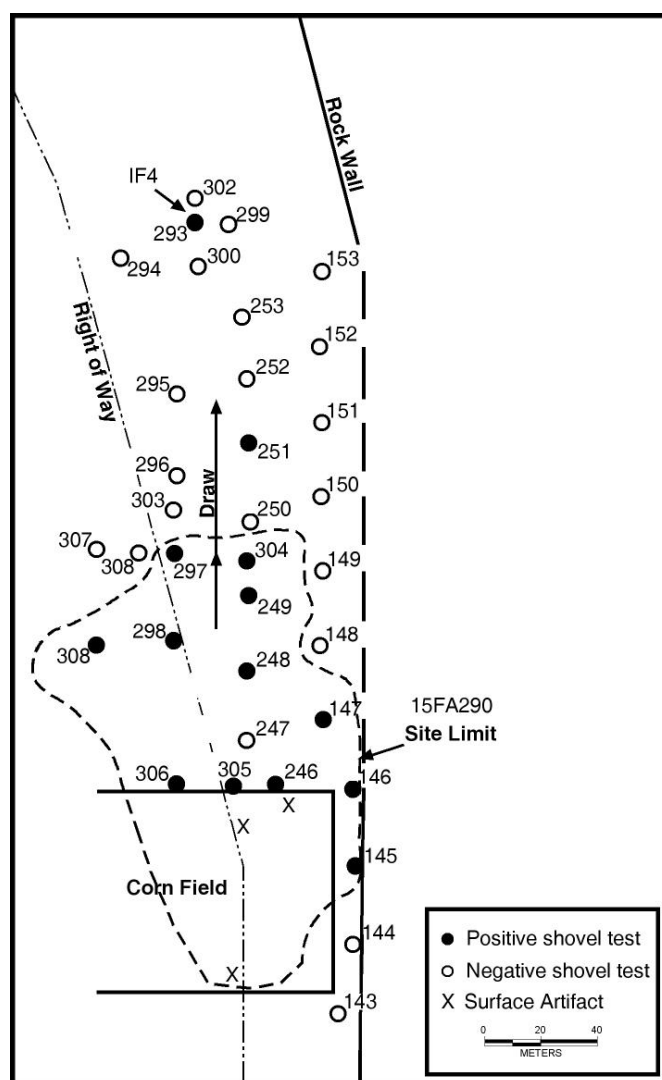


Figure 3.1. Sketch Map of 15FA290 Showing Phase I Investigations and Initial Site Boundaries.

recovered during the initial Phase I survey of 15FA290, only four were found on the surface in the agricultural field. The remaining 67 artifacts were recovered from 12 positive shovel tests. Shovel Test 251 was not included within the initial site boundary (Figure 3.1) because the artifacts from this shovel test were thought to have been redeposited onto this footslope location down the narrow draw that runs to the north. (Subsequent Phase II/III work reported here suggests that ST 251 is within the site area, near a dump location in the draw.) Architecture-related artifacts from the Phase I survey included brick, coal, glass, limestone, machine-cut nails, wire nails, and a cast iron pipe fragment. The Kitchen group was represented by ironstone, pearlware, stoneware, whiteware, container glass, and a metal food container fragment. The only prehistoric artifact recovered from 15FA290 was a secondary flake fashioned from Newman chert. Collectively, the historic artifacts date from the early to late 19th century, while the prehistoric artifact is of indeterminate age.

Two of the positive shovel tests (Shovel Tests 246 and 305 on Figure 3.1) showed plow zones underlain by dark brown silt loam that contained artifacts. Materials recovered from the lower zone include machine-cut nails and whiteware. These subplow zone deposits were interpreted as possible remnants of sheet midden that accumulated during the historic occupation of the site. However, the potential midden areas appeared to be confined to small part of the site, near the northern edge of the agricultural field.

Based on the recovery of moderate numbers of artifacts, the likely presence of intact cultural deposits

demolished by that date, and this interpretation is consistent with the date range of the artifacts. This interpretation of 15FA295 illustrates the fact that not every household was persistent and successful. Some early residences were built, then torn down when the owners failed in their occupations or moved to other locations.

On the Beers (1877) map, a structure is shown that corresponds to the location of 15FA290 (Figure 3.3) that appears to be associated with William V. Cromwell. However, another structure east of Newtown Pike also is attributed to W. V. Cromwell, and this location is indicated as having 267 acres of land associated with the residence. The location of 15FA290 is listed as only 88 acres, which suggests that the structure at 15FA290 was not W. V. Cromwell's principal residence. It may have served as a tenant house or secondary residence occupied by farm workers or even former slaves. An 1891 map of Fayette County (Wallis 1891; Figure 3.4) shows a similar situation. A structure is indicated at the location of 15FA290, with ownership now attributed to V. C. C. (Vincent C. Cromwell). However this structure is shown as an open square, while the structure on the east side of Newtown Pike that is also owned by Vincent Cromwell is shown as a filled rectangle. This mapping convention was likely used to differentiate the principal residence of the landowner (filled rectangle) from other residential structures owned by that person (open rectangles). Later maps of the area do not make these differentiations, though a structure is shown at 15AF290 on the 1904 *Map of Fayette County, Kentucky*. No structure is shown on the 1912 Fayette County map at the location of 15FA290.

These historic maps provide two important pieces of information relevant our interpretation of 15FA290. First, the maps consistently indicate a residential structure in the location of 15FA290 between 1861 and 1904, but no structure is shown in this location on the 1912 map. This indicates that the structure was abandoned and razed between 1904 and 1912, providing a narrow estimate of a terminal date of occupation. Second, the maps and associated mapping conventions allow us to infer that 15FA290 was not the principal residence of its owner during the late 19th and early 20th century. It likely served as the residence for renters, farm tenants, sharecroppers, or farm workers. The social and economic standing of these types of occupant would likely be lower than that of the owner, and this economic status should be reflected in the architecture and artifacts recovered from the site. Much of the artifact analyses and deed research conducted as part of the Phase III investigation was designed to test and verify this proposed relationship between economic standing and ownership/tenancy status of site occupants.

ARCHAEOLOGICAL RESOURCES

To help provide a local context for the construction, occupation, and abandonment of 15FA290, a search was made of the results of previous archaeological research conducted within 2 km of the project area. Research indicated that two previous archaeological surveys and nine sites exist within a 2-km radius of the Phase I project area. Of the nine sites, eight are prehistoric sites (15FA10, 15FA95, 15FA114, 15FA245, 15FA247, 15FA249, 15FA250, and 15FA253), and one is a multicomponent prehistoric and historic site (15FA248). Site 15FA248 is located on a broad, undissected upland and is described as a historic farm or residence that dates from the 19th to the 20th centuries. However, no Phase II investigations were carried out at 15FA248, and little comparative information can be gleaned from the survey information alone.

The best comparative information for sites located nearby is derived from the Phase II investigations conducted at 15FR295, which was discussed above. Comparisons to sites that are more remote, but which may be more comparable in terms of temporal period or economic standing of site occupants, will be made in subsequent chapters that present our interpretations of the age of the artifacts and the social/economic standing of the occupants of 15FA290 (see Chapters 6 and 8).

RESULTS OF DEED AND ARCHIVAL RESEARCH

Site 15FA290, which was most recently owned and managed by the University of Kentucky College

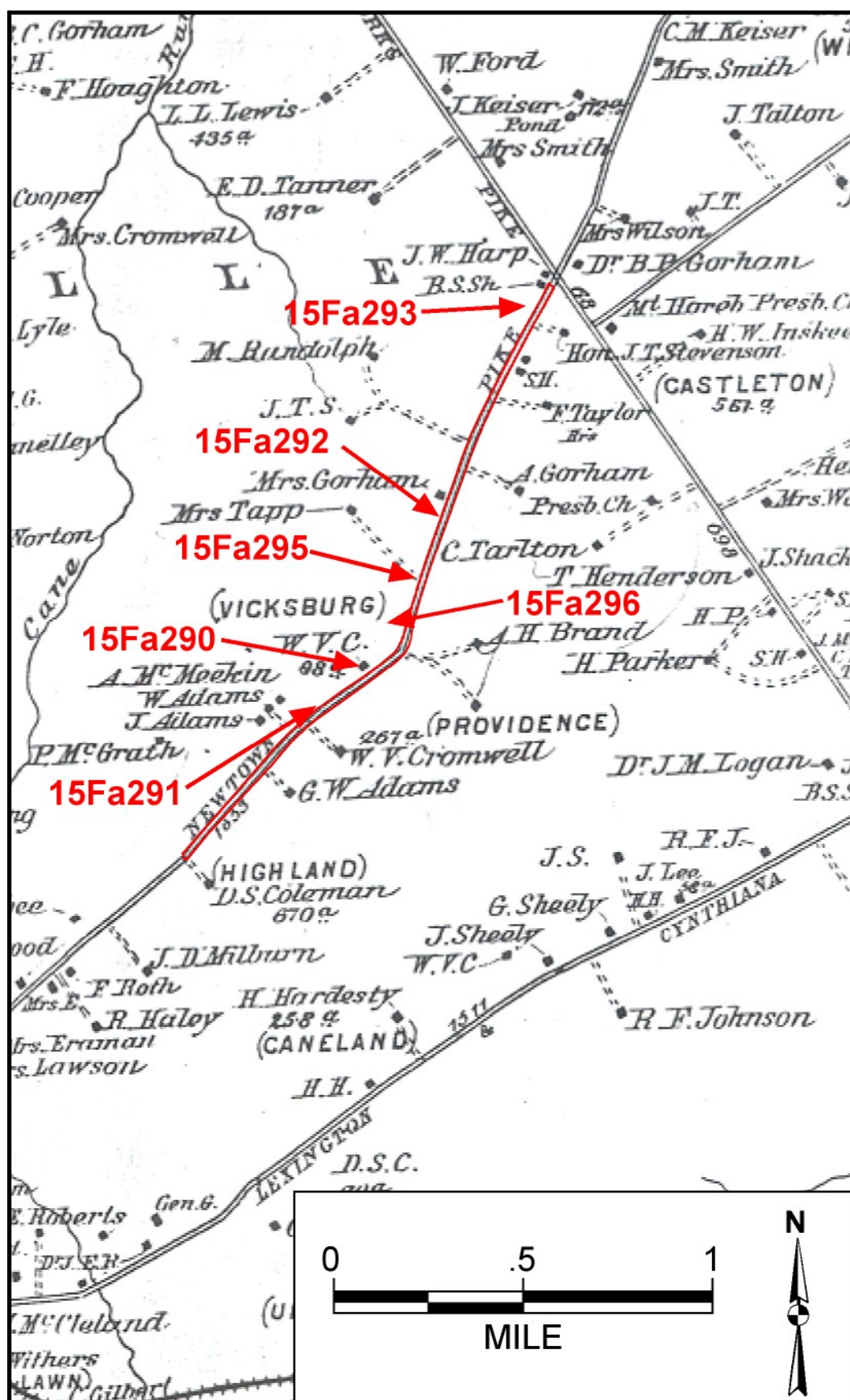


Figure 3.3. Overlay of Historic Sites Documented in the Phase I Survey onto a Segment of the Atlas of Bourbon, Clark, Fayette, Jessamine, and Woodford Counties, Kentucky (Beers 1877).

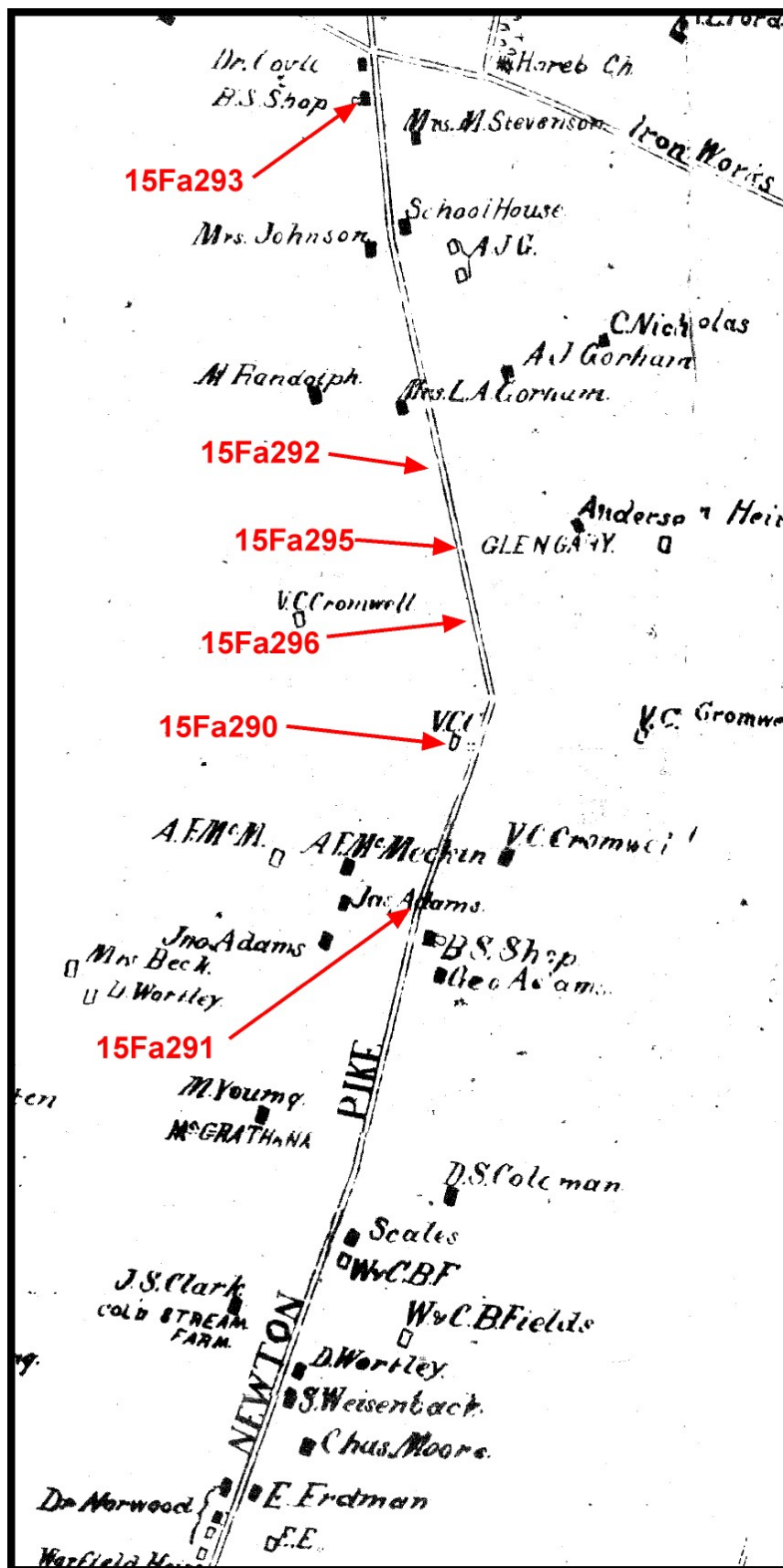


Figure 3.4. Location of 15AF290 and nearby Historic Sites on the Map of Fayette County, Kentucky (Wallis 1891).

Table 3.1 Chain of Title for 15FA290.

Owner	Years	Price	Acreage	Citation
John and Elizabeth Bradford	1784-1795	Land Grant	2,669	Land Grants Volume I Part I
Samuel Beeler	1795-1806	200 pounds "current money of Kentucky"	300	CC A:17-18
Richardson Allen	1806-1830	\$3,000	150	FCC CC B:714
John and Mary Estill	1830-1854	\$3,400	143	FCC DB 6:414
Alexander Brand	1854-1867	\$3,806	143	FCC DB 30:439-441
John T. and Emily M. Stevenson	1867	\$11,772	93	FCC DB 43:478
William V. and Mary E. Cromwell	1867-1890	\$5,298.90	42	FCC DB 45:301
Nannie C. Huguely	1890-1900	\$1	93	FCC DB 95:190
Milton Young	1900-1908	\$8,497.80	93	FCC DB 95:190
W. S. and R. A Beasley	1908-1942		1,100	FCC DB 155:494
E. Dale Schaffer and Barbara Schaffer Neuman	1942-1946	gift	1,100	FCC DB 338:527
E. Dale Schaffer	1946	\$100	550	FCC DB 338:527
Coldstream Stud, Inc.	1946-1947	\$1	1,815.11s	FCC DB 397:18
Henry H. Knight	1947-1951	\$1	1021.679	FCC DB 429:16
Crown Steel Sales, Inc.	1951-1955	\$1	1021.679	FCC DB 502:213
Crown Crest Farms, Inc.	1955-1956	\$1	1136.77	FCC DB 584:378
Elizabeth Arden, Inc.	1956-1967	\$1	764.54	FCC DB 593:145
Edward M. Maher	1967	\$1	764.54	FCC DB 913:26
University of Kentucky	1967- present	\$1	764.54	FCC DB 913:31

of Agriculture as part of the Maine Chance Farm, is located on the northern summit, upper shoulder and northern sideslope of a large, low upland rise that overlooks an extensive bottomland, about four miles (6.2 km) north of downtown Lexington. As part of the current project, UK-PAR staff conducted deed research and investigated historic maps and census data to obtain a history of the property and its use in the context of the growth of the city of Lexington. The deed research is summarized in Table 3.1 as a chain of title.

This property was a rural location when it was first occupied. The earliest landowner for which there is a record was John Bradford, who was born in Virginia in 1747. In September 1784, Bradford was granted 2,669 acres along Cane Run (*Kentucky Land Grants* Volume I Part 1; see Table 3.1). He and his wife, Eliza, sold a tract of 300 acres that included the location of what would become 15FA290 to Samuel Beeler (also originally from Virginia) on November 10, 1795 for 200 pounds “current money of Kentucky” (Fayette County Clerk [FCC]: Circuit Court [CC] A:17-18). The location of 15FA290 is on the extreme northern edge of this 300-acre tract, and while the tract includes the house location, the archaeological site boundaries extend north outside this 300-acre parcel (Figure 3.5). The documentary evidence for Beeler’s occupation of the actual site and house at 15FA290 is equivocal. Notices in the *Kentucky Gazette* from 1803 and 1804 place Beeler in the vicinity of 15FA290 (Green 1985:33, 52, 76; *Kentucky Gazette* Volume XVI, Number 884, Tuesday August 23, 1803; Volume XVIII, Number 946, Tuesday, November 6, 1804; Volume XIX, Number 1026, Saturday, March 29, 1806). In each of these notices Beeler is listed as living approximately four miles from Lexington on Henry’s Mill Road (Newtown Pike). While it is possible that he was living in a different house located on the same parcel he purchased from Bradford, these descriptions would be generally appropriate for the residence at 15FA290, suggesting that the house may have been constructed as early as the initial years of the 19th century. No census data could be found for Samuel Beeler, but the newspaper notices suggest that he was a man of some means, as he was able to afford property and owned at least one slave (*Kentucky Gazette* Volume XVI, Number 884). In October of 1804 fires on two successive nights burned Beeler’s barn and stable (Green 1985:52; *Kentucky Gazette* Volume XVIII, Number 946, Tuesday, November

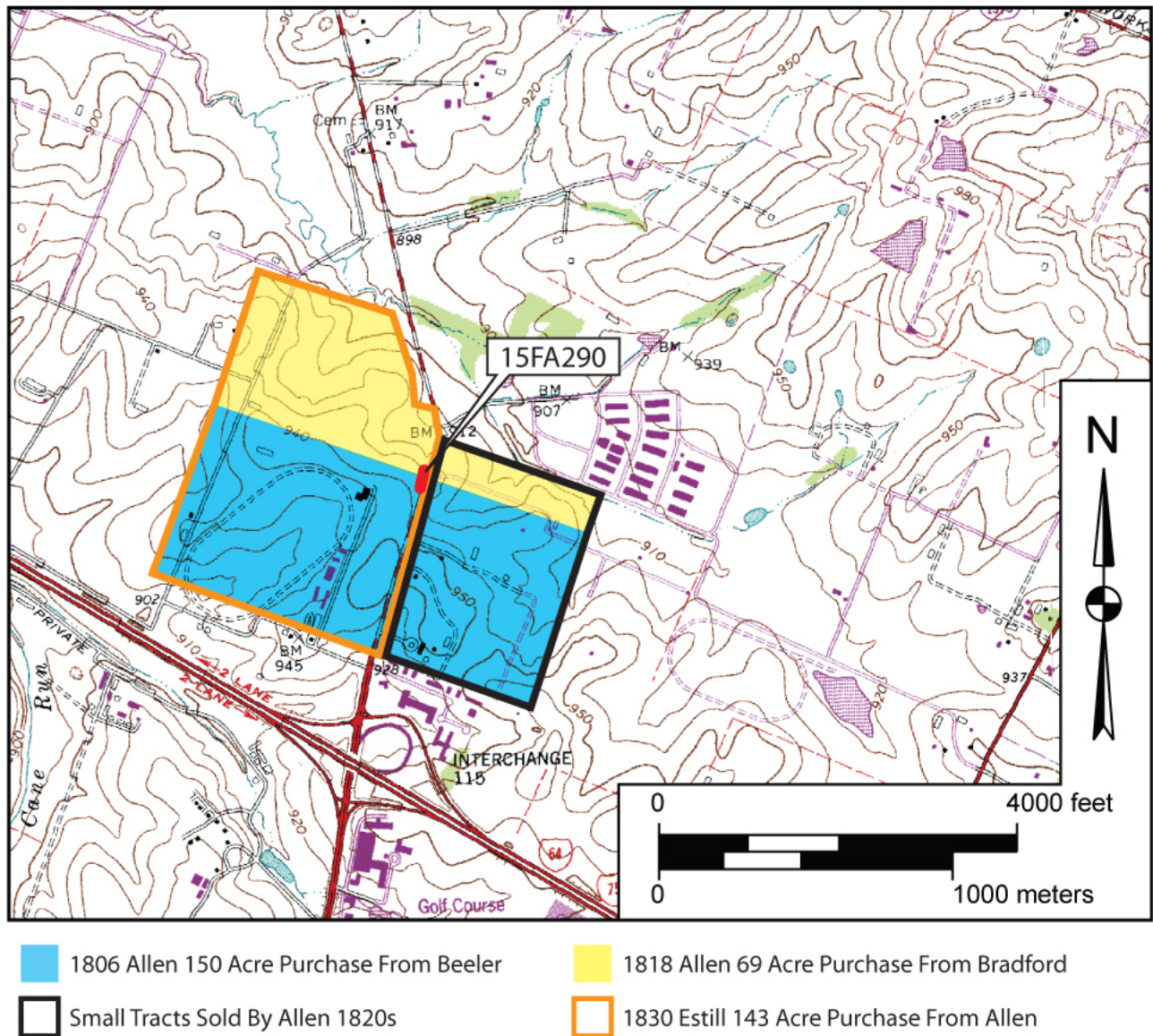


Figure 3.5. Overlay of Tracts of Early Land Sales on the Modern Topographic Context of 15FA290. Base map is the Lexington East, KY USGS 7.5' quadrangle, and 15FA290 is also shown.

6, 1804). It is of some interest that if the house at 15FA290 was constructed by Beeler, it appears that no reliable source of water would have been located on the property. The nearest spring would have been north of 15FA290 along Henry's Mill Road on land still owned by John Bradford.

In 1806, Beeler sold a 150-acre tract which included the 15FA290 location to Richardson Allen for \$3,000 (FCC CC B:714; see Table 3.1). Richardson Allen was born in York County, Virginia in 1771. Between 1806 and 1830 Allen was active in buying and selling land along Henry's Mill Road. In addition to the 150 acres purchased from Beeler, Allen purchased an additional 69-acre tract adjoining the northern edge this property (Figure 3.5) from John Bradford in 1818 for the sum of \$1,803.50 (FCC Deed Book [DB] R:575). The addition of this parcel raised Allen's land holdings in the area to approximately 220 acres and would have included the spring area north of 15FA290, which presumably would have been used to provide water. By 1819 Allen's land acquisitions reached their maximum; he held deed to approximately 225 acres straddling Henry's Mill Road. In the 1820s Allen sold off some of this land. In 1820, he sold a parcel of 74.75 acres, all positioned on the east side of Henry's Mill Road, to John Brand for \$1,871.25 (FCC:DB B).

Other sales of smaller parcels are also listed in the county deed books (FCC DB X:419, FCC DB 4:200, FCC DB V:49). By 1822, Allen's land holdings had stabilized at 143 acres, all positioned on the west side of Henry's Mill Road. In 1830 Allen sold all 143 acres (Figure 3.5), which included 15FA290, to John Estill for \$3,400 (FCC: DB 6:414; see Table 3.1).

Like Beeler's occupation of the site, Allen's occupation of 15FA290 is open to some interpretation. The archival and archaeological data indicate that Allen definitely lived at 15FA290. No maps could be located that show Allen residing at 15FA290, but several newspaper notices indicate that between 1806 and 1819 he divided his time between his property on Henry's Mill Road and properties in Lexington that he owned or in which he had business interests. A notice from 1808 in which Allen announces some of his personal property for sale mentions that his farm is four miles from Lexington (Green 1985:120; *Kentucky Gazette*: Volume XXII, Number 1203, Tuesday November 15, 1808), suggesting that he may have been living at 15FA290. In 1810, Allen put a notice in the *Kentucky Gazette* that he has a farm for sale approximately four miles from Lexington on Henry's Mill Road. This farm included a "commodious dwelling house" and numerous outbuildings including a still-house, barn, and stable (Green 1985:140; *Kentucky Gazette*: Volume XXIV, Number 1273, Tuesday June 5, 1810). This notice likely referred to the residence and outbuildings at 15FA290. The wording of the notice implies that at this time Allen was likely living in Lexington as he had several business ventures there, including a livery stable and a different house for sale (Green 1985: 136, 142; *Kentucky Gazette* Volume XXIII Number 1266, Tuesday January 23, 1810; Volume XXIV, Number 1278, Tuesday July 10, 1810). The notice regarding the livery stable indicates that Allen is "of Lexington" (Green 1985:136). No sale of the farm was completed in 1810. In 1819, the marriage notice for his daughter, Caroline, is worded to suggest that Allen was then living in Fayette County instead of Lexington (Green 1985:298; *Kentucky Gazette* Number 53, Volume V, December 31, 1819, Volume XXXIII). It is not clear if he was residing at 15FA290, but there is good archaeological evidence that the house was standing by this time, and probably for several years prior to this date. It is not clear that Allen was living at 15FA290 in 1830 when he sold the tract to Estill, but by that time, narrowly dated artifacts indicate that 15FA290 had been occupied for at least 10-12 years. It may have been occupied for up to 27 years if Samuel Beeler built and occupied the residence that is now Feature 1 at 15FA290 by 1803, as suggested by *Kentucky Gazette* notices discussed above.

During the first third of the 19th century, Richardson Allen was an active businessman in the Lexington area. Between 1800 and 1820 Allen built his wealth. The first mention of Allen in the area was in 1806 when he purchased his initial parcel from Beeler. Our reconstruction of Richardson Allen indicates that he was a moderately well-to-do businessman. Notices from the *Kentucky Gazette* indicate that by 1820 he was involved in several business ventures including the Keene Livery Stable and a house sale with Cornalius Coyle, a wealthy Lexington businessman (Green 1985:136; *Kentucky Gazette* Volume XXIII, Number 1266, Tuesday January 30, 1810; Green 1985:142, Volume XXIV, Number 1278, Tuesday July 10, 1810). However, there is no indication that Allen was ever part of the upper echelon of the social scene or business community. Much of his wealth may have been tied up in land or slaves, rather than expressed as material consumer goods. Census data indicate that in 1810 Allen was the head of a household consisting of 13 people including himself, two males and two females under 10 years old, one male and two females aged 10-16 years, three males and one female aged 16-26 years, one male aged 26-45 years, and one male over 45 (U.S. Census 1810). The census also indicates that Allen owned five slaves. In 1820, Allen's household included himself (aged upwards of 45 years), his wife (aged between 26 and 45 years), and six children—two males and two females less than 10 years of age, one female between 10 and 16 years of age, and one male between 16 and 26 years of age (U.S. Census 1820). In 1820 Allen also owned 10 slaves—four males under 14 years of age, one male upwards of 45 years of age, two females under 14, one female between 14 and 26, one female between 26 and 45, and one female upwards of 45 years of age (U.S. Census 1820). The 1820 United States census lists the occupation of two members of Allen's household, presumably himself and his son between 16 and 26 years of age, as being engaged in agriculture (U.S. Census 1820). By 1830, Allen's household included himself (between 60 and 70 years of age), his wife (between 50 and 60 years of age), and five children—one male and one female between 5 and 10 years of age, two males and one female between 10 and 15 years of age, and one female between 15 and 20 years of age (U.S. Census 1830). He also owned 9

slaves, including two males under age 10, three males between age 10 and 24, two females under age 24, one female between age 26 and 35, and one female between 55 and 100 years of age (U.S. Census 1830). The 1840 federal census indicates that Allen had moved his family to Marion County, Missouri. Allen lived here until his death in 1843.

John Estill was born in Virginia in 1788. No census data could be found for John Estill in 1830, the year he purchased property containing 15FA290 from Richardson Allen. This suggests that Estill and his family were not living in Fayette County when the census data were collected, and that they moved to the location later in the calendar year. The 1840 U.S. Federal Census indicates that John Estill's household included himself (between 60 and 70 years of age), his wife (between 30 and 40 years of age), and seven children—one male between 5 and 10, two males between 10 and 15, two females under 5, one female between 5 and 10, and one female between 10 and 15 years of age (U.S. Census 1840). He also owned 8 slaves—two males between 24 and 35, one male between 36 and 55, three females under 10, one female between 24 and 35, and one female between 56 and 100 years of age (U.S. Census 1840). Four members of his household are listed as being employed in agriculture (U.S. Census 1840). U.S. Census data and property records indicate that John Estill died in 1848 (U.S. Census 1850; FCC: DB 30:439). The 1850 U.S. Census lists John Estill's wife, Mary (aged 49 years), as the head of a household that included their four sons (Wallace, 23; James, 25; John, 16; and Thomas, 6) and three daughters (Mary G., 14; Eliza, 12; and Elmira, 9). Both Wallace and James are listed as farmers, and the three daughters are listed as having attended school within the last year (U.S. Census 1850). Mary's total value of real estate was assessed at \$11,025 (U.S. Census 1850). Mary Estill retained ownership of the property until 1854.

In the settlement of a lawsuit between Mary Estill and Nancy Breckinridge, the Fayette County Circuit Court ordered on October 14, 1854, that the 143-acre tract of property conveyed to the late John Estill by Richardson Allen be sold at public auction on the premises by Commissioner Randolph Haley (FCC: DB 30:439-441). The property was auctioned on November 18, 1854, and Alexander H. Brand, of Kentucky, was the highest bidder. Alexander H. Brand formally acquired the property by deed on December 11, 1854 for the sum of \$3,806 (FCC: DB 30:439-441; see Table 3.1). In 1860, Brand was 42 years of age, and his occupation was listed as farmer (U.S. Census 1860). His total value of real estate was assessed at \$85,300, and his total value of personal property was assessed at \$44,150. He was the head of a household that included Annie Brand, aged 21, whose total value of personal property was assessed at \$1000, Bettie Brand, aged 19, whose total value of personal property was assessed at \$1000, Margaret Brand, aged 17, whose total value of personal property was assessed at \$800, John N. Brand, aged 14, Eliza Brand, aged 11, Mary Brand, aged 9, and Sallie Conway, aged 55, whose occupation is listed as housekeeper (U.S. Census 1860). An 1861 map of Fayette County (Hewitt 1861), the earliest map source available for the project area, shows a residence at the location of 15FA290, and this is indicated as being owned by A.F. Brand (Figure 3.2). However, A. F. Brand is also associated with a residence east of Newtown Pike that is labeled "Cane Run" on the map, which is at the location of the W. V. Cromwell "Providence" residence on the Beers (1877) map (see Figure 3.3). Also shown on Figure 3.2 is a trotting course west of the 15FA290 residence, which suggests that by this date, the acreage of the farm associated with 15FA290 had been consolidated into a larger farm. Unfortunately farm boundaries and acreage are not provided on these early maps.

The residence at 15FA290 may have been a rental property when it was owned by Alexander H. Brand, but this inference is by no means certain. The 1860 U.S. census was examined for additional information about the occupants of 15FA290. Whenever possible, census-takers worked systematically along the landscape, following roads and documenting families in a systematic geographic order, though this is not always the case in the hand-written census records. The 1860 U.S. Census lists the following families in sequential order—Nancy Gorham, J. B. Johnson, M. H. Parker, and Andrew McMeekin. The Gorham and McMeekin residences are shown on Figure 3.2, and if the 1861 structure shown as a school was occupied as a residence, this would place the Johnson family at the school and the Parker family at 15FA290 in 1860. Of interest is the fact that of these four sequential families listed in the 1860 census, only the Parker family has no value of real estate listed. This suggests that this family did not own the residence in which they were living. This inference is consistent with the acquisition of 15FA290 by Alexander H. Brand, who apparently

did not live at the site. The Parker residence in 1860 was headed by M. H. Parker (male, age 77, farmer) and included Charlotte Parker (age 9, female), Montgomery Parker (age 8, male, attended school in the last year), and Lucy Parker (age 7, female). These three children are presumably either children or grandchildren of M. H. Parker. Also residing at 15FA290 in 1860 were Theodore Satterwhite (age 48, male, stable keeper), Eliza Satterwhite (age 41, female, probable wife of Theodore), Florence Satterwhite (age 19, female), Morris Satterwhite (age 18, male), and Thomas Satterwhite (age 17, male). As a stable keeper, Theodore Satterwhite may have been involved with the trotting course shown just west of 15FA290 on Figure 3.2.

Alexander H. (or F.) Brand sold the 143-acre tract associated with 15FA290 in two parcels in 1867. He sold a 93-acre tract containing 15FA290 to John T. Stevenson, of Kentucky, for the sum of \$11,772 on April 24, 1867 (FCC: DB 43:478 see Table 3.1). On the same date, he sold the remaining 50 acres to A. F. McMeekin (FCC: DB 43:479). The 1861 map (Figure 3.2) shows a J. T. Stephenson residing northwest of 15FA290 at the “Big Spring Farm” location. McMeekin is shown on the same map as residing just south of the 15FA290 location. Brand apparently sold the property to his neighbors that owned adjoining tracts. On the Beers (1877) atlas map for Fayette County (see Figure 3.3), ownership of 15FA290 is attributed to W. V. Cromwell. Deed records show that John T. Stevenson and his wife (Emily M.) sold the approximately 93-acre property that includes 15FA290 in two separate transactions, made in 1867 and 1870, to William V. Cromwell. On April 24, 1867, William V. Cromwell purchased approximately 42 acres, which included 15FA290, “beginning at a stake in the middle of the Newtown Turnpike Road corner” from John T. and Emily M. Stevenson for the amount of \$5,298.90 (FCC: DB: 45:301; see Table 3.1). He purchased the remaining 50 acres on the west side of Newtown Turnpike, which included a schoolhouse lot (see Figure 3.2), from John T. and Emily M. Stevenson on March 1, 1870 (FCC: DB 48:487).

Information gathered from the United States Census suggests that William V. Cromwell was likely a prominent resident of Fayette County. In 1860, Cromwell was 34 years of age and owned a total of 14 slaves between the ages of two and 60 years (U.S. Census Slave Schedule 1860). His total value of real estate was assessed at \$11,000, while his personal property was assessed at \$13,000 (U.S. Census 1860). He was the head of a household that included his wife, Mary E., who was 32 years old, his daughter Fanie (later spelled Nannie), who was 7 years old, and his son Vincent, who was 2 years old (U.S. Census 1860). By 1870, the total value of real estate owned by William V. Cromwell was assessed at \$55,000, and his total personal property was assessed at \$58,150 (U.S. Census 1870). This includes several hundred acres of land and multiple residences, among them the structure and land associated with 15FA290. His occupation was listed as farmer, and his household had added a daughter, Susan, who was 8 years old (U.S. Census 1870).

As discussed above, it is likely that in 1877 William V. Cromwell lived on the east side of Newtown Pike in the residence shown in Figure 3.3 that has his full last name in annotation. The location of 15FA290 is annotated simply as “W.V.C.”, which suggests that the tract containing the site was owned by William V. Cromwell but occupied by others, perhaps tenant farmers or a farm manager’s family. The 1870 Federal Census was examined to obtain information about the occupants of the residence at 15FA290. A search was made of the 1879 state and county census records for landowners listed on the 1877 Beers atlas. Mrs. Lydia A Gorham was listed, who is shown as owning the residence near the location of 15FA294 on Figures 3.2 and 3.3, north of 15FA290 on the west side of Newtown Pike. Also listed was Andrew McMeekin, who owned the residence just south of 15FA290 on the west side of Newtown Pike (Figure 3.3). Only one household was listed between the McMeekin and Gorham families. This household consisted of Zachariah Ross (male, age 17, black, with occupation listed as farm hand), Beny Ross (male, age 50, “mulatto”, farm hand), and Lavinia Smith (female, age 17, “mulatto”, occupation as domestic). No value was given for their personal property or real estate, suggesting that they did not own the residence where they were living (U.S. Census 1870). This listing strongly supports the inference that 15FA290 was a rental or tenant property after it was acquired by William V. Cromwell in 1867. It appears that a black family occupied the residence at 15FA290 in 1870, and for an unknown time prior and subsequent to the 1870 census.

The information in the 1880 Federal Census is not as easily interpreted. A similar technique was used to try to identify the occupants of the residence at 15FA290 in that year, but results are less clear because the

listings span two census pages (U.S. Census 1880). However, Andrew McMeekin was again located, along with his neighbors to the south on the Beers (1877) map—William Adams and John Adams. The next household listed in order, presumably to the north, was occupied by the Hanly family, headed by Thomas Hanly (male, age 56, white, with occupation listed as “works on the pike”). The household included his wife Mary Hanly (female, age 54, white, occupation “keeping house”), three daughters (Anna, age 26; May, age 22; Fanny, age 20), and four sons (Dannie, age 21; Thomas, age 18; John, age 15; and James, age 12). The oldest son Dannie is listed as “works on the pike”, and the youngest son James is listed as “at school”. All of the other sons and daughters are listed as “at home” under occupation. It appears that in 1880, the residence at 15FA290 is occupied by a white family that is again renting or acting as tenant/workers. Thomas Hanly the elder was born in Ireland, which makes an interesting comparison to the black family that previously occupied the house at 15FA290. “Working on the pike” is interpreted as being an itinerant or episodic laborer in the neighborhood (Newtown Pike), which would suggest a relatively low economic standing relative to landowning neighbors. However, given that in 1889 there were 6,910 miles of hard-surfaced roads in Kentucky, of which 5,441 miles were toll roads (Harrison 1984) maintained by local residents and towns, “working on the pike” may also have meant that Hanly worked to maintain Newtown Pike or worked as a toll collector. That the residence at 15FA290 was occupied by nine people, seven of which are adults, suggests that economic times were difficult for the Hanly family. It is not known how long the Hanly family lived at the 15FA290 residence.

Deeds show that on September 18, 1890, William V. and Mary E. Cromwell sold the property acquired in 1867 and 1870 along the west side of the Newtown Turnpike to their daughter Nannie C. Huguely, wife of John A. Huguely, “in consideration of one dollar in hand paid and by maternal love and affection” (FCC: DB 95:190; see Table 3.1). The deed states that Nannie and John resided in Mercer County, Kentucky. An 1891 map of Fayette County depicts the structure associated with 15FA290 on this tract of land (Wallis 1891; see Figure 3.4). However, ownership of the property is attributed to V. C. Cromwell. No property transactions between William V. Cromwell or Nannie and John Huguely to V. C. Cromwell could be located, but it appears that V. C. Cromwell refers to William’s son Vincent, who would have been 33 years old in 1891. Ownership of all of the property attributed to William V. Cromwell on the 1877 map (Figure 3.3) is attributed to his son Vincent C. Cromwell on the 1891 map (Figure 3.4). The 1880 federal census states that Nannie and John A. Huguely resided in the town of Bergin in Mercer County, Kentucky (U. S. Census 1880). Although Nannie may have retained legal ownership, her brother Vincent probably managed the property.

No Federal Census is available for Kentucky for 1890, so the occupants of the residence at 15FA290 could not be ascertained. However, it is fairly certain that Vincent C. Cromwell lived in the residence on the east side of Newtown Pike that was previously owned by William C. Cromwell, and that tenants/renters occupied the structure at 15FA290.

On January 25, 1900, Nannie C. Huguely sold the property that she acquired from her parents along Newtown Pike to Milton Young for the sum of \$8,497.80 (FCC: DB 95:190; see Table 3.1). The structure associated with 15FA290 is depicted on a 1904 map of Fayette County, and ownership is attributed to Milton Young (Mullin and Corbin 1904; see Figure 3.6). Milton Young began acquiring land along Newtown Pike as early as 1882, when he purchased more than 416 acres from Sallie McGrath for \$112.50 per acre (FCC: DB 70:180). In fact, the 1891 map lists M. Young as the owner of a structure situated south of the property he later purchased from Nannie C. Huguely, and this southern structure and land was attributed to P. McGrath on the Beers (1877) map. He also purchased a tract of land from John Stevenson on November 27, 1893 (FCC: DB 102:221). By 1900, Milton Young was 49 years old, and he was the head of a household that included his wife Lucy, who was 47 years old, and their five children, who ranged in age from one to 16 years (U. S. Census 1900). His household also included three African-Americans whose occupations were listed as “servant”—Delia Coleman, 19 years of age; Mary Taylor, 55 years of age; and Harby Winchester, 28 years of age—as well as Frank Sanders, aged 33, a white “servant” (U. S. Census 1900).

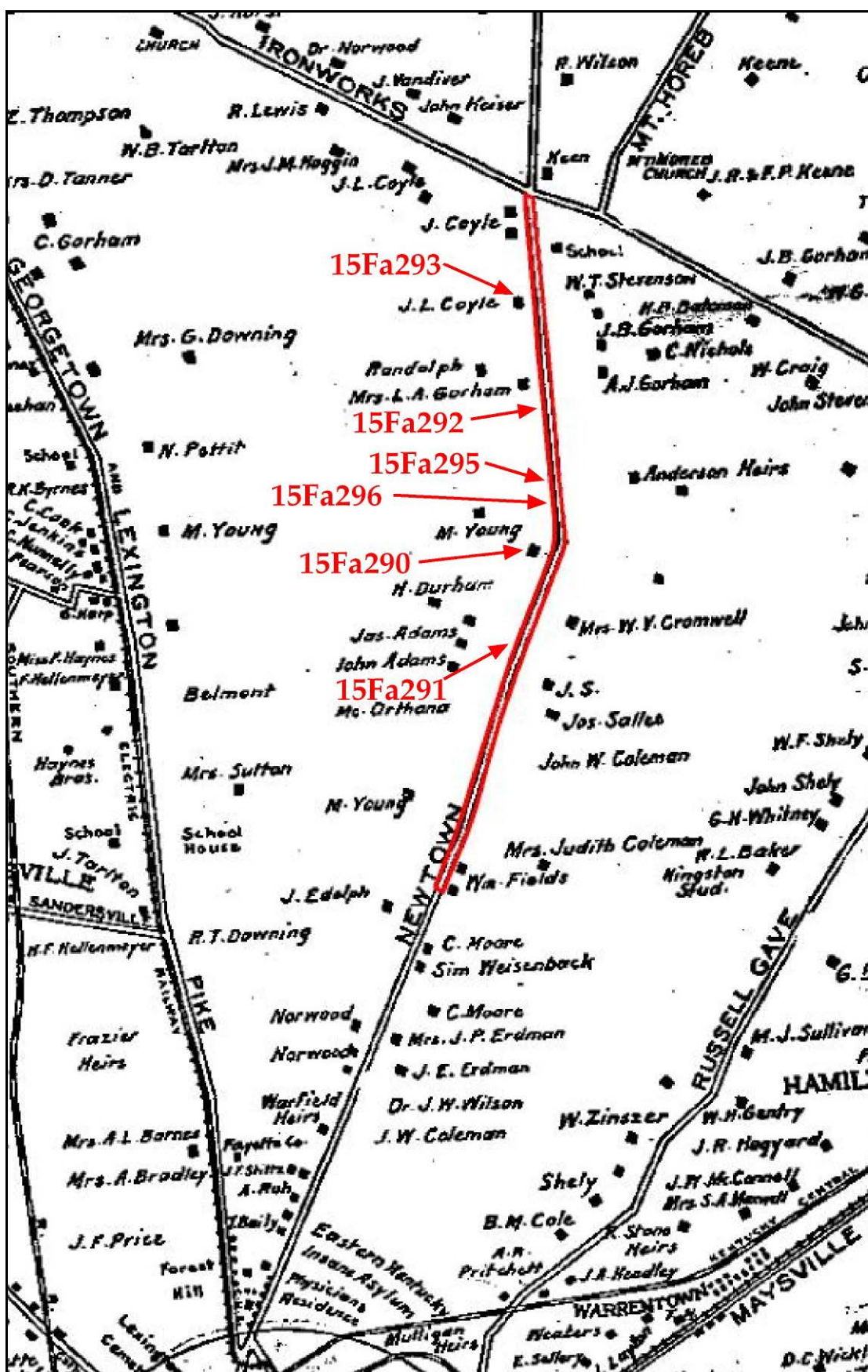


Figure 3.6. Selected Historic Sites Shown on a Segment of the Mullin (1904) *Map of Fayette County, Kentucky*.

The 1900 Federal Census was consulted for information about the possible occupants of the residence at 15FA290. Listings were found for residences shown on a 1904 map of Fayette County (Figure 3.6) that have ownership attributed to John Adams, James Adams, an unattributed structure shown north of James Adams, and H(andy ?) Durham, located west of the unattributed residence. These listings in the census book form an uninterrupted sequence from south to north for the west side of Newtown Pike. The next listing in the census book should correspond to the residence at 15FA290, and the census data indicates it is occupied by William Roberson, a black male, 49 years old with occupation listed as laborer (U.S. Census 1900). He lived with his wife of 22 years, Loucinda, a black female 44 years of age. She had born 10 children, six of which were still alive and living in the same residence. These children include sons Ezra (age 19), Jerry M. (age 13), Hunter (age 8), and John H. (age 5), along with daughters Maggie (age 14) and Polly (age 10). Again, the relatively small residence at 15FA290 was occupied by eight people, which would be uncomfortable by modern American standards but certainly not unusual for the turn of the 20th century.

On September 27, 1908, Milton Young sold more than 1,100 acres along Newtown Pike (FCC: DB 63:154), and this sale included the land and structure associated with 15FA290 (see Table 3.1). By 1910, Milton Young was 60 years old, and his household included the addition of a son, Thomas, who was 9 years of age (U. S. Census 1910). The structure associated with 15FA290 is not depicted on a 1912 map of Fayette County (Corbin 1912), nor is ownership of any property attributed to Milton Young along Newtown Pike. It is likely that the residence associated with 15FA290 was razed soon after the sale of this large tract of land. Milton Young is a recurring figure in deed records on file at the Fayette County Courthouse. Col. Milton Young was the second owner of the McGrathiana Stud Farm, initially owned by H. Price McGrath. With Milton Young's consolidation of multiple small farms and tracts along Newtown Pike in the first decade of the 20th century to create the McGrathiana estate (also known as the McGrathiana Stud Farm), one-time family residences and small farms like 15FA290 were either rehabilitated, turned into tenant houses, or razed. The residence at 15FA290 was razed, ending the accumulation of archaeological deposits at this site.

McGrathiana Stud Farm was sold in 1908 to Charles Schaffer (formerly Beasley; New York Times article 1908), who renamed it the McGrathiana Stock Farm and converted the horse stud farm to a cattle stock farm (see Table 3.1). Charles Schaffer gave that land to his two children, E. Dale Schaffer and Barbara Schaffer Neuman, in 1942 (FCC DB 338:527; see Table 3.1). Dale Schaffer bought his sister's half interest in the farm for one hundred dollars in 1946 (FCC DB 384:299; see Table 3.1). For the sum of one dollar, Coldstream Stud, Inc. purchased 11 parcels of land from E. Dale Schaffer in 1946 (FCC DB 397:18), including the parcel that contains 15FA290 (see Table 3.1). Henry H. Knight in turn bought 1021.679 acres from Coldstream Stud, Inc. in 1947 for the sum of one dollar (FCC DB 429:16; see Table 3.1). Crown Steel Sales, Inc. subsequently acquired this land from Henry H. Knight in 1951 for the sum of one dollar (FCC DB 502: 213; see Table 3.1). In 1955, a transfer of 1136.77 acres was made to Crown Crest Farms, Inc. for the sum of one dollar (FCC DB 584:378; see Table 3.1). Elizabeth Arden, Inc. purchased land from Crown Crest Farm, Inc. in 1956 for the sum of one dollar and renamed the tract the Maine Chance Farm. The acreage for this transfer was 764.54 acres (FCC DB 593:145), which was part of a larger tract of land purchased by the Crown Crest Farm, Inc. from Crown Steel Sales, Inc (see Table 3.1). Edward M. Maher acquired the land from Elizabeth Arden, Inc. in 1967 for the cost of a single dollar (FCC DB 913:26), and one day later sold the land to the University of Kentucky, again for one dollar (FCC DB 913:31). The University of Kentucky continues to own the land and maintains it as an agricultural research and experimental farm (see Table 3.1).

The deed research conducted in conjunction with the archaeological investigation of 15FA290 shows that the residential structure at the site was most likely built in 1803 or shortly before this date, when the land was owned by Samuel Beeler. Soon after the residence and associated buildings were constructed, the land was acquired by Richardson Allen. Allen (and his wife and six children) occupied the structure until 1830, after which he sold it and the surrounding land to John and Mary Estill, who along with their 7 children lived in the house until 1854. At this time the residence and associated land was sold at auction to a neighbor, Alexander H. Brand. Brand owned other property in the vicinity, including a large tract on the east side of Newtown Pike that would later be the location of the Fasig-Tipton Farm, and it is unlikely that the residential structure at 15FA290 was Brand's principal residence. It may have been occupied by a farm manager or

tenant farmer during the time that Brand owned the property (1854-1867). Census data suggest but cannot confirm that the 15FA290 residence was occupied by M. H. Parker. Because the Parker family has no value of real estate listed, this family is inferred as renters or tenants in the house and not owners. By 1870 there is direct documentation in the federal census records that the residential structure at 15FA290 was a rental/tenant property and was not occupied by the landowner. Sequential owners include William V. Cromwell (1867-1890), Fannie Huguely and/or her brother Vincent C. Cromwell (1890-1900), Milton Young (1900-1908), and W.S. Beasley (1908-1942), none of whom resided at 15FA290.

An undoubtedly partial list of inferred or documented tenants include the Parker and Satterwhite families in 1860, the Zachariah Ross family in 1870, the Thomas Hanly family in 1880, and the William Roberson family in 1900. Unfortunately, the duration of any of the tenants' occupancies is unknown. Of importance for the interpretation of the artifactual remains from 15FA290 are the economic standing of the site occupants and their racial classification. There is no information about the race of the Parker or Satterwhite families in the 1860 census. The economic standing of the household seems to be moderate; the declared personal value of \$4,600 for Parker is near the midpoint of the range of personal property values of persons listed on the same census page (between \$1,000 and \$17,000 for heads of households). The Ross family included only three persons, who were listed as black or mulatto in the census data. There is little information about their economic standing, but they have no personal property value or real estate property value attributed to them in the 1870 census. As black renters/tenants whose occupation was laborer, their economic standing was probably relatively low compared to landowners in the community. The Hanly family included an Ireland-born husband, a wife, and seven children, and they are listed in the census as white. This is the same number of occupants of the 15FA290 residence as the Estill family (1830-1854), but again, Hanly was a tenant and not an owner. He listed his occupation as working on the pike, which suggests intermittent work in the neighborhood, but could also mean that he had steady work involving local maintenance of Newtown Pike. Even so, the economic standing of the Hanly family may have been relatively low. Finally, the Roberson family (husband, wife and six children) occupied the house in 1900, and they are listed in the census as black. William Roberson's occupation was listed as laborer on the census records, but he claimed no period of unemployment over the previous year, suggesting that his economic conditions were at least steady.

It is tempting to try to correlate trends in the census and deed records with occupancy of the site by families of different racial classification. The facts, however, support only a more limited interpretation of the economic standing of the site occupants. The residence at 15FA290 was constructed by a person who had a modest landholding, relative to local landowners at the turn of the 19th century. While the original owners (Beeler and Allen) and subsequent owners prior to the Civil War (Estill and Brand) were slave owners, the residence at 15FA290 was by no means a large plantation house. The size of the structure, its layout on the landscape, and the limited evidence for associated outbuildings (they are mentioned in archival records for the site but were not documented archaeologically) all argue for 15FA290 being the residence of modest, rather than wealthy, farmers in the first half of its time span of occupation. The economic standing of subsequent owners (Cromwell, Huguely, and Young) may have been considerably higher than previous owners, but the residence at 15FA290 was not occupied by these individuals. It was almost certainly turned into a rental/tenant property by the beginning of William V. Cromwell's ownership in 1867, and there is limited evidence that the Parker and Satterwhite families that resided there in 1860, during the Brand period of ownership, were also tenants. The structure continued to be occupied by a series of both black and white tenant families for the next 35-40 years until it was razed, between 1904 and 1912 (likely soon after it was acquired by Charles Shaffer in 1908). The renters/tenants would not have had high economic standing in general, though the standing of individual occupants may have varied.

The overall trend, based on the deed research and census data, is one of decreasing economic standing through time for the series of occupants of the residence at 15FA290. The challenge and goal of the analyses are to determine if this trend in economic standing is reflected in the architecture or the artifacts recovered from the site. The deed and census data set the stage for discussion of research goals, presented in Chapter 4.

CHAPTER 4

RESEARCH GOALS

The archaeological investigations at 15FA290 began as a Phase II NRHP eligibility evaluation, and the field methods used for these investigations were fairly standard practice in such evaluations. These included surface inspection and site mapping, limited systematic shovel testing, hand-excavation of test units with placement guided by either the results of shovel testing or topographic irregularities, and mechanical removal of plow zone from large blocks to expose features. All archaeological investigations were confined to the portion of the site that would be impacted by the proposed construction activities, including the area within a permanent right-of-way and an adjacent construction easement for utilities. These field methods are discussed in more detail in Chapter 5.

Once the initial Phase II field investigations were completed at 15FA290, an on-site meeting was held that included representatives from the Kentucky Heritage Council, the Federal Highway Administration, the Kentucky Transportation Cabinet, and the UK Program for Archaeological Research. At that time, the residential structure at 15FA290 (Feature 1) had been outlined, the nearby cistern (Feature 24) had been defined, some additional hand-excavated test units had been completed within Feature 1 to document internal stratigraphy, and additional features had been exposed in portions of the inner and outer yards of the Feature 1 residence. Based on the presence of intact deposits accumulated on the Feature 1 residential cellar floor, the presence of small pit features intruding into the cellar floor, recovery of artifacts that spanned the 19th century, and the high potential for additional features and intact deposits within and around the perimeter of Feature 1, the decision was reached among the parties attending the on-site meeting that 15FA290 was eligible for listing on the National Register of Historic Places. As a result, the project shifted into a full data recovery or Phase III investigation to mitigate the impact of the impending construction on the affected portion of this NRHP-eligible site. The agreed scope of the additional field work included hand-excavation of all nonarchitectural features, mechanical removal of disturbed rubble fill from the Feature 1 interior, mapping and excavation of all features exposed as a result of rubble removal, documentation of the architectural and construction attributes of the residential house foundation and any other architectural features, and extraction of a larger sample of artifacts from selected intact stratigraphic contexts within and outside the residential structure.

Any site that is determined to be eligible for listing on the NRHP must be able to contribute to our understanding of specific research topics of local, regional, or national significance. For 15FA290, the relevant research issues were defined by the results of the Phase I and Phase II work. The deed research conducted for the Phase I survey indicated that a structure depicted on various historic maps at the location of 15FA290 had been torn down between 1904 and 1912. This terminal date range for site occupation was consistent with the artifacts recovered during Phase I and Phase II work, which produced very little material that could be attributed exclusively to the 20th century. The artifacts recovered also indicated that occupation of the site began in the early 19th century, with an 1803 estimate for initial house construction based on deed research, supported by recovery of creamware, pearlware, hand-wrought nails, early machine-cut nails, and thin window glass. This age estimate for the initial construction of the Feature 1 house was consistent with the construction style of the house foundation (described in detail in Chapter 7). Based on these age estimates, the inference was made that the site was occupied for most if not all of the 19th century.

The principal contributions that additional work at 15FA290 could make to local and regional research issues relate to documentation of the social/economic standing of site occupants and how their standing may have changed through the 19th century. Social/economic standing should be reflected in the artifacts recovered from the site, the architecture and any modifications that were made to structures during the span of site use, and in documentary records (deeds, wills, census data, historic maps) pertaining to the site and its occupants. The site also offered the potential for containing several small pit features or refuse disposal areas that could be dated to specific segments within the ca. 100-year span of the site's occupation. If specific features or excavation levels could be assigned to specific date ranges, changes in economic

standing might be tracked through time, as reflected in artifacts recovered from these dated features. Given the large changes that took place during the 19th century in the scale of regional and national economic networks, as well as changes in access to regional, national, and international markets linked to developments in transportation, we would not expect the economic standing of the site occupants to remain constant throughout the 19th century, even if the same family had occupied the residence. Changes in status and their expression in the material culture of the site occupants might be magnified if ownership (or occupancy) shifted from one family to another through this time span. Keys to any investigation of changing economic standing would be 1) recovery of sufficient numbers of artifacts, 2) recovery of features or specific contexts that could be assigned to a narrow time span, 3) documentation of the occupants through historic records, and 4) establishing measures of the economic standing of site occupants—even if only on a relative basis—using a combination of artifacts and documentary data.

These three lines of evidence—the archaeological, artifactual, and documentary data—provide semi-independent data that can be utilized to investigate this general research topic of changing social/economic status of site occupants through time. Based on the hand-excavated test units placed within the residential structure, artifact density appeared to be high, which should provide abundant artifacts for analysis. However, many of the artifacts had been recovered from the mixed rubble fill of the razed residential structure, and this rubble fill context could not be assigned to any specific temporal span within the 19th century. Small, discrete features had also been documented, as well as other contexts that had relatively good integrity, and these were the contexts that were relied upon for obtaining the requisite archaeological and artifactual evidence. Very little of the deed and documentary research discussed in Chapter 3 had been completed at the time of the on-site field conference, but this line of evidence would prove to be crucial for adding metaphorical interpretive flesh to the bare bones of the artifacts and archaeological features.

During the on-site meeting, some of the attendees noted that we had recovered some interesting artifacts during the Phase II excavations, which prompted suggestions of specific lines of investigation that should be pursued as part of the expanded data recovery work. Among these artifacts of interest were red and yellow pigment identified in the west room of the residence, a bottle recovered at the base of the hearth in the west room, a locket found just outside the northeast corner of the foundation in a builders' trench or possibly downspout/dripline context, and a couple of prehistoric projectile points found during excavation of test units in the interior of the residence foundation. These artifacts were of potential interest because they suggested that the site's occupants had intentionally placed these personal items as part of rituals related to magical protection of the house and its occupants. Such caches have been documented in both African American and European dwellings (e.g. Becker 1978, 1980; Fennell 2003; Thomas and Thomas 1920; Young 1997). Documentary research indicated that during the late 19th century the structure at 15FA290 was occupied by two African American families and a family of Irish immigrants (U.S. Census 1870, 1880, 1900), but this research had not been conducted at the time of the on-site meeting. Nevertheless, one aspect of additional Phase III excavations would be an attempt to recover other potentially ritual-related artifacts from specific contexts within the residential structure, especially from building corners or below hearths. This potential ritual aspect of site occupancy made the documentary information about site occupants particularly useful and informative. A second research goal was thus developed to determine if the site had been occupied by African Americans or by those of Irish descent, and to assess whether and how the racial and ethnic character of the site occupants was reflected in the features, architecture, or artifact assemblages. Obviously, the material expressions of race, ethnicity, and economic class are strongly related, and it might not be possible to differentiate these attributes in either the architectural or artifactual remains. However, they should be more readily accessible and interpretable through the combination of historic document research, archaeological contextual interpretations, and artifact analyses.

Pursuit of these two related research goals required excavation of specific contexts in the expanded data recovery excavations. Particular attention was paid to excavation of hearth and chimney base areas and to materials recovered from interior corners of the residence. However, the entire interior rubble fill of the house could not be excavated by hand because of time constraints. Instead, a backhoe was used to remove the rubble fill and cellar floor accumulation deposits and thus expose features that intruded into subfloor clays.

Artifacts were recovered by opportunistic collection during removal of the rubble fill, so it is likely that some potentially ritual-related items were missed. However, use of the backhoe exposed several additional small subfloor pits, and many of these could be assigned to narrow date ranges based on the associated artifacts, though assemblages from individual features were always small (see discussion of laboratory methods in Chapter 5).

These finely dated features are the basis for assessment of changes in the economic standing of site occupants through time. Proxy measures of economic standing were applied in the analysis of artifacts recovered from dated features to help address this research goal. In addition, analysis of faunal remains focused on changes in the proportions of wild animals in the diet of site occupants as another proxy measure of changes in site occupant's economic standing.

Another set of information related to this research topic is derived from evidence of expansion or remodeling of architectural features on the site. Architectural modifications generally are expensive propositions and are undertaken as repairs or as additions. In either case, the owners or occupants would need to have access to money and materials for undertaking such modifications. The timing of these modifications may be correlated with changes in artifact assemblages or changes in property ownership, providing an additional line of evidence about changes in the economic standing of site occupants or owners.

Probably the most important set of information relevant to assessment of the economic standing of site occupants is derived from historic documents. Maps, deeds, wills, court records, and census data all provide direct information about site occupants, and this can be correlated with other lines of evidence derived from site archaeology, architecture, and artifact assemblages. This same set of historic documents can provide direct evidence for the racial or ethnic characterization of the household, as has been demonstrated in Chapter 3.

The Phase III data recovery field excavations conducted at 15A290 were only the first step in assessing the research issues outlined above. Additional information relevant to the research questions was derived from analyses of specific artifact assemblages, analysis of architectural remains, and extraction of data from historic records and maps. Successful pursuit of these research topics at 15FA290 therefore relies on multiple lines of evidence, none of which is sufficient alone. Chapter 5 presents detailed discussion of the field and laboratory methods used in the investigation of 15FA290 and the assessment of these research issues as they pertain to the occupants of this site. This discussion of methods and analytical techniques is followed by description and interpretation of the materials recovered (Chapter 6) and discussion of the excavation contexts documented at 15FA290 (Chapter 7), including the results of shovel tests, hand-excavated test units, mechanical block excavations, and feature excavation, and discussion of artifact assemblages recovered from these contexts. These data-oriented chapters are followed by more interpretive and analytical chapters. The excavation contexts are grouped by spatial, functional, and temporal attributes (Chapter 8) to evaluate the research issues outlined above, and this is followed by an explicit discussion of the research topics (changes in economic standing of site occupants through time, material expressions of economic standing, and material expressions of racial and ethnic affiliation of site occupants) in Chapter 9 which draws upon all available lines of evidence. An interpretive summary including intersite comparisons is offered in Chapter 10.

CHAPTER 5

FIELD AND LABORATORY METHODS

Given the background information presented in Chapter 3 and the discussion of research goals presented in Chapter 4, this chapter provides detailed explication of the specific field and laboratory methods used to obtain data and analyze information and ultimately to address these research topics. Specific analytical methods employed for various material classes are discussed in detail, and only limited discussion of these methods is repeated or elaborated upon in subsequent chapters.

FIELD METHODS

Field work began with systematic walkover of the site area and opportunistic surface collection of any areas with surface visibility more than 50 percent. However, surface conditions were highly variable on 15FA290, with patches of good surface visibility only in the agricultural field at the south end of the site, and no visibility in the pastured areas that comprised about 60 percent of the site area within the construction corridor (see Figures 3.1 and 5.1). Only a few brick and rock fragments were noted on the surface, and these were not collected. A site grid was established with an electronic total station to provide map information for excavated and mechanically stripped areas as well as feature locations. The site datum was established just west of the rock wall that forms the east boundary of the site and the extant ROW for Newtown Pike, east of the northeast corner of the agricultural field (Figure 5.1). This datum was designated as N100/W100. A proposed new ROW marker designated as Station 71+64.45/60.00L was used as a secondary datum and mapping reference station for later excavations. The archaeological grid was oriented with grid north parallel to the proposed new center line, roughly 20 degrees east of magnetic north. The site grid was used only in the initial shovel testing and initial test unit excavations (discussed below). After the focus of excavations shifted to cultural features and test units placed within or relative to these features, the site grid was used only for control of site-wide mapping, and not for test unit orientation or maintenance of vertical control.

A series of initial shovel tests was placed over part of the 15FA290 site area to try to identify areas with intact midden preserved below the plow zone. Shovel tests excavated during Phase I survey had indicated possible subplow zone artifact-bearing deposits in two of the 12 shovel used to define the site area (Shovel tests 246 and 305 on Figure 3.1). These shovel tests were placed in the pasture area just north of the agricultural field. In the Phase II/III work, six shovel tests were excavated at 5-meter intervals along each of three transects spaced 5 meters apart, for a total of 18 additional shovel tests. The southern transect ran along the boundary between the pasture and the agricultural field, and two other transects were placed 5 and 10 meters to grid north. All sediment from shovel tests was screened through ¼-inch mesh to ensure standardized recovery of artifacts and help establish patterns of artifact distribution and density. Profiles were documented for all shovel tests, regardless of whether a test was positive or negative, to evaluate the presence of possible subplow zone midden deposits. However, no intact deposits could be identified in the shovel tests, and all profiles documented a well-defined plow zone underlain by a culturally sterile Bt soil horizon.

Shovel test excavation was followed by hand excavation of ten 1-x-1-m test units. Test units were placed in areas of higher artifact density, in areas that might contain intact deposits based on the Phase I survey data, or in high-probability landscape positions. High-probability landscape positions included several topographically flatter areas observed on the shoulder and upper side slope within the pastured portion of the site. These flatter areas were thought to be more likely to contain either unplowed remnants of sheet midden associated with a residential structure or the remnants of former structures. Test units in this initial series were oriented to grid directions. Test Units 1-10 were hand-excavated using a combination of arbitrary 10-cm levels and natural/cultural strata. The plow zone was removed as a single natural level (Level 1), and another 10-cm arbitrary level (Level 2) was excavated below plow zone in each test unit. Hand-excavated test units provided a larger sample of cultural material, and stratigraphic information obtained from test unit profiles allowed the project director to determine whether specific contexts contained intact deposits or had

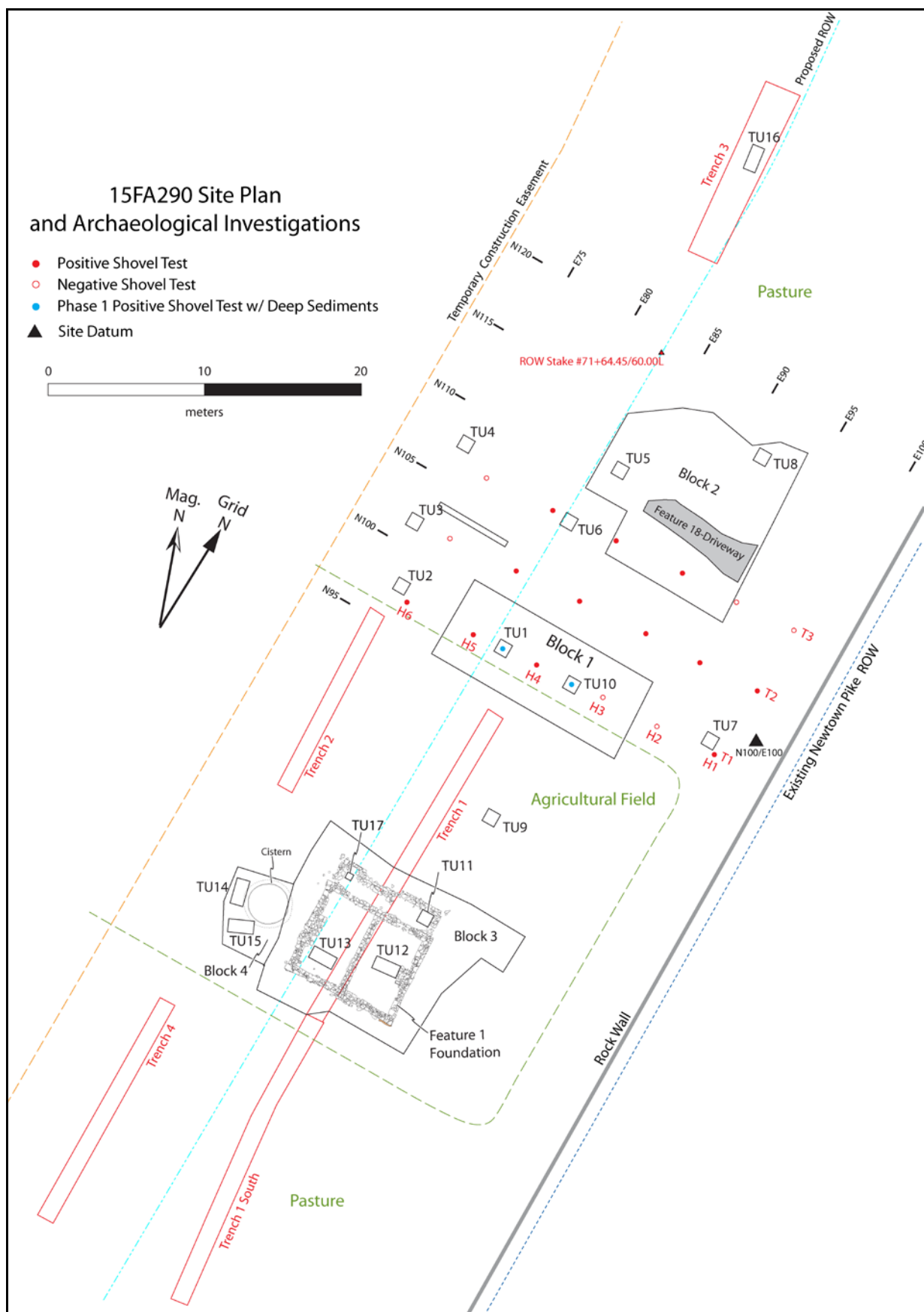


Figure 5.1. General Site Plan for 15FA290 Showing Locations of Archaeological Investigations. The horizontal grid system is used only for the shovel test and initial test units in the central part of the site.

been completely disturbed by plowing. As with the shovel tests, all sediment from test units was screened through ¼-inch mesh. After units were excavated into culturally sterile subsoil, at least one of the exposed profiles was photographed, drawn at 1:10 scale, and described using standard soil terminology.

Test Unit 1 was placed to cover the location of Shovel Test 305 in the Phase I survey (see Figures 3.1 and 5.1). The expectation was that this test unit, and possibly others within the site, would reveal artifact-bearing midden deposits below the plow zone. The location of ST 305 and Test Unit 1 was considered the most likely location for encountering intact deposits, based on what was known at the time. However, no intact deposits were found below the plow zone. Test Units 2 through 9 also showed no evidence of intact subplow zone deposits, and all profiles showed an abrupt boundary at the base of the plow zone, underlain by culturally sterile B horizon sediments. Test Unit 10 was placed in the location of ST 246 from the Phase I survey (Figures 3.1 and 5.1), which was another shovel test that had a deep soil profile with potential for intact subplow zone sediments. However, like the nearby Test Unit 1, no intact deposits were documented. It is likely that plow zones are deeper at the location of these initial shovel tests, near the edge of an agricultural field, and these deeper plow zones were misinterpreted as possible intact deposits. In any event, the initial ten test units showed clearly that no intact cultural strata were present in the north-central part of the site.

After excavation of the initial 10 test units, plow zone sediment was removed from larger blocks and trenches using a backhoe with a flat-bladed bucket. The flat blade created a smooth surface at the bottom of plow zone, which helped define features and postholes, which were recognized as circular to oval areas of dark soil intruding into the lighter brown and oxidized subsoil. All potential cultural features were flagged, cleaned in plan view, numbered, and photographed. Possible postholes were treated as features. Mechanical removal of plow zone began with Block 1, which was placed to cover the area that potentially contained intact deposits based on the Phase I survey results (Figure 5.1). Four small features were documented, but no architectural remains were found. Block 2 was placed grid north of Block 1, and it exposed a larger area on the shoulder of the landform, just south of the break in slope to the north. Three more features were exposed in Block 2, but none of them were architectural or structural in nature. For this reason, Trench 1 began just south of Block 1 and extended grid south as a 1.5-m wide trench about 23 m in length. Trench 1 intersected the Feature 1 house foundation, and Trench 1 was expanded to grid east and west to create Block 3. Block 4 is the westward extension of Block 3 that exposed the cistern area associated with the Feature 1 house.

The outlines of the Feature 1 foundation were exposed by mechanical removal of the plow zone and other disturbed deposits from the area around the foundation and to a shallow depth within the house foundation. The exposed, rubble-filled house foundation was subsequently cleaned by hand, photographed, and mapped in detail.

While Feature 1 was being cleaned and photographed, additional trenches were mechanically excavated within 15FA290 in an attempt to locate additional features, especially remains of outbuildings. Trench 1 was extended along its original direction for another 20 meters, and this was designated Trench 1 South. No additional architectural features were found, but one posthole was located. Trench 2 was placed grid northwest of the Feature 1/Block 3 area, just east of the temporary fence that had been erected on the site to mark the boundary of the construction easement and our project area. No features or postholes were identified in Trench 2. Trench 3 was placed on the sideslope north of Block 2 where a topographic low area and different vegetation cover suggested that a spring may have been located. No evidence of a springhouse or other architectural feature was found, but there was a large, dark stain within the block that was subsequently investigated (see below). Trench 4 was placed parallel to the temporary fence marking the construction easement boundary, grid southwest of Feature 1. No additional architectural features were found, but a cluster of four postholes was documented. In all, mechanical removal of plow zone exposed about 425 m² of the site area, or about 9.5 percent of the site area contained within the right-of way and construction easement.

After Feature 1 was cleaned of plow zone remnants and photographed, additional hand-excavated test units were placed within it and at other selected locations within the site. Feature 1 was clearly defined by the

backhoe and subsequent hand-clearing as a double-pen foundation creating an eastern room and a western room, with a probable porch or additional room foundation extending along the north side of both east and west rooms. Feature 1 was oriented parallel to the direction of Newtown Pike (cardinal grid directions). Chimney bases were identified along the interior walls of both the east and west rooms. This exposure showed three separate rooms within Feature 1 that were defined by limestone block foundation walls. Hand-excavated test units were placed in each of these rooms.

Test Unit 11 was a 1-x-1-m unit placed in the northeast corner of the north room. Test Unit 12 measured 1-x-2-m in extent and was placed in the east room, just west of the chimney base. Test Unit 13 also measured 1-x-2-m and was placed just south of the chimney base in the west room. Test Unit 17 was a 50-x-50-cm test unit placed near the northwest corner of the north room. Test Units 12 and 13 were positioned to have the highest potential for intersecting pit cellars or small subfloor pits that might have been used for storage or disposal of household trash. Excavation of all of the test units internal to Feature 1 would also provide information on the filling sequence within the house, the depth of the rubble fill in various locations, and the potential for encountering intact deposits, a deep cellar, or other major architectural features that were presently covered by rubble fill. Because we were working without benefit of soil profile exposures that would help guide excavations, this second series of test units was excavated primarily in arbitrary 10-cm levels. However, every effort was made to identify changes in soil horizons within the arbitrary levels and to sample strata separately. This proved to be extremely difficult, and many of the arbitrary levels cross-cut the natural fill zones that were definable when the test unit profiles were documented. In particular, the lowest strata above the sterile clay cellar floor in Test Units 12 and 13 consisted of a series of discontinuous, partially overlapping, and ephemeral strata that are interpreted as internal midden deposits that accumulated below the floor of the structure. Given their thinness and discontinuity within any given test unit, the decision was made to group these deposits by arbitrary excavation level, and to not try to separate them during the test unit excavation. For analytical purposes, the test units have variable stratigraphic control, with some arbitrary levels corresponding closely to natural/cultural strata and other arbitrary levels cross-cutting multiple cultural strata, especially in the thinly stratified subfloor accumulations in Test Units 12 and 13. The stratigraphic sequences and integrity of test units and assessment of the age of associated materials is discussed more fully in Chapter 6.

Other test units were placed in selected locations within the site to investigate specific contexts. Test Units 14 and 15 were placed adjacent to the south and west sides of the cistern associated with Feature 1, which had been exposed during mechanical excavation of Block 4 (see Figure 5.1). Backdirt from emplacement of the cistern had stratigraphically sealed a small area of intact original A horizon sediments that contained historic artifacts. Test Units 14 and 15 obtained a larger sample of artifacts from this remnant of A horizon sediments, which proved to contain artifacts deposited during the earliest period of site occupation. Test Unit 16 was placed within Trench 3 in the northern part of the site to investigate a large, dark stain that was identified at the base of the plow zone.

Test Units 11, 12, 13, and 17, placed in the interior of Feature 1, all showed relatively deep rubble fill (30 to 60 cm) overlying Bt horizon sediments that comprised a prepared surface underlying the structure. Apparently the original A horizon sediments had been removed as part of the preparation for house construction, resulting in an abrupt transition from cultural fill to basal clay Bt horizon. Cultural midden sediments had accumulated directly on this prepared Bt horizon surface in patchy areas, presumably as a result of occupation of the house. However these did not form a continuous or deep stratum. Test Units 11 and 17 in the north room showed no accumulation of midden sediment, and the floor accumulation in Test Unit 12 (east room) was relatively thin. Test Unit 13 had the thickest floor sediment accumulation, but this was highly disturbed by rodent burrows. Test Units 12 and 13 also revealed multiple small pit features intruding into the sterile Bt horizon sediments, but no such features were found at the base of units 11 or 17.

Because the floor sediments were not continuous and were highly rodent-disturbed when present, the decision was made to mechanically remove the remaining rubble fill and accumulated cellar floor sediment from the interior of Feature 1, exposing any subfloor pits that might be present. This decision was reached in

consultation with KHC and KYTC archaeologists during the on-site visit that resulted in the shift to full Phase III mitigation of the impacted part of 15FA290. Again, the flat-bladed backhoe bucket was used to extract the rubble fill, and this removed most of the thinly stratified midden accumulations as well. Small subfloor pits were expected to reflect short-term episodes of use, and to therefore have the greatest potential for containing artifacts that could be dated to narrow time ranges. After rubble fill and floor sediments were removed from most of the interior of Feature 1, it was again cleaned by hand to expose features intruding into the Bt horizon. These features were mapped in detail and their locations were added to the master map of Feature 1. The final use of the backhoe was to bisect the cistern, designated Feature 24. The cistern proved to be filled with brick and limestone block rubble, and it contained few temporally diagnostic artifacts.

In retrospect, more artifacts could have been recovered from good contexts if the backhoe had been able to remove only the rubble fill from the house interior, leaving the accumulated and thinly stratified midden deposits on the cellar floor for more controlled hand excavation. The backhoe proved to be a clumsy tool for such fine work, and the subfloor cultural accumulations could not be consistently left intact for hand excavation. At the time, we recognized that these subfloor accumulations were highly rodent-disturbed, and we did not consider their mechanical removal to be a great loss of information. An alternative approach that could have provided a larger sample of these cumulative midden deposits is suggested here to help guide future field work situations. The interior test units (TU 11, 12, 13, and 17, but particularly TU 12 and 13) could have been expanded by hand into adjacent 1-x-2-m units, and these units could have been excavated by natural strata, using the initial profiles to guide excavations. This would have provided a larger sample of additional artifacts from finely controlled stratigraphic contexts, without excavating the entire interior fill by hand. Expansion of the hand-excavated units and use of exposed profiles for stratigraphic control could also have obviated the mixing of artifacts that resulted from use of arbitrary levels to sample the thin subfloor midden strata in the initial interior unit excavations. .

After their locations were mapped, subfloor features were cross-sectioned, removing one half of the fill. If these areas proved to be cultural features (instead of noncultural disturbances such as rodent burrows or patchy remnants of rubble fill), the fill from the first half was screened, and the exposed profile was drawn, photographed, and described. The fill of the second half was removed in natural/cultural zones if any were present. Flotation samples were extracted from the second half of selected features for later processing. Most of the float samples were taken from ash-filled pits, but few subsistence remains were recovered. Other features and postholes identified in the inner and outer yard were documented and excavated using similar techniques, except for the cistern and Feature 18, another large-area feature in Block 2; these were cross-sectioned but were not fully excavated. Finally, all features, postholes, excavation blocks, and trenches were mapped with an electronic total station, along with the locations of test units and shovel tests. The mechanically stripped areas were backfilled after archaeological investigations were completed.

LABORATORY METHODS

Artifacts were washed, catalogued, and analyzed at the laboratory facilities of UK-PAR in Lexington, Kentucky after completion of field work. Following washing, artifacts were separated into historic and prehistoric materials, which were further subdivided into major material classes (e.g., chipped stone, metal, ceramics, faunal, botanical) for more detailed description, identification, and analysis. Following analysis, an inventory was assembled using a standard descriptive typology for both prehistoric and historic artifacts. Artifact classes for both prehistoric and historic materials are described and discussed below.

PREHISTORIC ARTIFACTS

Analysis of prehistoric artifacts involved a typological classification of all chipped stone materials that focused on identifying the production trajectory and stage of reduction (Andrefsky 1998; Collins 1975; Odell 2003). Each piece of chipped stone debitage was identified to a specific typological category based on

a set of morphological features (see definitions below). Chipped stone tools were analyzed separately to identify gross morphological characteristics, stage of manufacture, possible evidence of utilization, and potential function. The large majority of the prehistoric artifacts recovered in the present survey are assigned to one of several lithic debitage categories; few formal tools were found. In addition to morphological classification and assignment to reduction stages, the raw material type was identified for all chipped stone artifacts. Steven Ahler analyzed the prehistoric lithic and ceramic artifacts recovered from 15FA294. Chert raw material types identified by Ahler were verified by Eric Schlarb.

Debitage Categories

Analysis of debitage includes classification by reduction stage using definition criteria developed by, among others, Crabtree (1982), Flenniken (1987), and Collins (1975), adapted by Nilsson (1988), and further modified by Madsen and Tyree (2000) and Bamann and Madsen (2002). In addition to flake type, the amount and type of cortex present on the dorsal surface of each flake was also recorded. Definitions for debitage flake types are provided below.

Primary Flakes

Also called decortication flakes, primary flakes represent the initial stage of lithic reduction. An obtuse platform with no lipping, a pronounced bulb of percussion, and a significant amount of cortex on the dorsal surface (more than 50 percent) typically characterize this flake type.

Secondary Flakes

Also called partial decortication flakes, secondary flakes are also considered to represent the initial stages of reduction that involve removal of cortex from cores and tool blanks and preparation of cores and blanks for subsequent thinning and shaping. Attributes of secondary flakes include an obtuse-angled platform that shows no lipping on the ventral surface, a noticeable bulb of percussion, and presence of cortex on less than 50 percent of the dorsal surface (including the platform as part of the dorsal surface).

Interior Flakes

Interior flakes (sometimes referred to as tertiary flakes) exhibit 1) an identifiable platform, 2) a bulb of force on the ventral surface, and 3) no cortex on the dorsal surface and/or platform.

Biface Thinning Flakes

Biface thinning flakes are flakes that have: 1) an identifiable platform, often with two or more distinct facets or surfaces, 2) a diffuse bulb of force on the ventral surface, 3) no cortex on the dorsal surface or platform, 4) a platform that forms an acute angle ($<90^\circ$) between the platform and the dorsal surface, and 5) a lip, or hook-like protrusion at the ventral edge of the platform.

Pressure Flakes

Pressure flakes are similar to biface thinning flakes, but the platform is often very diminutive and may exhibit crushing at the point of detachment. The bulb of force is a pinpoint location, and the small lip at the ventral edge of the platform is often discernable only by feel or with the aid of a hand lens for magnification. Other attributes of biface thinning flakes (faceted platform, acute angle between platform and dorsal surface, and absence of cortex) are all applicable as well to pressure flakes. Not surprisingly, biface thinning flakes and pressure flakes often are distinguishable only by the smaller size of the latter. Because many platforms are crushed in the process of creating pressure flakes, they are often placed in the broken flake category. Biface thinning and pressure flakes may be grouped as late-stage reduction flakes in many analyses.

Broken Flakes

Broken flakes or flake fragments are pieces of flakes that lack either an identifiable platform or a bulb of force. However, the specimen is still identifiable as a flake by its relative thinness, the presence of dorsal flake scars, and a smooth ventral surface. Broken flakes also lack cortex, and this suggests that many may

have been produced later in the manufacturing process. Flake fragments that have cortex on the dorsal surface were placed into primary or secondary flake categories based on the amount of cortex visible, and were not included in the broken flake category.

Angular Shatter

Shatter is a fragment of chert that has been culturally modified but lacks attributes that would allow it to be classified into any other debitage category. Angular shatter can be produced at any stage of reduction but is more likely a by-product of early stages.

Chipped Stone Tool Categories

Lithic chipped stone artifacts that show evidence of modification, either through use or by intentional shaping of the item, are considered tools. This general class of chipped stone tools can be further divided into a variety of specific categories based on the morphology of the artifact, presence or absence of intentional shaping, and the degree to which the artifact has been modified. Specific artifact categories that commonly occur on prehistoric sites include unifacial tools of various shapes and functions, cores, and bifacial tools. In the present assemblages, we recovered only bifaces in various stages of reduction. Gun flints, some of which are made from local chert, were also recovered, but these are described in the historic artifacts section.

Cores are typically tabular blocks, cobbles, or nodules of lithic raw material that exhibit at least one intentional flake scar. Flake scars may be the result of testing the raw material, the production of flakes or blades, or the early stages of biface reduction (Driskell 1986). The type of core may reflect the material type, the size and shape of the parent material, and/or the desired end product. Tested cores exhibit only one to three flake scars. These types of cores are typically the product of initial exploration of raw material, and the flakes serve to remove cortex and expose the chert matrix. If the chert is suitable for further reduction, additional flakes are removed, producing a general or amorphous core that shows evidence of multiple flake removals from multiple directions (Rondeau 1995).

Assessment of the degree of modification allows bifacial tools to be placed into various stages of production that reflect the degree of refinement of the tool and its placement along a reduction stage continuum (Collins 1975, Odell 2003, Whittaker 1994). Biface stages that are commonly recognized include rough bifaces that show only minimal bifacial work (also known as Stage 1 bifaces), thick or Stage 2 bifaces that show the of regularized shaping of the artifact, thin bifaces or Stage 3 bifaces that are fully thinned, and finished bifaces (projectile points and knives) which exhibit evidence of a hafting element. Three categories of bifacial tools were recovered in the course of the present survey. These included Stage 2, Stage 3 and finished bifaces. Stage 1 or rough bifaces were not represented in these assemblages.

Stage 2 Bifaces

Stage 2 biface reduction continues the processes of shaping and thinning a biface, which began with production of rough or Stage 1 bifaces. Stage 2 is typified by the complete absence of cortex from both faces of the biface. The purpose of this stage is to remove as many problem areas as possible while continually setting up platforms to shape and thin the biface. Early Stage 2 reduction has a slightly more even cross-section than Stage 1, and by late Stage 2, smaller flakes are evident around the margins. These smaller flake scars are typically thinner and longer than those found in Stage 1, and may extend to the centerline. It is not usually possible to tell the distal from the proximal ends during Stage 2. Viewed from the side, the edge is generally sinuous rather than straight, but there is generally lateral symmetry by Stage 2.

Stage 3 Bifaces

Stage 3 or thin biface reduction is primarily geared toward thinning and further shaping of the biface, which is achieved by the removal of long thin flakes that extend past the center line of the tool. These flakes are often spaced regularly around the margins. Viewed from the side, the bifacial edge is straight rather than sinuous. At this point the biface is refined and can be made into a variety of forms, including a hafted biface.

On some Stage 3 bifaces it is possible to tell distal from proximal ends, but it is difficult to make such a determination with confidence.

Finished Bifaces

Hafted, finished, or Stage 4 bifaces represent the final stage in biface production. Finished bifaces are refined and regular in appearance, and are generally symmetrical in plan, profile, and cross-section. In addition, finished bifaces have evidence of some type of hafting element (notching, flutes, lateral grinding, etc.). When used and resharpened, small pressure flakes along the blade margins may result in either beveling of the blade edge or serration. Distal and proximal ends are discernable at this stage, often even when the specimen is fragmentary. In the present assemblage, the finished biface category is represented by projectile points assigned to various morphological styles and temporal periods. Temporal assignment of hafted bifaces was made by comparison of morphology to exemplary types illustrated in standard reference texts for the region (e.g., Justice 1987).

Lithic Raw Material Types

The lithic raw materials were identified by comparison to the type collection at the William S. Webb Museum of Anthropology. Dr. Steven Ahler provided the initial identifications, with verification and refinement provided by Eric Schlarb. Local geological quadrangle maps were consulted to determine whether the raw materials types identified were locally available to prehistoric inhabitants of the region. Multiple lithic raw material types were identified in the assemblage. Specifically, these chert types are Boyle, Newman, Cane Run, Brannon, Grier, Tyrone and unidentified cherts.

Boyle chert is local for central and eastern Kentucky, outcropping mainly in the southern Outer Bluegrass and Knobs regions. For northern Fayette County, Boyle chert would be nonlocal, as primary outcrops are more than 30 km distant. It occurs as nodules and discontinuous layers (Meadows 1977:102). The nodules are large and blocky, and can be found eroding out of its parent dolomite in a clayey soil environment. The nodules often exhibit a white, chalky cortex. However, stream-transported cobbles frequently exhibit a smooth, polished brown cortex. The interior color is highly variable, with a mottled mixture of tan, blue, yellow, gray, and different shades of brown. Boyle chert can range from earthy to waxy luster. It is generally opaque, but can be translucent. It is of medium to high quality. This material also can be highly fossiliferous, containing bryozoans, brachiopods, corals, crinoids, and echinoderms, which often appear as bright white or light gray inclusions against the darker mottled background of the chert matrix (Meadows 1977).

The Newman Limestone is known to outcrop along the western boundary of the Eastern Coalfields (Applegate 1996; Meadows 1977), and its primary outcrops would be nonlocal for northern Fayette County. However, like Boyle chert, Newman chert can be found in secondary deposits as water-worn cobbles with polished brown cortex. The Newman formation contains several chert-bearing members, including Haney, Paoli/Beaver Bend, Ste. Genevieve, and St. Louis (Meadows 1977). Each of these limestone members contains a subtype of Newman chert (i.e., Haney, Paoli, and Ste. Genevieve). For the purposes of this analysis, all of these are grouped as generic Newman chert. Farther west and south, the individual chert members that comprise Newman chert may be more readily distinguished.

Fayette County local cherts derive primarily from the Middle Ordovician Lexington Limestone Series, which contains multiple submembers, most of which have a distinct associated chert type. These include Cane Run, Brannon, Grier, and Tyrone cherts, derived from submember limestones. Cane Run chert can be characterized by its grainy, dull appearance and its off-white or tan color. However, if heated, hues of red and pink may appear in the material. Because thermally altering this material improves the quality, it is not unusual to find it discolored by heating. Brannon chert is gray to bluish-gray in color and contains many fine mottles of darker and lighter gray. In general, it is of higher quality and finer grain than Cane Run chert. These two chert types share many characteristics and grade into one another. Grier chert is generally of

moderate quality, similar in appearance to Brannon chert. However, there is a fine-grained, high-quality variety of Grier that is dark gray to bluish-gray and is similar in appearance to high-quality Ste. Genevieve chert, and is often mistaken for that material (Eric Schlarb, personal communication 2008). Tyrone chert is characterized by gray to brown-gray color and thin to medium distinct concentric banding. Small vugs with quartz crystal linings are sometimes visible in Tyrone chert, but are not common. All of the Ordovician cherts common to the Inner Bluegrass are generally free of fossils that can be seen without magnification. Sponge spicules are the most common fossil observed with magnification.

Prehistoric Ceramics

Prehistoric ceramic sherds that were less than 2 cm² were not analyzed in detail, while sherds more than 2 cm² in size were more completely analyzed. The detailed analysis of prehistoric ceramic artifacts included the recording of paste and temper, exterior or interior surface treatments, the assessment of cordage twist type when possible, and measurement of maximum sherd thickness in millimeters. Temper, the aplastic material mixed with the clay to increase wall strength or improve firing characteristics, can be temporally sensitive. Temper types most often include limestone, sandstone, grit (crushed rock other than limestone or sandstone), grog (crushed sherds or fired clay), and mussel shell. Surface treatments observed in the current sample include only cordmarked surfaces. Many other surface treatments and decorations were employed prehistorically, but the present sample contains no intentionally decorated sherds.

Once described, sherds are compared to previously defined stylistic types near the study area (cf. Haag 1940, 1942; Henderson 1992, 1999, 2008; McMichael 1984; Turnbow 1988) and assigned to general or specific temporal periods or subperiods based on this typological comparison. Only one previously described ceramic type compares favorably with ceramics recovered in the 15FA290 assemblage, and that is the Jessamine series (Turnbow 1988). Ahler analyzed the prehistoric ceramics from 15FA290, and the analysis was confirmed by A. Gwynn Henderson of the Kentucky Archaeological Survey.

The Jessamine series includes Jessamine cordmarked and Jessamine plain types. Jessamine series ceramics (Turnbow 1988) are primarily tempered with limestone, though other materials are present as secondary or minor temper constituents. These minor constituents may include ferromanganese concretions if these are present in the local clay bodies used for ceramic manufacture. Other common temper materials include crushed shell, which becomes more common in the later half of the temporal span of its manufacture. Other attributes of Jessamine series ceramics are the presence of loop handles and almost exclusively S-twist cordage. Jessamine sherds are generally thin-walled, and vessel forms include primarily jars and bowls. Jessamine series ceramics are associated with the terminal Woodland period and the early Fort Ancient period, with a date range of about AD 800-1200.

HISTORIC ARTIFACTS

The historic artifact analytical scheme used by UK-PAR includes both functional and temporal dimensions. At the most general level, material is classified according to functional group (following South 1977), which would include the Kitchen, Architecture, Furniture, Personal, Arms, Activities, Clothing, Faunal, Fuel, Transportation, and Unassigned groups for this particular project. Subsumed within groups are artifact classes including, for example within the Kitchen group, Ceramic Cooking/Storage, Ceramic Tableware, Glass Tableware, and Container Glass classes. The next level (subclass) consists of objects that describe specific artifact forms such as flatware, jug, jar, or bowl. Temporally significant attributes, including both decorative elements and technological attributes, are also described (e.g., creamware, edge-decorated pearlware, mocha wares, whiteware, or flow blue decoration). An additional descriptive level is provided that includes artifact-specific information such as glass color, vessel part, or maker's mark description. Each artifact category is further recorded by count of by weight for some artifact categories such as brick and shell. Once entered into a computerized database or spreadsheet program such as Microsoft Excel or Access, the

results of analyses can be filtered, sorted, and tabulated into selected inventory subsets or presented as a comprehensive inventory arranged by context. The specific artifact groups and classes recovered in the historic assemblage from 15FA290 are described in detail below.

Kitchen Group

Artifacts assigned to the Kitchen Group reflect activities conducted in and around domestic kitchens, including preparation, consumption, and storage of foods. As such, a variety of materials and artifact types are represented in the group, including ceramics (bowls/plates for food consumption, bowls and crocks for food storage and preparation), glass (tableware and container glass), and metal (tin cans for food storage, metal utensils for food consumption). The most commonly recovered classes of Kitchen Group artifacts are ceramic tablewares and container glass.

Ceramics

Almost all ceramic artifacts recovered from historic sites in the region can be classified as earthenwares. Earthenwares in general are characterized by a clay body which is not totally vitrified in firing. Most earthenwares are porous and require a glaze to become impermeable to moisture. Many commonly available clays can be utilized to produce earthenwares, but earthenware bodies can be white, red, buff, or gray depending on the iron content of the clay and its source (Beazley 1989). In addition, earthenwares can be classified as refined or coarse, depending mainly on the graininess and porosity of the paste, thickness of the vessel, and the firing temperature. Within the current sample, both refined and coarse earthenwares are well represented. Additionally, porcelain is present in the current sample, which constitutes another class of ceramics. Porcelain differs from earthenware in that it is a highly fired, vitreous ware with a white paste. Porcelain objects are often glazed; but examples of unglazed porcelain are also present in the current sample.

Refined Earthenware

Creamware, pearlware, whiteware, and ironstone are subclasses of refined earthenwares. White-bodied, refined earthenwares constitute the most common category of ceramics recovered from historic sites occupied during the late 18th and 19th centuries. The assemblage from 15FA290 includes examples of all four types.

Creamware was initially produced as a distinct refined earthenware in 1762 by Josiah Wedgwood. Creamware was manufactured from about 1762 to 1820 in a variety of wheel-thrown and molded vessel forms; it was commonly available in a wide array of both tableware and teaware varieties. The production of creamware, a white-bodied refined earthenware with a cream-colored glaze, transformed ceramic manufacture in England from a craft to an industry. Creamware satisfied the late 18th and early 19th century consumers' desires for an off-white European alternative to Chinese export wares.

In 1828 Jacob Lewis partnered with potter Jacob Vodrez in Louisville to manufacture "cream-colored" ceramics similar to the English creamwares (Stradling and Stradling 2001). Commercial production of Kentucky creamwares did not succeed, but the same pottery did produce stonewares and stoneware smoking pipes from about 1840 to 1850. All creamware recovered from Kentucky sites and the greater Ohio valley region is considered to be imported from England.

Creamware was available at a reduced cost in undecorated forms between 1762 and 1820 (Hume 1969:125-126). Higher costs were paid for creamwares embellished with hand-painted polychromes or monochromes (Hume 1969:126-128) or other decorative styles, such as underglaze blue hand painting (manufactured 1765-1810), underglaze transfer printed (1780-1820), overglaze transfer printed (1765-1815) dipt (1782 1820) shell edged (1774-1800), and others (see Azizi et al. 1996:15, Hume 1969:132, Miller and Hunter 1990:202-204).

Josiah Wedgwood also initially developed what archaeologists generally refer to as pearlware.

Wedgwood's Staffordshire competitors quickly followed suit, producing pearlwares in large quantities between 1775 and about 1830 (Miller et al. 2000). Pearlware is characterized by a blue tint to the glaze which was obtained through the addition of cobalt oxide into the lead glaze. The blue-tinted glaze is most readily apparent around the footings of vessels and in other locations on the vessels where glaze puddles. As there is temporal overlap between pearlware and later whiteware, it is often difficult to firmly discriminate small ceramic fragments with a slight blue tinge of color as either pearlware or whiteware. Decorative embellishment and form help in conjunction with the tint of the glaze, however many whitewares also had a slight amount of cobalt in the glaze mixture (Stelle 2001) added by the potters with the intent of creating a whiter ceramic.

Pearlware was available in a wide variety of both table and teaware vessel forms. While creamware satisfied the need for clean, crisp white-bodied earthenware, pearlware satisfied the demand in England and America for an inexpensive alternative to the highly valued Chinese export wares. Pearlware was available at a reduced cost as minimally decorated, molded shell-edged wares, or at a higher cost as vessels embellished with underglaze blue hand painting (manufactured 1775-1830), underglaze blue floral painting (1775-1830), underglaze hand-painted polychromes (1795-1830), luster decorated (1790-1830), underglaze hand painting with sponging (1800-1815), underglaze transfer printing (1783-1830), or other decorations (Lofstrom 1982, Miller 1987:87; Miller and Hunter 2001).

At least thirteen categories of transfer prints found on 19th century whiteware and pearlware are temporally diagnostic (Samford 1996, 2001) and potentially add an additional level of refinement to the evaluation of the temporal association of historic assemblages. English-produced molded shell-edged pearlwares dominated the early 19th-century tableware market, and specific shell-edged molding patterns can be temporally diagnostic (Hunter and Miller 1994:434-435). The earliest shell-edge was asymmetrical with an undulating scalloped rim (1775-1810); concurrent with this style was a rococo scalloped rim (1780-1800). This shell-edged form was followed by an evenly scalloped shell-edge rim style (1810-1835). The last molded rim style available in pearlware was the variety characterized by embossed-edge molding, accented primarily with blue or green at the edge of the flatwares, which date to the period 1820-1835 (Hunter and Miller 1994:436-437).

Whiteware was initially manufactured in England in 1805, although it was not commonly a part of American ceramic assemblages until after 1820 (des Fontaines 1990:4). Whiteware, as its name implies, is a white-bodied, refined earthenware that is still produced and used today. The earliest whitewares often contained a small amount of cobalt oxide in the glaze mixture (Mullins 1988), which imparted a slight blue cast. Whiteware is the ubiquitous type of earthenware recovered from historic sites in Kentucky that date from the second quarter of the 19th century to the present. Unlike the earlier creamware and pearlware, whiteware was not invented in the sense that a particular potter devised the recipe for a unique glaze. Whiteware was largely developed as a result of consumer demand for a whiter ceramic (Mullins 1988). Flow blue decorated whitewares were popular during the mid- and late 19th century, and are thought to have been produced initially in 1844 (Mullins 1988) with a terminal date of 1860 (Price 1979:31). Flow blue was common as a high-status ware during this time span. This decorative style is characterized by a transfer print applied to the surface of the vessel and the addition of volatile chemicals (Stelle 2001), which results in "bleeding" of the blue or black color of the base transfer print ink.

Whitewares were available in the full range of both tableware and teaware vessel forms. During the early 19th century whitewares and pearlwares were often described similarly by their decorative embellishment, rather than as distinctly different ceramic wares. "Printed teas" or "painted teas" could have referred to either decorated pearlware or whiteware teawares. The majority of whitewares were produced between about 1820 and 1920, but manufacturing continues to the present. Whiteware was available at a reduced cost in undecorated or simple molded panel forms (1830-1870; Azizi et al. 1996:16), or at a higher cost if embellished with underglaze or overglaze hand painting or underglaze stenciling (1815-present; Azizi et al. 1996:16). Other temporally informative decorative styles for whiteware include sprig-decorated "Chelsea" style motifs (1830-1920; Azizi et al. 1996:16), blue transfer printing (1815-1915; Azizi et al.

1996:16), transfer printing in colors other than blue (1828-present; Shaw 1829:214), “bicolor” transfer printing (1835-1860; Miller 1997), cut-sponge stamping (1845-1930; Miller 1991:6), spattered (1815-1850; Azizi et al. 1996:16), hand-painted polychromes (1820-1850s; Miller 1997), flow blue (1844-1860; Price 1979:31), and decal applied (1880-present; Shaw 1900:XIX).

Ironstone, properly termed “stone china” (Miller 1997), is a white-bodied, refined earthenware which typically exhibits a more highly vitrified body than creamware, pearlware, or whiteware. Although decorated “stone chinas” were available as early as 1805 (Miller 1991:8-9), ironstone is generally regarded to have been initially produced by Charles Mason as Mason’s ironstone china in 1813 (Hume 1969:131). Ironstone and Mason’s ironstone china became increasingly popular in America and Kentucky by the 1850s, and continued to be a major component of household ceramic assemblages until about 1900. The commonly found undecorated and molded ironstones, also known as “white granite,” were developed from the stone chinas and largely date to the period from 1840 to 1900 (Miller 1991:10). Compared with whiteware, mid-19th century ironstone could be relatively thick-bodied and was usually white to very light gray in appearance, often exhibiting a blue tint as the result of the addition of cobalt oxide into the glaze mixture. Flow blue ironstones were popular during the mid- and late 19th century, and were considered markers of higher status in the mid-19th century. By about the 1870s, thick-bodied ironstones were considered reflective of a low class status, and the desire for thinner-bodied wares resulted in the manufacture of thinner ironstones. American producers of ironstone were in full production during the 1870s and 1880s (Mullins 1988), although the popularity of ironstone was waning by the 1880s; ironstones were marketed in smaller quantity during the early 1900s (Mullins 1988). The majority of ironstone produced during the 19th century, although molded, is otherwise typically undecorated (Mullins 1988).

Ironstone was available at a reduced cost in undecorated, or simply molded forms mainly between about 1813 and 1900 (Hume 1969:131), or at a higher cost if embellished with plain panels (1840-1870), sprigged “Chelsea” style motifs (1830-1920), sponge decorated (1840-1940), transfer printed (1840-1915), flown transfer printing (1840-1910), decal-overglaze (1885-present), decal-underglaze (1897-present), or metallic bands (1850-present [Azizi et al. 1996:17]).

Coarse Earthenware

Yellow ware is a coarse earthenware characterized by its buff to yellowish fabric and mustard yellow glaze. The fabric of yellow ware is quite dense and sometimes becomes vitrified during firing. While some examples of yellow ware in the current sample are more similar to refined earthenware than to other coarse earthenwares, the majority are considered coarse and are placed in this category. Yellow wares imported from England were noted for their yellow glaze, while American yellow wares were characterized by a clear alkaline glaze (Leibowitz 1985). Although quite commonly recovered from historic sites dating to the late 19th century, yellow wares were imported to America from England during the late 1820s. They were produced in America in New Jersey, Ohio, New York, Vermont, Pennsylvania and Maryland (Leibowitz 1985) as early as 1830 and continued in production until approximately 1940 (Ramsay 1939:61; Ketchum 1971:11-12). The ware’s peak of popularity was largely from 1870 to 1900 (Joy 1998). One of the major producers of yellow ware, whiteware, and stonewares was the Peoria Pottery located in Peoria, Illinois, which was producing ceramics for domestic use by 1859 (Barber 1901). Typically yellow wares were undecorated, being made impervious to liquids with the application of a clear lead glaze. Many yellow wares were decorated with embellishments including mocha style dendritic patterns and annular banding from about 1830 to 1930 (Ketchum 1971:11-12), and also by colored slip banding, molded relief, underglaze hand painting, luster, and finger trailing.

Vessel forms associated with yellow ware include predominately food-preparation bowls and food storage vessels, although mugs and other tablewares were also manufactured. Several chronological attributes of yellow ware production assist in attributing a date to these ceramics. Hand-thrown, plain yellow wares with no lips, decoration, or formal foot formation date after about 1830. Annular/banded yellow wares often with dendritic “mocha” style embellishments date after about 1840. Coarse, heavy-bodied Midwestern

yellow wares ranging from a cream or buff color to a canary yellow were popular during the 1850-1870 period. Molded yellow wares with floral devices and scenes were popular between about 1860 and 1900.

Redwares are characterized by a reddish or orange paste and, relative to refined earthenwares, are fired at a lower temperature resulting in a more friable clay body. Redwares were largely wheel-thrown and were commonly glazed with a mixture of lead sulfide, alumina, and silica. These constitute a very common category of ceramics recovered from historic sites occupied during the late 18th and throughout the 19th century in Kentucky. Common vessel forms include primarily utilitarian forms related to dairy activities (milk pans, butter pots, and churns) and food preparation and storage (storage jars, bowls, large dishes and crocks).

Unlike refined earthenware production, manufacture of redwares was typically a local craft with production and distribution often centered on limited geographic areas. Relatively little research has been undertaken on redware manufacture in Kentucky, and associating examples recovered archaeologically to specific manufactories or temporal periods is often problematic. Utilitarian coarse earthenwares were produced in the Lexington area by local potters as early as the 1790s (Kentucky Gazette 1794, O'Malley 1986, Ramsay 1939) and continued to flourish throughout the first half of the 19th century. A general date range of 1750 to 1900 is typically associated with lead-glazed redwares recovered from historic sites in Kentucky although, with the exception of special pieces, production waned after 1850 (O'Malley 1986).

American gray stoneware and American brown stoneware are commonly recovered from late 18th- to early 20th-century sites in Kentucky. Stonewares in general are characterized by a clay body which fuses when fired, becoming semi-vitrified and impermeable to water and liquids. A wide variety of clays can be utilized in the production of stonewares, and consequently stonewares can be white, red, buff, or gray depending on the iron content of the clay (Beazley 1989). American gray stonewares are distinguished from American brown stonewares by the color of the clay body. The vast majority of stonewares recovered from historic sites in Kentucky are domestically produced American gray and American brown vessels. Although domestic production of stoneware began before 1790, these early varieties are uncommon (Beazley 1989). During the second quarter of the 19th century American production of stonewares became more common, predominately consisting of ovoid jars and jugs in the 1840-1850 period (Beazley 1989). Straight-sided storage jars and crocks became more common in the mid-19th century, and decoration on domestic stonewares often was nothing more than an expedient salt glaze. A salt glaze was produced when salt was introduced into the kiln at a particular temperature, volatilizing on the surface of the vessel and creating a thin glaze impervious to liquids. Salt glaze is characterized by its orange-peel texture. Other common forms of decoration on domestic stonewares included incising (1830-1845; Raycraft 1990:7), cobalt blue hand painting (1830-1925; Rock 1990:19), impressed stamps (1830-1890; Ketchum 1991:4), and stenciling (1870-1925; Raycraft 1990:7).

Albany-type slip-decorated American stonewares are commonly recovered from historic sites dating to the 19th century. Albany-type slip is very smooth and can appear as dull to "shiny chocolate brown" (Mullins 1988:57). The production of American stoneware decorated with Albany-type slip was largely between about 1800 and 1940 (Azizi et al. 1996:19). The best clays for producing the characteristic brown Albany-type slip were located in the Albany, New York, area. Albany slips on vessel interiors was very common after about 1850 (Mullins 1988:57).

Bristol-slip or Bristol-glazed stoneware was common in England during the Victorian period (after 1835; Azizi et al. 1996:19). It began to be produced in America, most notably in Ohio, after about 1884 (Greer 1981:210) and continued into the 20th century (Joy 1998). Bristol slip is characterized by an off-white, opaque glaze that is generally smooth and even. The glaze can appear pink or tan speckled when applied to a clay body with high iron content (Joy 1998). The smooth Bristol slip was easy to clean for the consumer and easy to produce, resulting in the large-quantity production during the late 19th century. Pre-1920 Bristol slip stonewares often had the slip applied in combination with other slip glazes (particularly Albany slips) on the interior (Mullins 1988:58). After 1950 Bristol slip was more commonly used alone (Azizi et al. 1996:19).

Additional surface embellishments on Bristol-slip decorated vessels included adding cobalt to the glaze, decal application, and sponged, stamped or sprayed metallic oxides which resulted in green, brown or blue tinting to the decoration.

Porcelain

Porcelains are divided into three main categories—hard-paste porcelain, soft-paste porcelain, and bone china. Porcelains in general are characterized by a clay body which, when fired, is totally vitrified, impervious to liquids, and translucent. Although the clay body is vitrified, the majority of porcelains also have a glaze.

Hard-paste porcelain is made from kaolin (china clay) and petuntse (china stone) which are clays formed from decomposing granite. These clays, when fired, fuse and become highly vitrified, have glass-like qualities and are impervious to water. After firing the glaze on hard-paste porcelain fuses tightly to the clay body creating a durable, smooth and easily cleaned surface. Chinese export porcelain is an example of true hard-paste porcelain. Chinese porcelains produced for export to the West were most commonly decorated with underglaze blue hand painting, overglaze hand-painted enamels, or a combination of both. Chronological dating of Chinese export porcelain is derived from the underglaze and overglaze motifs, many of which have specific named styles and date ranges (see Madsen 1995). Vessel forms produced in hard-paste porcelain consisted primarily of table and teawares for food and beverage consumption.

Soft-paste porcelain has a softer body that can be scratched with the fingernail, and the glaze “sits on the surface” (Beazley 1989). Additionally, in contrast with hard-paste porcelain, soft-paste porcelain feels warmer when held, and the glaze on archaeological examples is often reduced in luster to a matte finish (Pittman 1984:22). English soft-paste porcelain was manufactured between 1745 and 1790 (Fisher 1966:229). Soft-paste porcelain manufacture in America began as early as 1770-1772 (Beazley 1989), but American production on a large scale was not achieved until about 1826. By the third quarter of the 19th century, American porcelain production was firmly embedded as a successful pottery industry. Vessel forms produced in soft-paste porcelain consisted primarily of table and teawares for food and beverage consumption. Temporally sensitive decorative embellishments on soft-paste porcelain include overglaze decal applied (1830 to the present), underglaze decal applied (1897 to the present), luster decorated (1790-1840), gilded band (1850-present), and bat printed (1756-1860; see Azizi et al. 1996).

Bone china is an English derived porcelain created in about 1794 (Beazley 1989, Miller 1991:11, Pittman 1984), with qualities that make it more similar to hard-paste porcelain than soft-paste porcelain. This ceramic was also produced on the Continent and in America. Bone china is manufactured with a high content of bone ash added to the traditional hard-paste porcelain clays. The addition of bone ash imparted a bright white quality to the porcelain, while still keeping the porcelain translucent. A wider variety of colors were possible for decoration on bone china due to its lower firing temperature (Joy 1998). Decoration on bone china included underglaze blue hand painting and printing, polychrome overglaze hand painting and printing, and other modes (see Azizi 1996 for date ranges). Bone china was produced primarily in table- and teawares for food and beverage consumption. Archaeologically recovered bone china is often stained as a result of the breakdown of the glaze and consequent absorption of minerals from surrounding soil.

Container Glass

Glass containers (bottles, jars, etc.) and table glass are included in this category. These materials were sorted by color and by manufacturing type when possible. Prior to 1903, most container glass was produced in molds, such as the cup or post-bottom mold, or was hand-blown. Use of the post-bottom mold dates from 1870 to 1910 (Adams et al. 1981:924). Until the bottle manufacturing process was fully automated, the addition of lips or rims (finishes) was effected by applied tools, with the body reheated to ensure proper bonding of the glass. Finishes were hand-applied prior to about 1840. Rough applied finishes date from about 1840 to 1870, while improved tool finishes date from about 1870 to 1903 (Baughner-Perlin 1982:268-269). Machine-manufactured bottles date after 1903 when the Owens automated glass process was introduced (Deiss 1981). Machine-made bottles can be recognized by lips that have seams or by bases

displaying suction scars; earlier lip finish types lack seams. Standardized screw threads appeared after the introduction of machine-manufactured bottles and typically date from about 1919 to the present (Deiss 1981:95).

Many of the colors found in container glass are the result of the addition of chemicals used over specific spans of time, so some of these colors are temporally diagnostic. Amethyst glass is produced by solarization of glass that has had manganese added as a decolorizing agent; it was manufactured in the United States between about 1880 and 1914 (Baughner-Perlin 1982). Germany was the primary source of manganese, and the market supply was interrupted by the start of World War I. Between 1914 and 1930, selenium replaced manganese as a decolorizing agent (Kendrick 1966); when exposed to sunlight, glass produced with selenium turns an amber color. After 1930, arsenic was used as a decolorizing agent (Munsey 1970), producing clear glass that was not affected by exposure to light. However, clear glass had been manufactured as early as 1875 on a limited basis (Fike 1987:13). Milk glass has been produced since 1890, brown container glass has been manufactured since 1860, but aqua, light blue, and light green are not considered to be temporally diagnostic colors (Fike 1987:13). Clear glass produced with a soda-lime formula superseded leaded glass by 1860 (Stelle 2001). Lead glass will fluoresce blue-purple under ultraviolet light while soda-lime glass will fluoresce green-yellow.

Sherds of container glass may be marked to identify a commercial product, a container manufacturer, or both. Some of these methods, such as embossing or silk-screening, are temporally diagnostic. Embossing on glass has a long period of use, beginning in the 1700s, with letters carved into a mold (Baughner-Perlin 1982). By the late 1850s, plate molds were developed for embossing, which increased the availability of embossed bottles (Baughner-Perlin 1982; Fike 1987:5; Pullin 1986:355). The advent of paper labeling led to a general decline in embossing by around 1920 (Fike 1987:5; Pullin 1986:355). Some decorative motifs used for embossing are diagnostic. Shields, floating ribbons, or rows of stars embossed on fruit jars date between 1890 and 1920 (Toulouse 1969:392). Embossing and silk screening, which began in 1935 (Paul and Parmalee 1973:57), is still used for decorating bottles.

Kitchen Metal

This subclass includes items such as cutlery (forks, knives, and spoons), serving utensils, and metal cooking vessels and cans. Examples from this assemblage include fork, knife, and spoon fragments as well as can fragments.

Architecture Group

Artifacts in this functional group are materials commonly used to construct buildings, as well as relatively permanent materials placed in structures to enhance their use. The most commonly recovered items in the architecture group are nails, window glass, and brick.

Nails

Hand-wrought nails have been present in North America since initial European settlement (Nelson 1968). Hand-wrought nails are manufactured entirely by hand and do not include any elements of machine-manufacture. They are identified by the asymmetrical, often mushroom-shaped head and hammer-marked surfaces. Hand-wrought nails will often, but not always, exhibit a teardrop-shaped tip and a tapering squared shank. Special-purpose hand-wrought nails and spikes continued to be made into the late 19th century, but general-purpose hand-wrought nails began to be replaced by machine-cut nails with hand-finished heads between 1790 and 1810 (Nelson 1968:6). Machine-cut nails with machine-made heads first appeared in 1805 (Nelson 1968:6). From 1790 until about 1830, machine-cut nails often show a slight constriction just below the head, forming a noticeable shoulder. These and combination hand-made/machine-cut nails are considered early machine-cut nails in this analysis. After the 1830s machine-cut nails lack this shoulder and taper evenly from the base of the head to the tip; these are considered late machine-cut nails for the present analyses. Machine-cut nails are still in use, but they were widely replaced by wire nails in the 1880s (Mansberger

1981:91, Nelson 1968). Large wire nails were initially produced as early as 1860, and they became more popular after 1880 (Nelson 1968:7).

Window Glass

At the turn of the 19th century, flat (window) glass was produced by one of three methods: crown, cylinder, or casting (Lorrain 1986:37). Crown technique involved the spinning of a blob of glass attached to the end of a metal rod, or pontil. The flat glass was allowed to cool and was then cut into the desired shape for windowpanes. Crown glass manufacture generally dates before about 1820 (Stelle 2001). From about 1820 to 1920, the cylinder method of flat glass production was used. A blob of hot glass was formed into a cylinder by swinging the glass, and then it was cut down its long axis and reheated, forming a flat piece of glass (Stelle 2001). Straight distortion lines are characteristic of the cylinder method. Pane glass refers to flat glass typically less than 3 mm thick produced by the crown or cylinder methods. Production of flat glass by casting creates plate glass, which is made by rolling the hot glass on a flat surface of sand, after which the flat glass is ground and polished. Typically plate glass measures more than 3 mm in thickness. The 1903 invention of the cylinder glass machine and the implementation of the continuous sheet process in 1917 (Deiss 1981:85) made flat window glass more affordable and of standardized thickness.

Color and thickness of window glass can be temporally informative, but a statistically robust sample is needed to produce an accurate date (Ball 1982, Moir 1987). However, the general trend is for glass thickness to increase through time. Moir (1987) developed a regression formula to estimate construction and repair dates from mean glass thickness data. That formula is used in the present analyses, with the understanding that it is best applied to construction activities that date between about 1810 and 1920, and with the caveat that a relatively large sample size is needed for high confidence in the statistical analysis. Individual specimens or sample sizes less than 30 are not generally acceptable for use with the Moir regression formula.

Other Architecture Classes

Other artifact classes represented in the current assemblage that are assigned to the architecture group include brick (none of which had holes and therefore likely was hand-pressed), mortar, door hardware, and other unassigned hardware. None of these material classes are particularly temporally diagnostic, and they all could be part of domestic structures or farm outbuildings constructed and occupied in the 19th century.

Furniture Group

Artifacts in the Furniture functional group include items associated with household furnishings and hardware. Examples recovered during investigations at 15FA290 include mirror glass, lamp parts, escutcheons, drawer pull handles, and casters for furniture.

Personal Group

Artifacts in this category consist of materials used by individuals in everyday activities. These materials include pipes and pipe stems, marbles, coins, jewelry, hair combs, personal hygiene items, gaming or toy related artifacts, and pocket knives. Medicinal items are included here within the Personal group, though they are sometimes assigned to a separate group.

Arms Group

The Arms group includes all hardware and other materials associated with making and using firearms. This includes the arms themselves and their constituent parts (e.g., trigger guards, barrels, lock plates, frizzens, ramrods, etc.) as well as any type of ammunition or ammunition casings. For the current sample, the

Arms group includes gun flints as well as rim- and center-fire cartridges.

Activities Group

The Activities group includes artifacts that were related to the activities or work around a household or farm. Fence wire, staples, bolts, washers, hand tools, buckets or bucket fragments, and lawn mower blades may all be included in this group. Examples of the above items and others were recovered from 15FA290.

Clothing Group

The Clothing group includes artifacts such as buttons, clasps, hook-and-eyes, grommets, shoe fragments, and sewing equipment. Buttons are among the most temporally diagnostic artifacts in this group. Several categories of temporally diagnostic buttons have been documented and offer important temporal distinctions. Examples of chronologically specific buttons recovered from historic sites in Kentucky and the greater Ohio Valley include prosser-molded 4-hole buttons, hard rubber buttons, and some mother-of-pearl buttons. Prosser-molded 4-hole buttons with a depressed center were in use after 1840 and common until about 1920 (Luscomb 1992:156, Sprague 2002:111), the hard rubber button was patented in 1851 (Luscomb 1967:91), and the “fisheye” type of mother-of-pearl button was initially produced in 1902 (Claassen 1994:55). In this assemblage, buttons, hook-and-eyes, and shoe fragments were recovered during Phase II/III excavations.

Fuel Group

Fuel group artifacts include raw materials used for heating or cooking, as well as the by-products or residues from fuel consumption. In the current assemblage, fuel group artifact classes include mainly coal fragments, charcoal fragments, ash, and coal cinders (aka clinkers). In most instances in the field, these materials were noted, but were not systematically collected. When these materials made their way into the laboratory for inventory, they were weighed but not further analyzed, as these artifact classes generally provide very little temporal or functional information.

Transportation Group

Transportation group artifacts include all materials related to domestic and farm-related transportation activities. This suite of materials includes wagon and carriage parts, automobile and tractor parts, and horse-related artifacts such as tack, buckles, horseshoes, and horseshoe nails. For the present sample, artifacts included in this group are horseshoes, stirrups, spurs, buckles, and a carriage bolt.

Faunal Group

This functional group includes all faunal remains. For the current project, only two artifact classes are represented. Animal bone comprises by far the most numerous artifact class, with mussel shell recovered in minimal quantities as the second faunal group artifact class.

Many of the faunal remains recovered from 15FA290 were obtained from stratigraphically mixed contexts, such as the rubble fill of Feature 1 or from arbitrary test unit excavation levels that cross-cut natural/cultural strata. The purpose of the faunal analyses conducted at 15FA290 was to determine if the taxa reflected the social/economic standing of site occupants. For this reason, the detailed faunal analyses were confined to assemblages derived from dated features or controlled and dated stratigraphic contexts. For

faunal remains from mixed or general contexts, the faunal remains were identified only to taxonomic class (mammal, bird, fish, reptile), with mammal remains further subdivided into large mammal, small mammal, and indeterminate size categories. This level of analysis was appropriate for these mixed contexts, as more detailed analyses of these remains could not contribute to the research topics. For most of the artifact tables, these general taxonomic classes and size categories are used to describe the faunal remains.

Analytical methods used for the detailed analyses of faunal remains from 15FA290 are relatively standard for this class of archaeological materials. Each element was identified to its finest possible taxonomic level based on direct comparison to study specimens whenever feasible or to diagnostic information available within the relevant zooarchaeological literature (e.g. Olsen 1964, Reitz and Wing 1999, Steadman 1980) when necessary. Quantification is based on the number of identified specimens (NISP) of recognizable species or animal size class (e.g. pig, large mammal), element, side, and represented portion, plus age and sex of taxon, if identifiable, for each excavation context (feature or level). Calculation of minimum number of individuals (MNI) was obtained for each species identified, based on the largest number of individual diagnostic bone elements recovered for a particular species. The extreme fragmentation of some specimens meant that they could be identified only to broad taxonomic categories (e.g. unidentified mammal, bird, or vertebrate). This approach was also taken when attributes of fragmentary items did not permit differentiation among similarly-sized taxa, such as postcranial elements of sheep, goat, or deer. In these cases, the classification sheep/goat and sheep/goat/deer were used. When applicable, some specimens were recorded as a close fit (cf.) to a particular species. No additional MNI was counted for tentatively identified specimens except for a few such as sheep/goat in an effort to maximize the measurement of a specific taxon/group.

Clear signs of natural or cultural modification were noted for each specimen when present, particularly butchering marks and animal gnawing. Butchering marks include knife and saw cuts, which were differentiated when possible. Specimens with saw cuts are represented by either one end saw cut or both ends saw cut in a parallel orientation separated by various lengths of the bone. When apparent, hand-sawn bone was noted.

Modification was also recorded for bones with gnaw marks from rodents (most likely Muridae [mice and rats]) or from carnivores (most likely dogs; see Lyman 1994). Ingested bone or bone derived from scat, also likely produced by dogs, was identified by pitting, polished edges, and eroded surface characteristics typical of corrosion from digestion (Binford 1981:55, Schmitt and Lupo 1995:499). Burned bone was recorded as black or calcined (Shipman et al 1984), while characteristics of weathering, mainly cracked and exfoliated surfaces, were recorded when present as slight, moderate, or heavy degree based on the visual condition of the bone. Overall, preservation of the faunal remains recovered from 15FA290 was moderate to excellent. The low frequency of weathered and burnt bone is due largely to an absence of bone burning in food preparation patterns, and the limited length of time that specimens were exposed on the ground surface.

These detailed analyses were conducted on only a limited subset of faunal remains recovered from dated contexts within 15FA290—those that could be assigned to one of the periods of site occupancy within the general span of the 19th century. Specific features and excavation levels could be assigned to particular temporal spans based on the associated temporally diagnostic artifacts (see Chapters 7 and 8), and the faunal remains from these narrowly dated contexts were used as a semi-independent data set to help evaluate changes in the economic standing of site occupants through time. One of the assumptions of this analysis is that in general, large mammal, bird, and fish remains represent subsistence-related fauna, while small mammal (mouse, vole, etc.) and reptile taxa (except for turtle) represent the remains of commensal animals that occupied the site at the same time as humans but were not food sources for the human occupants. The general description of faunal remains by taxonomic class and size category in the artifact tables (Chapters 6 and 7) provides a quick picture of the relative amount of subsistence remains in any given context compared to the amount of faunal material that accumulated through commensal occupancy and bioturbation (noncultural processes).

Unassigned Group

Materials are placed in the Unassigned group when their function and artifact category cannot be determined. This group most commonly includes small fragments of corroded metal or unique objects.

CURATION

All artifacts were prepared for curation according to the standards of the University of Kentucky William S. Webb Museum of Anthropology (see 36 CFR Part 79 *Curation of Federally-Owned and Administered Archaeological Collections*). All artifacts were washed and placed in inert, labeled plastic bags. These bags were then placed in acid-free boxes for storage. A copy of this report and all field notes, artifacts, and photographs pertaining to this study is curated at the Webb Museum, where they are available for inspection by qualified researchers upon request.

CHAPTER 6

DESCRIPTION AND ANALYSIS OF MATERIALS RECOVERED

This chapter provides detailed descriptions and analyses of the prehistoric and historic cultural materials recovered during the Phase II NRHP evaluation and follow-up Phase III excavations at 15FA290. This site was impacted by construction of new right-of-way and adjacent construction easement along Newtown Pike (KY Highway 922) in northern Fayette County, Kentucky. The purpose of the materials recovered chapter is to present an overview of the temporal and functional classification of the artifacts recovered from the project, using the classification schemes discussed in the previous chapter, and to present substantive interpretations of these materials as they relate to the occupation of the investigated sites. Materials recovered during Phase I investigations are referenced, but numerical and statistical analyses of materials use only on the artifact sample recovered during Phase II/III investigations.

PREHISTORIC ARTIFACTS

Prehistoric artifacts recovered from 15FA290 include both ceramic and lithic artifacts. The initial Phase I survey investigation of 15FA290 produced only historic artifacts (Byron et al. 2007), but a low-density scatter of prehistoric artifacts was documented in the shovel tests and test units excavated as part of the Phase II investigations. However, the prehistoric component at 15FA290 is minor in comparison to the historic component. Prehistoric artifacts from 15FA290 are described below, but they are not discussed again or incorporated into analyses presented in subsequent chapters. Those chapters all focus on the primary 19th century historic component at 15FA290. Prehistoric artifacts from selected contexts are only mentioned later if their presence aids in interpretation of historic activities.

In all, combined Phase II/III investigations at 15FA294 resulted in recovery of 55 prehistoric lithic artifacts and two prehistoric ceramic artifacts. The lithic artifact total is divided into 47 debitage fragments representing various flake types and 8 modified items, mainly bifaces. The prehistoric artifact assemblage was obtained through several different methods that were employed during different aspects of the site investigation. A small number of artifacts was obtained through shovel testing, while the largest part of the sample was obtained from excavation and screening of the initial ten test units. Other materials were added to the assemblage from the additional test units (TU11-TU17) excavated after the house foundation was exposed. Finally, several artifacts were collected opportunistically during mechanical removal of plow zone from various excavation blocks and trenches, and during mechanical removal of rubble fill from the interior of the Feature 1 house foundation. These opportunistic collections are skewed strongly towards tools and projectile points, while the systematically screened shovel tests and test units have much higher proportions of debitage. The different collection strategies have a bearing on overall interpretation of the prehistoric components represented at 15FA290, as does the recovery of prehistoric artifacts from constructed historic contexts. These issues will be addressed in subsequent sections, while the overall character of the assemblage is addressed first.

LITHIC DEBITAGE

By far the largest single prehistoric artifact class recovered from 15FA290 is lithic debitage. A total of 47 flakes was recovered from 15FA290. However, given the volume of sediment excavated (about 10.2 cubic meters of hand-excavated and screened sediments), the density of prehistoric artifacts is very low, averaging only about 4.3 items per cubic meter of screened sediment. Given this low artifact density, it is not surprising that the 28 shovel tests excavated within and near the general site area during Phase I survey did not produce prehistoric artifacts. The low artifact density from the excavated contexts indicates short-term or even ephemeral occupation during the prehistoric era.

Debitage was analyzed with respect to both flake types that are part of a biface reduction trajectory (see Chapter 5 for definitions), and to raw material type. Nodebitage was observed that could be related to other lithic reduction industries, such as bipolar, blade, or specialized flake tool production techniques. The fact that only bifacial tools in various stages of reduction were recovered supports the use of a biface reduction trajectory for analysis of thedebitage. Apparently, only bifacial tools were being manufactured, used, and discarded at 15FA290.

Table 6.1 presents detailed provenience-based and composite data on the flake types and raw material types recovered at 15FA290. Of the 47 fragments ofdebitage recovered from 15FA290, broken flakes (n=16) are the most commondebitage category. Though broken flakes are not attributable to any specific reduction stage, they are more likely to be produced during intermediate and later stages. Of the flake types that are assignable to specific reduction stages, secondary flakes (n=11) and biface thinning flakes (n=8) are the most common flake types, though all of the flakes types that constitute a biface reduction trajectory are represented in this small sample, except for pressure flakes. The numerical emphasis on secondary and biface thinning flakes suggests that both early- and late-stage reduction was practiced at 15FA290, and that intermediate stages of reduction were not common. The presence of secondary and biface thinning flakes as the most common types ofdebitage is consistent with short-term use of the site, biface maintenance and resharpening, and expedient lithic reduction. This suite of flake types coupled with very low artifact density is consistent with use of the site as a temporary residential location or campsite location. It most likely did not function as a repeatedly occupied location on the landscape or as a longer-term or generalized occupation.

Differential use of raw material types is more difficult to characterize for the assemblage from 15FA290. Seven different raw materials types are represented in the assemblage. These include four local raw material types, two material types with primary source outcrops that are nonlocal to the Newtown Pike locality, and an unidentified, burned chert type. Of the material types identified, the locally available Cane Run, Brannon, and Grier cherts are the most prevalent, accounting for 33 of 47debitage items (70.2 percent ofdebitage). Geologically nonlocal Boyle and Newman cherts are also fairly well represented, accounting for 23.4 percent (n=11) of thedebitage assemblage.

However, differentiation of local and nonlocal cherts is misleading in the present assemblage because the ostensibly nonlocal cherts could easily have been obtained from secondary stream gravel deposits within a few kilometers of the Newtown Pike locality. Boyle and Newman cherts, which have primary source locations well to the south and southwest of the site, at the edge of the Outer Bluegrass region, are easily obtained from local secondary deposits. Examination of cortex types provides support for this inference. Of the 12debitage fragments that have cortex on the exterior surfaces, seven (58.3 percent) show water-worn cortex, indicating extraction from secondary stream gravel deposits that are presumably local. All of the Boyle chert with cortex is water-worn. Four items (33.3 percent) have thin subcortex, while only a single item—a secondary flake made from Cane Run chert—exhibits nodular cortex indicative of extraction from a primary geologic source. These observations indicate that there is a strong emphasis on use of locally available raw materials. This is consistent with relatively short-term use of the site, which is also indicated by the low artifact densities and the assemblage composition of thedebitage.

Given the low numbers of artifacts, statistical analyses of differential representation of flake types by various raw materials is not possible. In addition, exploration of differential use of raw materials based on local versus nonlocal origin is not appropriate, given that all of the materials were likely obtained from local primary or secondary sources. However, differential use of raw materials based on the knapping quality can be addressed. The descriptions provided in Chapter 5 indicate that Cane Run has a grainier texture than the other chert types, and can be considered of medium quality overall. Of the chert types represented in these assemblages, Cane Run is most often heat-treated to improve its knapping characteristics. Brannon chert is of slightly higher quality overall than Cane Run chert, with a finer texture to the matrix. The other chert types—Grier, Tyrone, Newman, and Boyle—can be considered high-quality cherts relative to the other types, and they are rarely if ever heat-treated. The burned, unidentified chert is excluded from consideration here.

Table 6.1. Artifacts Recovered from Phase II/III Investigations at 15FA290. Raw material types for the debitage categories are abbreviated, with B=Brannon chert, C=Cane Run chert, Bo=Boyle chert, G=Grier chert, N=Newman chert, T=Tyrone chert, and U=Unidentified chert. See Chapter 4 for flake type and raw material type descriptions. Location abbreviations are Tn/Hn= Shovel test on Transect n/Hole n; TU=Test Unit; L=Level. Historic artifacts made from chert are shown in parentheses and are not counted in the total.

Provenience	Bag No.	Primary Flakes	Secondary Flakes	Interior Flakes	Biface Thinning Flakes	Broken Flakes	Shatter	Modified Lithics	Prehistoric Ceramics	Total
T1/H1	1						1 B			1
T3/H4	11					1 C				1
TU1/L1	14								1	1
TU1/L2	13								1	1
TU2/L1	15		1 C	1 C						2
TU3/L1	16				1C, 1B, 1G					3
TU4/L1	18						1 G			1
TU4/L2	19-20		1 C		1 N					2
TU6/L1	22					1 G, 1 U	1 B, 1 N			4
TU6/L2	23					1 B				1
TU7/L1	25					1 C				1
TU7/L1	26		1 Bo	1 Bo	1 Bo	1 C, 1 G				5
TU9/L1	28		1 C			1 N				2
TU9/L2	30			1 G						1
TU10/L1	29	1 C	1C, 1B, 1Bo		1 C, 1 Bo					6
TU14/L1	70		1 C, 1 B							2
TU14/L2	72		1 B							1
TU14/L4	88			1 T						1
TU15/L2	181			1 C						1
TU16/L1	101					1 C				1
Feature 6	98							1 point, T		1
Feature 15	117					1 G				1
Feature 24	89					1 B, 1 Bo				2
Screened, Outer Yard		1	10	5	7	12	4	1	2	42
TU12/L2	60					1 Bo				1
TU12/L4	83					1 C, 1 B				2
TU13/L2	58							1 point, B		1
Feature 47	167							(1 Bo, gun flint)		(1)
Feature 48	168							(1 French gun flint)		(1)
Screened, F 1 Interior						3		1 (2)		4 (2)
Block 1	113						1 C			1
Block 2	32		1 N					1 core, Bo		3
Block 2	112							1 point, U		1
Block 2	130					1 G		1 biface, B		1
Block 2	130							1 point, G		2
Grab Sample, Outer Yard			1			1	1	4		7
Block 3	69							1 point, B		1
West Room	136				1 G					1
Block 4	141							1 biface, B		1
East Room	158			1 T						1
West Room	191							(1Bo, gun flint)		(1)
Grab Sample, Feature 1			(1)	1	1			2 (1)		4 (1)
GRAND TOTAL		1	11 (1)	6	8	16	5	8 (3)	2	57 (3)

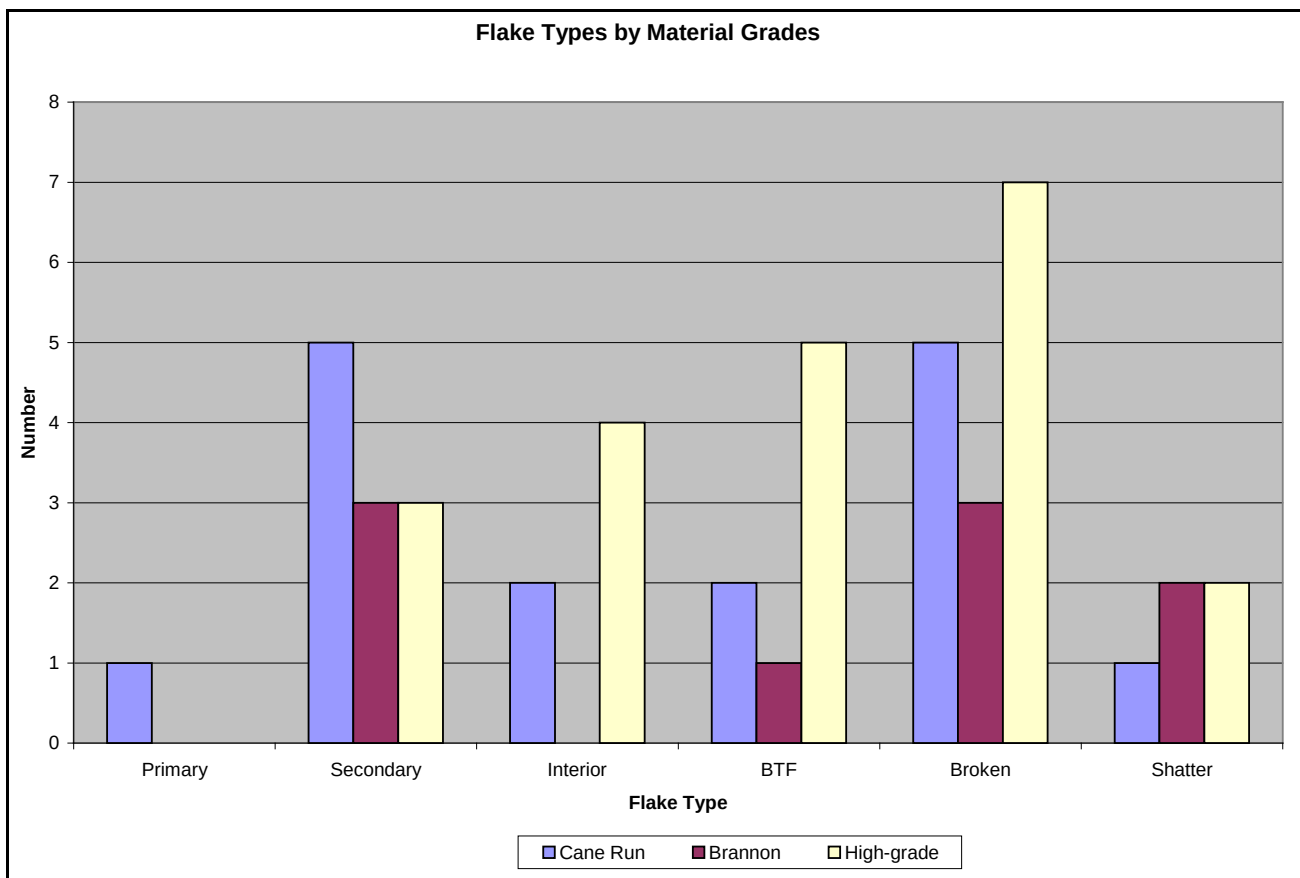


Figure 6.1. Counts of Flake Types among Grades of Raw Material Types. Cane Run is considered relatively low-quality; Brannon chert is medium quality, and the high-grade category includes Tyrone, Grier, Newman, and Boyle cherts.

If the chert raw material types are grouped by quality, and if unidentified cherts are omitted from consideration, there are three raw material groups—Cane Run (low), Brannon (medium), and grouped high-quality cherts (Tyrone, Grier, Boyle, and Newman). The sample sizes are still very low, and statistical comparisons are not appropriate, but some trends can be seen when the flake type is graphed by the quality of material (Figure 6.1). The three raw material groups are represented at different rates in the biface reduction trajectory. The lower-quality Cane Run chert shows an emphasis on early (primary and secondary flakes) reduction and is also well represented by broken flakes. This contrasts to the high-grade chert group, which shows no primary flakes and increasing numbers through the sequential stages of biface reduction. This pattern suggests that high-quality cherts were differentially selected for biface manufacture, while the low-quality Cane Run chert was used more often for expedient tasks that did not involve complete shaping and refinement of bifacial implements. The medium-quality Brannon chert is difficult to interpret due to small sample size, but it seems to follow the Cane Run pattern more than the pattern shown for the high-grade group. This differential use of raw materials based on their knapping qualities was also observed in the prehistoric components at two nearby sites (15FA294 and 15FA295) that were also tested as part of the Newtown Pike realignment (Venter et al 2008). It would be of interest to determine if this is a region-wide pattern of chert use, or if it is typical only of specific localities or temporal periods. However, this larger research topic is beyond the scope of the present project. While not statistically investigated (see Thomas 1976 for use of the Kolmogorov-Smirnov Two-Sample test, which would be appropriate if sample sizes were sufficiently large), these observations suggest an emphasis on use of locally available materials, which are differentially used on the basis of their quality and knapping attributes.

LITHIC MODIFIED ITEMS

Eight modified prehistoric lithic artifacts were recovered during the Phase II/III investigations conducted at 15FA290. The modified items provide additional information on the age of the prehistoric occupation and the types of activities conducted at the site.

None of the modified items were recovered from the shovel tests or the initial series of test units excavated in the outer yard of Feature 1 (see Table 6.1 for proveniences), but one modified item was recovered from a feature in the outer yard. The low incidence of recovery of modified items in the hand-excavated test units is consistent with ephemeral use of the site in the prehistoric period. Most (n=6) of the modified items were recovered through opportunistic collection of materials during mechanical block excavation and exposure of features at the site. One modified item was recovered during hand excavation of Test Unit 13, placed in the interior of Feature 1.

The recovery of several additional modified lithic items from unsystematic collection of mechanically stripped areas in the outer yard is surprising, given the low density of modified items from test units placed in this same part of the site. The discrepancy may be due simply to sampling biases. However, historic activities of the site's occupants may also account for the high incidence of modified items at 15FA290. The ratio of modified prehistoric items to debitage is almost 1:6, which is a very high proportion under any circumstances. It is likely that one or more of the site's occupants collected projectile points and other bifaces while engaged in farming activities. These were transported to the house/yard area and added to the materials deposited by historic occupants within and around the residence. If this scenario is true, the contexts of their recovery then have no association with the original location of manufacture or use of these tools, and instead reflect only their location of ultimate discard. Recovery of a projectile point from a test unit placed within the residence foundation (Feature 1), which is a completely artificial historic context, lends strong support to this scenario. Differential collection of points and bifaces and subsequent discard near the 15FA290 residence would account for the high proportion of tools in the assemblage as well as the presence of high proportions of bifaces. There is definitely an *in situ* prehistoric component at 15FA290, but this component has been enhanced by redeposition of artifacts collected from other locations. From the contexts of their recovery, only one of the modified items (a core from Block 2) may actually be associated with the *in situ* prehistoric component at 15FA290; the remaining tools, including all temporally diagnostic artifacts, are additions.

All prehistoric modified items are described in Table 6.2. The materials include one generally reduced core, a thick biface, a thin biface, and five finished projectile points. The raw materials represented by the modified items are the same suite of material types found in the debitage assemblage. None of the materials appears to be nonlocal or exotic in origin. However, there is a strong emphasis on locally available Brannon chert for manufacture of bifaces, with four of seven bifaces made from this medium-grade material. Interestingly, no bifacial tools were made from the lower-quality Cane Run material, which partially supports the interpretation of differential use of raw materials suggested by the debitage assemblage. The core, made from high-quality Boyle chert, indicates on-site lithic reduction activities, an activity that is also consistent with the interpretation of the debitage. .

The projectile points recovered from 15FA290 are shown in Figure 6.2. Among these is a complete Type 4 Fine Triangular Fort Ancient point (Figure 6.2a). This specimen is made from high-quality Tyrone chert, which is locally available. It has slightly excurvate and tapering lateral margins and a straight basal margin, which are characteristics of Type 4 Fort Ancient points (Railey 1992). Type 4 Fort Ancient points were manufactured in the late Fort Ancient period, after about AD 1400 (Railey 1992). Unfortunately, this point was recovered from a historic posthole (Feature 6). Even so, it may have been redeposited from nearby sediments rather than remotely collected locations, and thus may be associated with the *in situ* prehistoric occupation of 15FA290. The other points found at 15FA290 are Archaic in age. One specimen made from high-quality Grier chert (Figure 6.2b) has a straight to slightly expanding stem. It fits comfortably into the Saratoga Cluster (Justice 1987), and is more specifically comparable to Saratoga Expanding Stemmed points

Table 6.2. Lithic Modified Items Recovered from Phase II/III Investigations at 15FA290. Length (L), Width (W), and Thickness (Th) measurements are provided from complete points in millimeters.

Provenience	Description	Raw Material	Comments
Feature 6	Type 4 Fort Ancient Triangular point	Tyrone chert	Redeposited into historic posthole. L=29.5, W=14.7, Th=3.4
TU13/L2	Side-notched point	Brannon chert	Excurvate base, complete. L=37.9, W=23.6, Th=7.5
Block 2	General core	Boyle chert	Probably related to <i>in situ</i> prehistoric component
	Corner-notched point	Unidentified chert	Fragment only, probably Early Archaic
	Thick biface frag.	Brannon chert	Distal end only, no measurements
	Stemmed point	Grier chert	Probably Late Archaic, complete. L=48.7, W=30.1, Th=8.0
Block 3	Expanding stem point	Brannon chert	Early Archaic?, impact fracture at tip. L=45.0, W=25.8, Th=7.3
Block 4	Thin biface frag.	Brannon chert	Distal end, no measurements
Historic Modified Chert Items			
Feature 47	Biface thinning flake	Boyle chert	Feature 1 interior, possibly reused as a gun flint
Feature 48	Gun flint	French chert	Exhausted gun flint
West Room	Secondary flake	Boyle chert	Reused as gun flint and modified to fit lock



Figure 6.2. Projectile Points Recovered during Phase II/III Investigations at 15FA290. a) Fort Ancient Type 4 Triangular; b) Middle-Late Archaic Saratoga Cluster; c) Middle-Late Archaic Matanzas Cluster; d) Early Archaic Kirk Stemmed; e) Early Archaic Charleston Corner-notched.

(Justice 1987:156-158; Winters 1963). This point shows steep retouch along the basal margin, which is one of the basal modifications characteristic of Saratoga Cluster points. Saratoga Cluster points date to the late Middle Archaic to Terminal Archaic periods, between about 3,000 and 6,000 years ago. A broadly contemporary point type is the Matanzas Side-notched point, represented in the 15FA290 assemblage by a single specimen (Figure 6.2c). This specimen is also complete, and it exhibits excurvate lateral margins and a slightly excurvate basal margin. The side notches are distinct, placed well above the basal margin, and are oriented perpendicular to the lateral edges. These attributes are characteristic of the Matanzas Side-notched point (Munson and Harn 1966), which Justice (1987) places in the more general Matanzas Cluster. This specimen compares favorably to Cook's (1976) Modal Matanzas type. Matanzas points are also diagnostic of the late Middle Archaic to early Late Archaic periods, generally ranging in age from 4,000 to 6,000 years ago. Figure 6.2d shows an expanding-stem point with a slightly bifurcated base. Though this point does not show beveled blade edges, it is morphologically most comparable to the Kirk Stemmed point (Coe 1964; Justice 1987:82-83). Kirk Stemmed points are diagnostic of the later part of the Early Archaic period, between about 8,000 and 9,000 years ago. Another probable Early Archaic point was recovered from 15FA290, but this specimen is fragmentary, showing evidence of burning, potlidding, and multiple breaks (Figure 6.2e). Even so, the deep corner notching, removal of semilunar flakes from notch interiors, basal thinning, and ground base are attributes that are characteristic of Early Archaic manufacturing techniques. Though fragmentary, this specimen compares well with the Charleston Corner-notched type (Broyles 1971; Justice 1987:75-79), which is included in the broader Kirk Corner-notched Cluster by Justice (1987). Charleston and Kirk Corner-notched points date between about 9,000 and 10,000 years ago.

In addition to the hafted bifaces/projectile points, work at 15FA290 also produced one thin biface and one thick biface. Neither of these items is illustrated, but they are described briefly in Table 6.2. These tools, which may be associated with the *in situ* prehistoric occupation, or may also have been collected and redeposited by historic occupants of the site, add little to our understanding of the prehistoric activities conducted at the site. If they are part of the original prehistoric occupation, they indicate a relatively broad range of tool production and use, and this is consistent with the recovery of lithic debitage from all stages of bifacial reduction.

The projectile points recovered from 15FA290 would ordinarily indicate that the site was multicomponent, occupied multiple times within the Early, Middle, and Late Archaic periods, as well as in the Late Prehistoric period. However, we have made the argument that most of the points found at 15FA290 were collected from surrounding farm fields by the historic occupants of the site, who subsequently lost or discarded them within or near the historic residence. If the site was truly a multicomponent site occupied during at least four separate temporal periods, higher densities of debitage would be expected, along with recovery of other tool types. It is possible that the site functioned repeatedly as an ephemeral hunting station, and that the array of points recovered represents the remnants of these types of prehistoric activities conducted repeatedly at 15FA290. This repetitive, but ephemeral use of the site would also be consistent with low densities of artifacts and an emphasis on locally available raw materials. In either case, no prehistoric features were found, and no intact subplow zone midden deposits were documented. The prehistoric research potential of 15FA290 is considered to be low, and the prehistoric components are incidental in comparison to the more intensive historic component.

Three lithic artifacts were recovered that are historically modified chert materials. All three are interpreted as gun flints, and they are listed in parentheses in Table 6.1. While one of these items is an imported French "honey-colored" gun flint, the other two are locally available Boyle chert flakes that probably have been collected from the surrounding area, modified, and used as either gun flints or strike-a-lights. These materials are discussed more fully in the Arms Group section below. All three potential gun flints were recovered from within Feature 1, the historic residential foundation at 15FA290. Their recovery from interior house contexts strongly indicates that the early 19th century occupants of the house were collecting prehistoric materials from the vicinity, reusing them, and discarding them in secondary contexts within the residential house. Their presence supports the argument that many of the projectile points recovered from 15FA290 also may have been collected by the historic occupants of the house while engaged

in farming or other activities remote from the residence, and redeposited at later times within or near the residence.

PREHISTORIC CERAMICS

Prehistoric ceramics were recovered during Phase II/III investigations at 15FA290. Analysis of these materials provides additional information about the nature of the prehistoric occupation and the temporal and cultural affiliation of the prehistoric component.

Only two fragments of prehistoric ceramics were recovered from 15FA290, and both were recovered from Test Unit 1 (see Table 6.1). One was too small to obtain any reliable temper and surface treatment information because it measured less than 1 cm². However, it was tentatively identified as having primarily limestone temper, with an eroded exterior surface. The other sherd was analyzable, and measured about 6 cm². This analyzable sherd is a body sherd with exterior cordmarking. The cordage showed an S-twist manufacture. It was tempered primarily with limestone; some ferromanganese concretions were also included that may be either intentionally added temper material or may be natural inclusions in the clay body. Based on these attributes, this sherd can be classified as Jessamine Cordmarked (Turnbow 1988), which is a local ceramic type associated with the terminal Late Woodland through middle Fort Ancient periods. The small sherdlet may represent a fragment of Jessamine series ceramics, but it was too small and eroded to determine a specific type. Jessamine series ceramics are characterized as having primarily finely ground limestone temper, accompanied by a mixture of hematite, ferromanganese concretions, crushed rock, or shell as secondary tempering agents. No rim sherds were recovered, so additional characterization and comparison of this miniscule assemblage is not possible.

Recovery of probable Jessamine series ceramics from 15FA290 suggests that the site may also have been occupied during the terminal Late Woodland to middle Fort Ancient periods, between about AD 800 and 1400. This temporal span was not represented in the projectile points (though a late Fort Ancient projectile point was recovered), so another possible component is added to the growing list of possible temporal periods represented at 15FA290.

SUMMARY OF PREHISTORIC COMPONENTS AT 15FA290

The observations made for the prehistoric ceramic and lithic assemblages recovered from 15FA290, though based on a small and fragmentary sample, are consistent with two possible interpretations of the prehistoric occupational history of the site. In the first scenario, 15FA290 is repeatedly occupied during the prehistoric past, but always as an ephemeral location and never as a more generalized or long-term site. This results in accumulation of a low density of debitage and ceramic artifacts, as well as projectile points attributable to the various periods of site use—early part of the Early Archaic, later in the Early Archaic, late Middle to early Late Archaic, early Fort Ancient, and late Fort Ancient periods. In spite of repeated occupation of the site, no features or midden accumulations remain intact below the plow zone, and the site has very low potential for contributing to prehistoric research issues of local or regional interest.

In the second scenario, the only datable item recovered from definitively prehistoric contexts is a single sherd of Fort Ancient period Jessamine series ceramics found at the base of the plow zone in Test Unit 1. This item suggests that the other debitage materials recovered from the outer yard area north of the historic residence may also be attributed to a terminal Late Woodland to middle Fort Ancient time span of site occupation. However, even if all debitage is attributed to this component, it still represents a short-term or ephemeral occupation that did not result in construction of features or accumulation of midden that has survived modern agricultural practices. In this scenario, the projectile points from the site, which were all recovered from potentially or demonstrably historically disturbed contexts, represent materials that were collected from surrounding agricultural fields by historic residents of 15FA290 and redeposited in and around

the historic residence. This collecting activity of historic residents would easily account for the large variety of temporal periods represented by the points as well as the high proportions of points compared to debitage recovered near the residence. Recovery of two local Boyle chert flakes that were likely recycled as historic gun flints (or strike-a-lights) and eventually discarded within the historic house lends support for a scenario of historic collection, recycling, and redeposition of the projectile points. In this scenario, the temporal periods represented by the points are incidental to the in-place prehistoric occupation, which may have been confined to the terminal Late Woodland to middle Fort Ancient time span. Due to redeposition of the projectile points, the prehistoric components would not be viewed as potentially contributing to local or regional research .

In either scenario, the research potential of the prehistoric component(s) at 15FA290 is minimal. The prehistoric component of 15FA290 is not considered to be eligible for listing on the National Register of Historic Places. No additional work is recommended for investigation of the prehistoric component, as the proposed construction of new roadway and utility corridors along Newtown Pike will not have any impact on a scientifically significant prehistoric site.

HISTORIC ARTIFACTS

A total of 7,522 historic artifacts were collected during the Phase II/III investigations at 15FA290. Major functional categories represented among the historic artifacts include Kitchen (n=2,909 or 38.7 percent of the assemblage), Architecture (n=2,538, 33.7 percent), Activities (n=209, 2.8 percent), Arms (n=41, 0.5 percent), Clothing (n=112, 1.5 percent), Furniture (n=55, 0.7 percent), Personal (n=94, 1.2 percent), Transportation (n=15, 0.2 percent), Faunal (n=1,153, 15.3 percent), and Unassigned Material (n=396, 5.3 percent). Historic artifact categories in the assemblage are discussed in more detail below, with discussion arranged by major functional group. Manufacturing dates for this artifact assemblage range from as early as the late 18th century to the modern era, with a median occupation of the site during the 19th century. Artifacts indicative of specific periods of site occupation are discussed in the summary section of the chapter.

KITCHEN GROUP

The artifacts placed in this group are those which functioned in activities related to the preparation, service, or consumption of foods and liquids. Artifacts classified in this group include fragments of ceramic vessels, glass containers, metal containers, and utensils. Major ceramic classes consist of refined earthenware, coarse earthenware, and porcelain. Major classes of glass artifacts consist of container glass and table glass. Metal container fragments and utensils are discussed under the heading of “Other Kitchen”. Table 6.3 lists Kitchen group artifacts recovered from 15FA290, with all proveniences combined.

Refined Earthenware Ceramics

Five refined earthenware ceramic types occur in the assemblage—creamware, pearlware, whiteware, ironstone, and porcelain. There is also one example of a burned, unidentified refined earthenware ceramic category that may be either pearlware or whiteware. A total of 989 sherds were identified as refined ceramics, representing 34.0 percent of the Kitchen group assemblage, 73.2 percent of Kitchen group ceramics, and 13.1 percent of the total historic assemblage. A minimum vessel analysis of refined earthenware ceramics is presented in Chapter 9; here we discuss descriptive attributes of the refined Kitchen ceramics. Date ranges for ceramic categories listed in Table 6.3 are derived and generalized from Hunter and Miller (1994), Miller (1991, 1997), Miller and Hunter (2001), and Stelle (2001). Maximum date ranges of ceramic production have been truncated to account for the period of site occupation, which begins at about 1800 and end at about 1910.

Creamware sherds recovered include undecorated creamware (n=83), molded creamware (n=1), and underglaze painted creamware (n=2; Figure 6.3 b-c). One undecorated sherd was perforated (Figure 6.3 d);

Table 6.3. Kitchen Group Artifact Categories Recovered from Phase II/III Excavations at 15FA290. All proveniences have been combined.

Artifact Category Description	Date Range	Quantity	
Refined Earthenware		989	
Creamware	1760-1820	86	
Molded			1
Underglaze Painted	1765-1810		2
Undecorated			83
Pearlware	1775-1830	202	
Factory-made Slipware	1800-1830		4
Common Cable	1800-1830		3
“Old Blue” Transfer Printed	1765-1810		6
Mocha	1790-1830		6
Molded	1765-1830		2
Overglaze Painted			1
Shell Edge, Embossed Patterns	1823-1835		2
Shell Edge, Impressed Bud Motif	1813-1834		8
Shell Edge, Impressed Repetitive Pattern with Unscalloped Edge	1841-1857		1
Shell Edge, Impressed Straight Lines	1809-1830		20
Shell Edge, No discernible pattern	1800-1830		5
Sponging	1800-1815		1
Transfer Print	1820-1830		56
Undecorated	1775-1830		72
Underglaze Painted	1775-1830		15
Whiteware	1820-1910	224	
Factory-made Slipware	1820-1850		10
Decal	1880-1910		2
Molded	1830-1870		11
Overglaze Painted	1870-1910		1
Sponged	1845-1910		1
Molded Rim, Underglaze Painted	1830-1870		1
Transfer Print	1820-1910		34
Undecorated	1820-1910		147
Underglaze Painted, Blue	1820-1860		1
Underglaze Painted, Polychrome	1820-1860		16
Ironstone	1840-1910	334	
Decal	1880-1910		21
Gilded Rim	1850-1910		1
Molded	1840-1870		44
Transfer Print	1840-1910		10
Undecorated	1840-1910		255
Underglaze Painted	1840-1880		3
Burned Refined Earthenware	---	1	
Porcelain		136	
Chinese Export	Variable		5
Decal	1897-1910		13
Overglaze Painted			5
Decal, Overglaze Painted	1897-1910		2
Gilded	1850-1910		13
Molded	1830-1870		30
Purple Luster	1800-1840		1
Undecorated	---		67
Coarse Earthenware		363	
Redware	1800-1850	152	
Green Glaze			1
Lead Glaze			132

Table 6.3 (continued).

Artifact Category Description		Date Range	Quantity		
Stoneware	Slip Decoration	1840-1910	199	1	
	Unglazed			18	
	Albany Slip			67	
	Albany Slip, Bristol Glaze			41	
	Albany Slip, Salt Glaze			27	
	Weir Canning Lid, Bristol Glaze			1	
	Bristol Glaze, Salt Glaze			1	
	Salt Glaze			61	
	English Salt Glaze			1	
	Yellow ware			12	3
	Engine-turned Bands	1800-1830	1		
	Common Cable	1800-1830	1		
	Brown Glaze	1			
	Undecorated	7			
Kitchen Ceramic Total			1,352		
Glass, Container Lip			79		
Glass, Container Lip	Rough Applied Finish	1825-1875	18		
	Indeterminate Rough Applied Finish,			1	
	Amber				
	Double Ring				5
	Clear				4
	Aqua				1
	Extract				3
	Clear				2
	Aqua				1
	Folded				1800-1875
	Clear	1			
	Light Blue	3			
	Threaded, Clear	1			
	Straight, Aqua	1			
	Improved Tooled Finish	1875-1910	33		
	Indeterminate Improved Tooled Finish			4	
	Clear			3	
	Amber			1	
	Double Ring			7	
	Clear			5	
	Amethyst			2	
	Extract			8	
	Clear			7	
	Aqua			1	
	Straight, Clear	5			
	Crown Cap	1905-1920	4	4	
	Amber			2	
	Aqua			2	
	Flared/Fused, Clear			2	
				2	
Fruit Jar Finishes	Threaded, Internal, Clear	1860-1875	9	1	
	Interrupted External Threaded, Aqua			1	
	Tapered Collar with Ring, Clear			1	
	Blob, Aqua	1800-1845		2	
	External Threaded, Aqua	1903-1910	8		
	Groove Wax Ring, Aqua		1		
	Machine-Made Finishes	1903-1910	3		
		Capseat, Clear		1	
		External Threaded, Clear		1903-1910	2

Table 6.3 (continued).

Artifact Category Description	Date Range	Quantity	
Unidentified Finish Type		16	
Glass, Container Base		73	
Identified Base Type		49	
Empontilled	---		3
Clear			2
Aqua			1
Cup Mold	1850-1903		19
Clear			9
Amber			1
Aqua			5
Amethyst			4
Key Mold	1810-1903		2
Amber			1
Aqua			1
Turn Mold	1880-1905		5
Clear			1
Amber			2
Green			2
Post Mold	1840-1903		2
Clear			1
Aqua			1
Ricketts Mold, Green	1821-1853		3
Semi-Automatic Bottle Machine	1880-1905		7
Clear			1
Aqua			6
Automatic Bottle Machine	1903-1910		8
Clear			5
Aqua			3
Unidentified Base Type		24	
Clear			15
Aqua			7
Amethyst			2
Glass, Container Body		1,177	
Body Fragments		85	
Beveled			12
Clear			10
Aqua			2
Decal, Clear			1
Embossing			23
Clear			5
Aqua			8
Amethyst			10
Embossing, Mold Seams			2
Clear			1
Aqua			1
Etched, Aqua			1
Fruit Jar, Aqua			7
Mold Seams			32
Clear			18
Aqua			11
Amber			2
Light Blue			1
Rickett's Bottle Fragment, Green	1821-1853		1
Scroll Flask Fragments	1830-1860		6
Aqua			5
Green			1

Table 6.3 (continued).

Artifact Category Description	Date Range	Quantity	
Unidentified Body Fragments	1880-1910	1,092	
Clear			702
Aqua			260
Amber			62
Amethyst			32
Blue			1
Blue/Green			4
Green			25
Light Blue Milk Glass			1
White Milk Glass			4
Yellow			1
Glass, Container Complete		3	
Swayzee's Improved Mason Jar, Aqua	1894-1906		1
Improved Tooled Extract Finish, Cup Mold Base, Clear	1875-1903		1
Improved Tooled Flared Finish, 2-Piece Mold, Clear	1875-1903		1
Glass, Lid Liner		3	
Canning Jar Lid Liner, White Milk Glass	1869-1910		3
Glass, Stopper		2	
Bottle Stopper, Molded, Clear	1860-1910		2
Container Glass Total		1,337	
Glass, Table Glass		94	
Drinking Glass Fragments		24	
Wine Glass, Molded, Clear	1860-1910		3
Optic Molded, Clear	1875-1910		1
Press Molded, Clear			10
Molded, Clear	1860-1910		10
Known Vessel Type		14	
Small Bowl, Press Molded			13
Clear			2
Light Blue Milk Glass			1
White Milk Glass			10
Handle, Press Molded, Clear			1
Unknown Vessel Type		56	
Press Molded			42
Clear	1860-1910		31
Amber			1
Amethyst	1880-1910		1
Blue Milk Glass			6
White Milk Glass			2
Yellow			1
Optic Molded, Clear	1875-1910		10
Etched, Clear			2
Molded Appendage, Amethyst	1880-1910		1
Carnival Glass, Red	1900-1910		1
Kitchen Glass Total		1,431	
Metal, Utensils		29	
Utensils, Complete		8	
4-tine Fork			1
3-tine Fork	1850-1910		2
2-tine Fork	1800-1875		1
Knife, Incised Bone Handle			1
Knife, Plain Bone Handle	1800-1820		1
Teaspoon	1880-1902		1
Soup Spoon			1

Table 6.3. (concluded).

Artifact Category Description	Date Range	Quantity	
Utensils, Fragmented	1800-1820	21	
Knife Blade, Partial Tang			4
Metal Handle Fragments			2
Wood/Bone/Metal Handle Fragments			15
Metal, Containers	1847-1910 1820-1847	97	
Can Fragments		46	
Stamped Can End			8
Hole-in-the-Top Can			30
Perforated Shaker Top Can			8
Unknown Container Type		51	
Kitchen Metal Total		126	
Kitchen Group Total		2,909	



Figure 6.3. Examples of Creamware Recovered from 15FA290. a) Undecorated; b and c) Underglaze hand-Painted; d) Perforated sherd from a coffee or tea pot lid.

the perforations were made during the manufacturing process as the holes were glazed. This sherd appears to have been part of a coffee or tea pot lid (Miller and Hunter 2001: 43). Creamware sherds represent 3 percent of the total Kitchen Group assemblage and 8.7 percent of the refined earthenware ceramic assemblage. Creamware is the oldest of the refined ceramics and was manufactured from the mid-1700s through the first two decades of the 1800s (South 1977). Creamware sherds were recovered from the general house foundation fill. Their presence in specific feature contexts (Features 9, 15, 19, 20, 33, 43, 47, 48, and 51) was used to associate these features with the early period of house occupation.

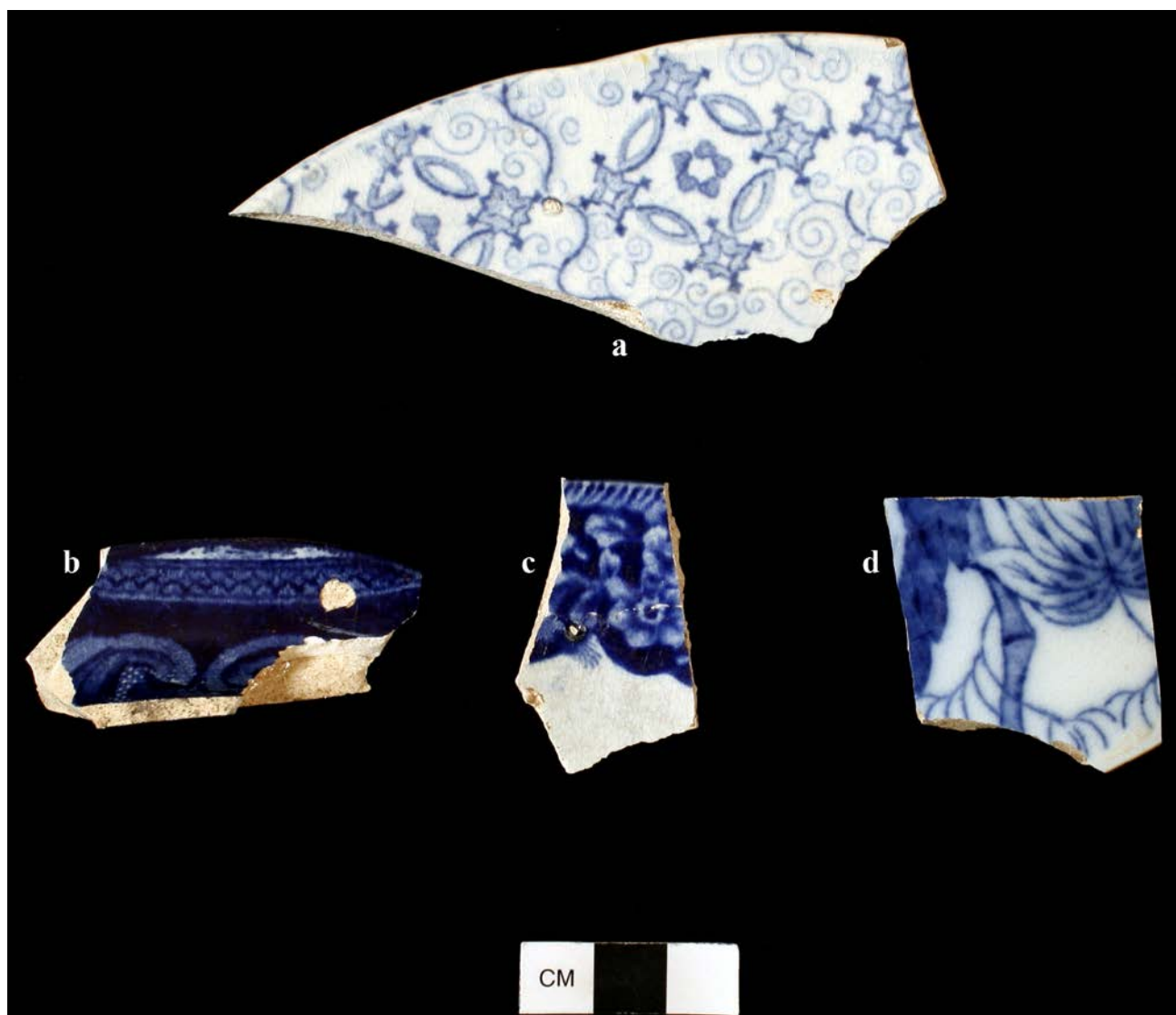


Figure 6.4. Transfer-Printed Pearlware from 15FA290. a) Transfer-printed; b and c) Old Blue transfer-printed; d) Transfer-printed pearlware sherd that resembles Chinese porcelain.

Pearlware accounts for 202 of the recovered sherds and includes undecorated pearlware (n=72) and pearlware decorated in various ways (n=130). These sherds represent 6.9 percent of the total Kitchen Group assemblage and 20 percent of the refined earthenware ceramic assemblage. Decorations consist of transfer print (n=56; Figure 6.4), shell edge (n=36; Figure 6.5), under-glaze hand-painting (n=15; Figure 6.6), over-glaze hand-painting (n=1), factory-made slipware (n=4; Figure 6.7), common cable or worm-pattern slipped decoration (n=3; Figure 6.8), mocha decoration (n=6; Figure 6.8), molded (n=2), and sponge-stamped (n=1). One pearlware sherd was perforated during the manufacturing process. This sherd (Figure 6.9) appears to represent a coffee or tea pot lid (Miller and Hunter 2001:43) similar to the creamware lid. Twelve of the transfer-printed pearlware sherds were printed with the Willowware pattern (Williams 1978). Two transfer-printed sherds were fragments of lids from covered dishes (Figure 6.9, right).

Pearlware dates from about 1780 to 1840, but some of the decorated sherds allow for assessment of more specific date ranges. Of the shell edge pearlware, 20 sherds were identified as having an even scalloped rim and impressed straight lines; these have a date range of 1809 to 1831. Eight sherds showed an even scalloped rim and impressed bud motif (Figure 6.5 a-b); this type of decoration was produced between 1813 and 1834. Two sherds were had patterned scalloped rims and embossed patterns, with a date range of 1823 to 1835 (Miller 2000). Mocha pearlware sherds date from 1795 to 1840. Factory-made decorated slipware with



Figure 6.5. Edge-Decorated Pearlware from 15FA290. a and b) Blue shell edge with embossed bud designs; c) Green shell edge with impressed curved lines.



Figure. 6.6. Hand-Painted Pearlware from 15FA290. A and c) Under-glaze hand-painted; b) Over-glaze hand-painted.



Figure 6.7. Factory-Made Decorations on Pearlware Recovered from 15FA290. A) Common cable or worm pattern; b) Engine-turned roulette patterns; c) Common cable or worm pattern with engine-turned roulette pattern; d and e) Annular banding.

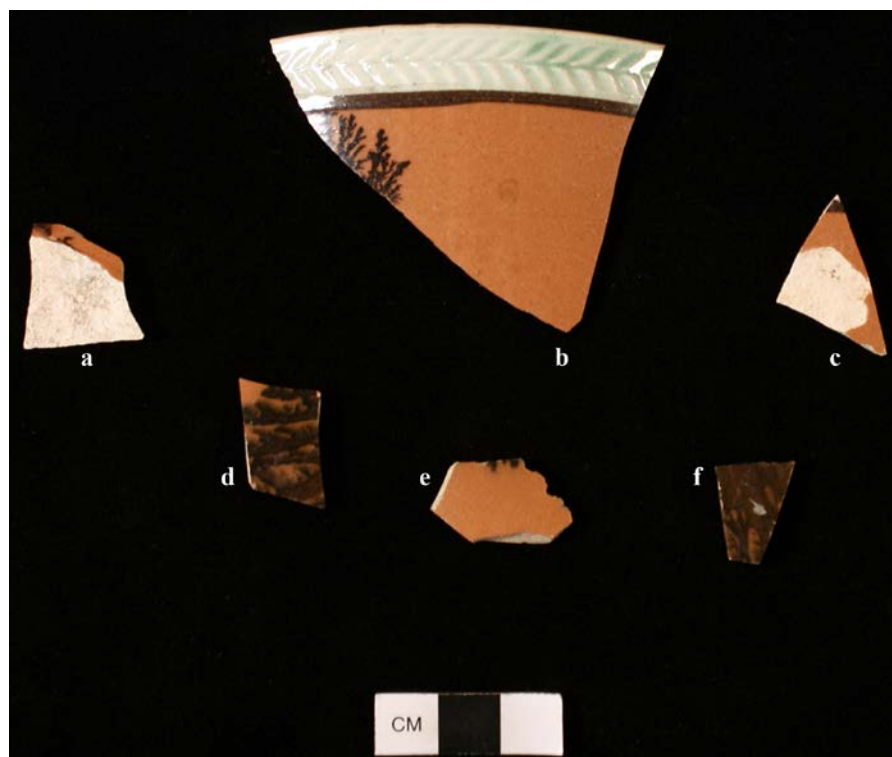


Figure 6.8. Factory-Made Decorations on Pearlware from 15FA290. A, c-f) Mocho; b) Mocho decoration with engine-turned roulette pattern.



Figure 6.9. Pearlware Lid Fragments from 15FA290. A) Transfer-printed fragment of a coffee or tea pot lid; b) Under-glaze hand-painted knob from the lid of a covered dish.

slip decoration over rouletted patterns (see Figures 6.7 a-c and 6.8 b) and common cable or worm pattern slip decorations (Figure 6.7 a and c) were both popular from the 1790s to 1830 (Sussman 1997). Fragments of pearlware were recovered from Features 13, 15, 19, 20, 31, 42, 43, 44, 47, 48, 51, 55, and the Feature 1 Builder's Trench; presence of pearlware in these features is primary evidence for their association with the early and early to middle periods of site occupation. In addition to being recovered from these features, pearlware sherds were also found in the general rubble fill of Feature 1.

Two hundred twenty-four whiteware sherds were recovered, including both undecorated (n=147) and decorated (n=77) specimens. This type of refined earthenware represents 7.7 percent of the total Kitchen group and 22.6 percent of the refined earthenware ceramic assemblage. The decorated whiteware (Figure 6.10) included factory-made slipware (n=10); decal-decorated whiteware (n=2); molded whiteware (n=12); transfer printed whiteware (n=34) in blue, black, brown, green, and purple colors; sponge-stamped whiteware (n=1); and under-glaze painted sherds (n=18). Whiteware was initially manufactured in the early 1800s and replaced pearlware as the dominant refined ware by the 1830s (Brown 1982, Price 1979). It reached its greatest popularity between 1830 and 1870, but is still manufactured today. There was a resurgence in popularity of decorated whiteware in the late 19th century, with several transfer-printed styles revived as well as decal-decorated wares. The decorations applied to whiteware allow for some refinement of its dating. Factory-made slipware may display colored bands applied by a variety of techniques. Bands in this assemblage were a medium brown color and appeared to be hand-painted on a turning lathe (Sussman 1997:4). This decorative type was common between 1830 and 1870 (Price 1979, Smith 1983). Decalcomania (decal-decorated) whiteware dates from 1880 to the present (Majewski and O'Brien 1987). Molded edge-decorated whiteware dates from 1830 to 1860 (Lofstrom et al. 1982, Smith 1983) while molded body whiteware dates after the 1840s-1850s (Gates and Omerod 1982). The transfer printed whiteware sherds were available in a variety of colors; blue was the most common in this assemblage, followed by purple, black, green and brown. While several different patterns are represented, only two patterns could be identified. One is a purple transfer-printed sherd in the Royal Flora pattern (Figure 6.10 c) produced between 1830 and 1841 (Williams 1978:50). The other is also a purple transfer-printed sherd in the Caledonia pattern (not illustrated) produced between 1800 and 1864 (Williams 1978:210). Transfer-printed vessels were common between about 1800 and the 1850s, with blue being the most common color initially. Black and brown were also available, while



Figure 6.10. Decorated Whiteware from 15FA290. a and b) Under-glaze hand-painted; c) Purple transfer print in Royal Flora pattern; d) Annular band; e) Blue transfer print; f) Sponge-stamped; g and h) Blue transfer print; i) Black transfer print.

red, green, and purple were produced after 1828 (Majewski and O'Brien 1987). Black, red, brown, and green fell out of production in the 1850s while purple continued until the 1860s. In this assemblage, under-glaze painted sherds were primarily floral motifs or geometric shapes that likely represent stylized flowers. These painted ceramics were most commonly produced from the 1820s to 1850s (Majewski and O'Brien 1987; Miller 1980). Four whiteware sherds with maker's marks were present in the assemblage. Two of the sherds had marks from potteries in Staffordshire, England. One Staffordshire mark was "ADAMS" and was from the potters William Adams & Sons. This mark was used between 1800 and 1860 (Godden 1964: 21). The other Staffordshire mark was from Longport and the potter George Phillips (Figure 6.12a). This mark was used from 1834 to 1848 (Godden 1964:492). The final two marker's marks were too fragmentary to identify the manufacturer. The assemblage of whiteware excavated from 15FA290 ranges in age from the early 1800s to the end of the period of house occupation. However, the large majority of the decorated whiteware recovered here was probably manufactured between 1830 and 1870. Only the decal-decorated sherds are likely to date to the late 19th century. Whiteware sherds were recovered from Features 20, 23, 32, 40, 41, 42, 43, 44, 50, and 55, which collectively span the occupation period of the house. In addition to being recovered from features, whiteware was recovered from the general rubble fill of the Feature 1 house foundation.

Ironstone accounted for 334 sherds in the assemblage, which includes undecorated ironstone (n=255), molded ironstone that is otherwise undecorated (n=44; Figure 6.11 b), and ironstone showing a variety of decorations (n=35; Figure 6.11). The ironstone sherds represent 11.4 percent of the Kitchen group assemblage



Figure 6.11. Ironstone from 15FA290 Showing Various Decorations. a) Decal; b) Molded; c) Purple transfer print; d and e) Gilt decal; f) Blue transfer print; g) Green transfer print; h) Decal and molded.

and 33.8 percent of the refined earthenware assemblage. Decoration methods include decal (n=21; Figure 6.11 a, e, h), transfer printing (n=10; Figure 6.11 c, f, g), hand painting (n=3), and one example with a gilded rim (Figure 6.11 h). Of the undecorated ironstone, 9 sherds were found to have partial or complete maker's marks (Figure 6.12). Two of these marks are from Staffordshire, England, two are from East Liverpool, Ohio, one possibly from Cincinnati, Ohio, and four were too fragmentary to identify. The first Staffordshire mark is from the J.W. Pankhurst & Co. pottery (Figure 6.12 c) and was used from 1852 to 1882 (Godden 1964:481). The second Staffordshire mark was made by Jacob Furnival & Co. in Cobridge between 1845 and 1870 (Figure 6.12 b). The first East Liverpool mark (Figure 6.12 g) is from the Potter's Cooperative Company and was used between 1890 and 1925 (Gates and Ormerod 1982:211). The other East Liverpool mark (Figure 6.12 h) is from the Goodwin Pottery and their "Pearl White" line manufactured between 1885 and 1897 (Gates and Ormerod 1982:52). A third mark is most likely from the Brockmann pottery in Cincinnati, Ohio and was used from 1888 to 1912 (Lehner 1988:57). Ironstone was initially manufactured in 1800, but it was most popular from approximately 1850 to the early 1900s and is still produced today. However, based on the decoration of the ironstone, the majority recovered from 15FA290 likely dates from about 1870 to about 1910, and thus represents the latter one-third of the date range of site occupation. These ironstone sherds were recovered from Features 9, 13, 15, 18, 40, 41, and 44 as well as the general rubble fill of the house foundation; their recovery from specific discrete feature or intact stratigraphic deposits is the principal assemblage attribute used to assign these contexts to specific date ranges or periods of site occupancy.

One hundred thirty-six porcelain sherds were identified in the 15FA290 assemblage, which accounts for 4.7 percent of the total Kitchen group and 13.8 percent of the refined ceramic assemblage. Of these sherds, sixty-seven were undecorated and sixty-nine were decorated. Decorations included molding (n=30; Figure 6.13 a, b, f, h), decal decoration (n=13; Figure 6.13 e), gilding (n=13; Figure 6.13 c), over-glaze painting (n=5), over-glaze painting with and decal decoration (n=2), luster ware (n=1; Figure 6.13 k), and annular banding (n=1; Figure 6.13 l). Within this assemblage, five examples of Chinese export porcelain were identified. Three of these sherds were decorated and included a blue glaze (n=1; Figure 6.13 j), decal (n=1), and combination decal and over-glaze painting (n=1; Figure 6.13 g). The remaining porcelain was either English-made bone china or American-made porcelain. Porcelain was recovered from Features 40, 41, 43, 44, 48, 51, the Builder's Trench, and general rubble fill; these features span the occupation of the house.

Coarse Earthenware Ceramics

Three coarse earthenware ceramic types—yellowware, redware, and stoneware—were identified in the assemblage from 15FA290. A total of 363 sherds was assigned to this category. These account for 12.4 percent of the Kitchen group artifacts and 4.8 percent of the total historic assemblage.

Yellowware accounted for 12 sherds in the coarse earthenware ceramic assemblage, including five decorated and seven undecorated sherds. This ceramic type represents 0.4 percent of the total Kitchen group assemblage and 3.3 percent of the coarse earthenware ceramic assemblage. Decorations included three sherds with engine-turned bands (Figure 6.14 b, d, e), two of which are from one vessel, and one sherd with a cable or worm pattern (Figure 6.14 c). Of the remaining sherds, one had a gritty, medium brown glaze (Figure 6.14 a). The remaining sherds were undecorated with a clear glaze. All sherds appeared to represent utilitarian vessels, most likely bowls. While some examples of yellowware possessed a coarse earthenware paste, some examples also had a more refined paste and could have been classified as refined earthenware. Yellowware ceramics date from 1830 to 1940 (Miller 2000). Yellowware was recovered mainly from the rubble fill of the house foundation, with one example from Feature 44 dating from the earlier occupation of the house.

One hundred fifty-two redware sherds were identified in this assemblage, and of these, only three were decorated. Redware accounts for 5.2 percent of the Kitchen group and 41.9 percent of the coarse earthenware ceramic assemblage. Decorations include one rim sherd with a rouletted edge and a clear lead glaze (Figure 6.15 a), one incised and slipped, but unglazed rim (Figure 6.15 c), and one unglazed, molded rim (Figure 6.15 b). The rim sherd with the roulette edge may be part of a flower pot, while the other



Figure 6.12. Maker's Marks on Whiteware (a) and Ironstone (b-h) from 15FA290. a) George Phillips of Longport, Staffordshire, England; b) Jacob Furnival of Cobridge, Staffordshire, England; c) J.W. Pankhurst & Co., Staffordshire, England; d-f) Unknown; g) Potter's Cooperative Company, East Liverpool, Ohio; h) Goodwin Pottery, East Liverpool, Ohio.

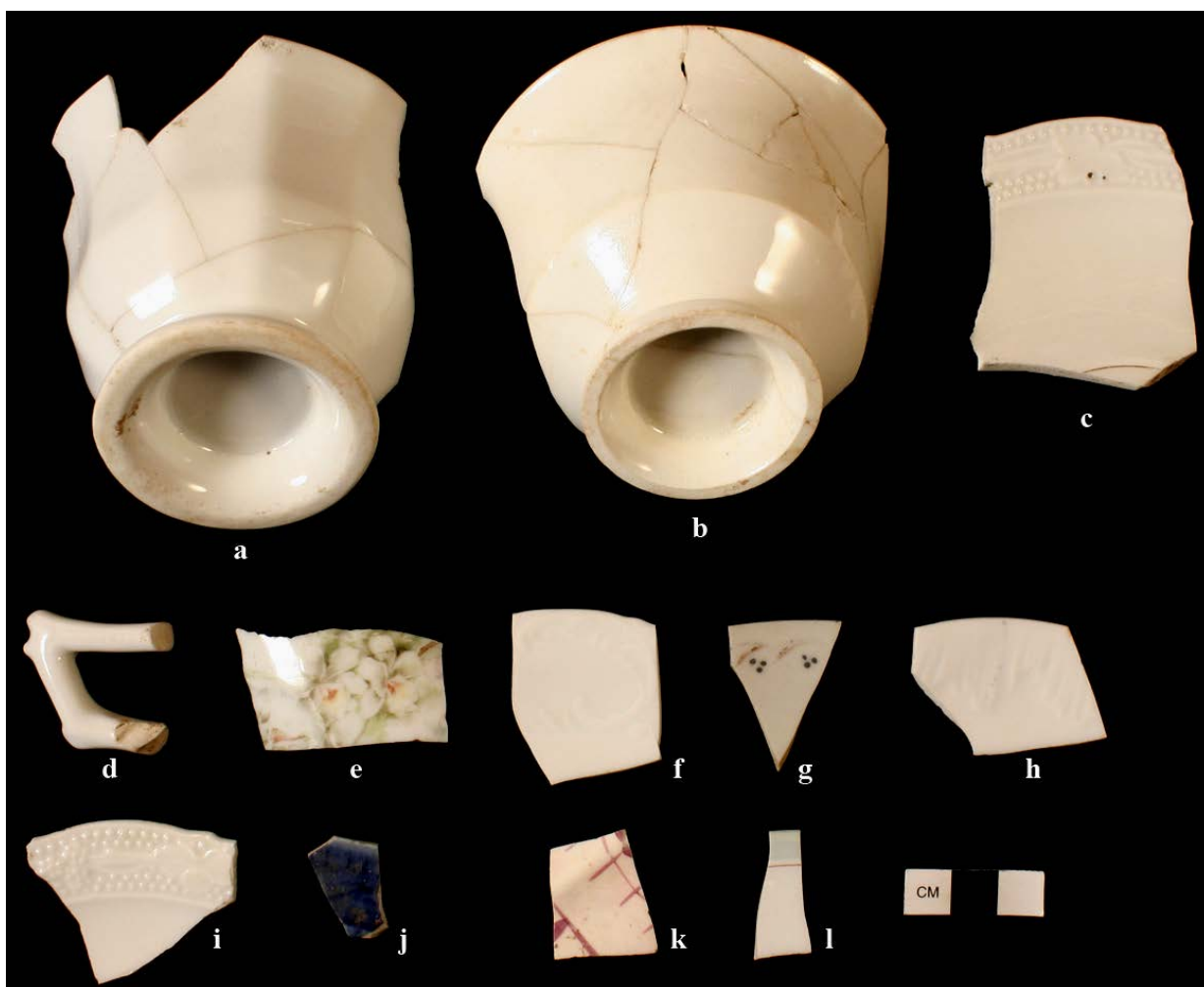


Figure 6.13. Porcelain from 15FA290. a-b) Bone china tea cups; c) Embossed molding and gilt flatware; d) Tea cup handle; e) Decal decoration; f) Bone china; g) Over-glaze hand-painted Chinese export porcelain; h) Molded bone china; i) Embossed molding; j) Under-glaze hand-painted Chinese export porcelain; k) Luster ware; l) Annular banded.

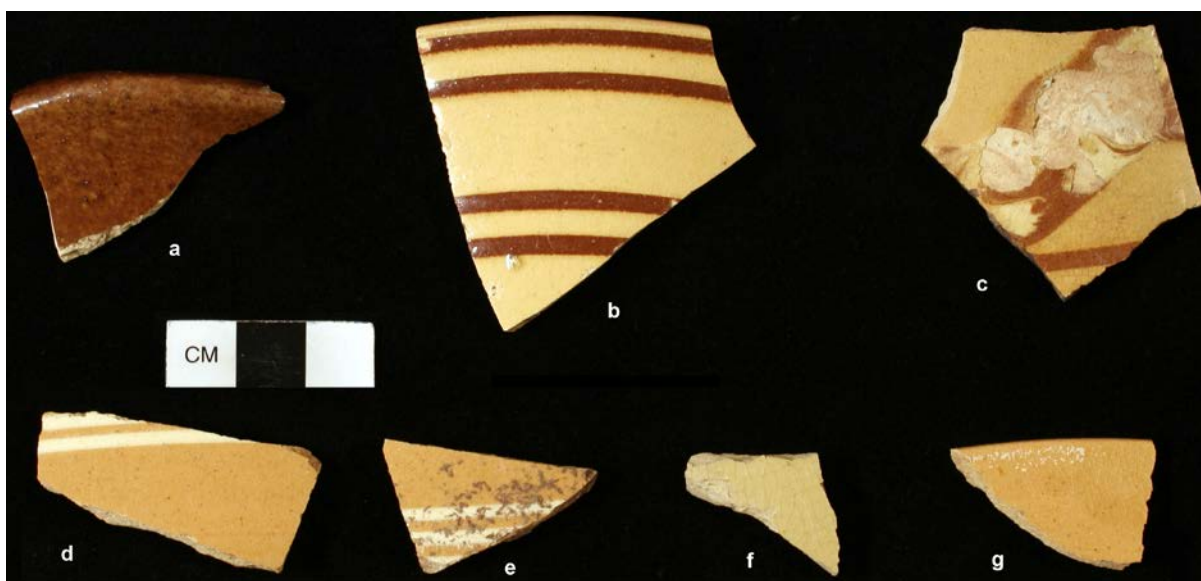


Figure 6.14. Yellowware from 15FA290. a) Gritty brown glaze; b) Annular banding; c) Cable or worm with annular band; d-e) Annular; banding f) Lighter yellowware; g) Darker yellowware.



Figure 6.15. Redware from 15FA290. a) Rouletted edge with clear glaze; b) Molded and unglazed rim; c) Incised and slipped rim; d) Polychrome glazed.

decorated sherds appear to represent utilitarian vessels. Of the undecorated redware, seventeen sherds were unglazed and one sherd had a polychrome glaze (Figure 6.15 d). The remaining undecorated redware sherds had a clear lead glaze (n=131). Redwares primarily date from 1750 to 1870 but have been manufactured before and after this date. The redware present at 15FA290 was recovered from Features 5, 19, 20, 23, 31, 32, 44, 47, and the Builder's Trench. These features are ascribed to both the early and middle-late periods of site occupation. Redware was also recovered from the general rubble fill of the house foundation.

Stoneware is represented by 199 sherds and includes both slipped and glazed examples. Stoneware accounts for 6.8 percent of the total Kitchen group and 54.8 percent of the coarse earthenware ceramics from 15FA290. This assemblage is composed almost entirely of American brown or gray stoneware and includes salt-glazed stoneware (n=62; Figure 6.16 a), Albany-slipped stoneware (n=67; Figure 6.16 f), stoneware sherds with Albany-slipped interior and Bristol-glazed exterior (n=41; Figure 6.16 b, d), Albany-slipped interior and salt-glazed exterior stoneware (n=27), and stoneware with a salt-glazed interior and Bristol-glazed exterior (n=1). Only one stoneware sherd was decorated—a salt-glazed fragment with hand-painted designs in blue (Figure 6.16 e). Only one stoneware sherd appears to have originated in England. A brown salt-glazed sherd was recovered and may be from a porter bottle (Figure 6.16 c). These porter bottles were popular in England and in the United States from the 18th throughout the early 20th centuries (Hume 2001). Also, one stoneware fruit jar lid was present in the assemblage (Figure 6.17). This is a Weir closure ceramic lid for fruit and canning jars. The jar lid is embossed with “THE WEIR PAT. MARCH 1ST 92 APRIL 18TH 1907 No. 4”. This style of Weir lid was patented in 1903 and included modifications to create a better seal between the jar and the lid (Toulouse 1969). The stoneware artifacts represent utilitarian vessels, such as jugs (Figures 6.16 f and 6.18) and crockery associated with food storage and preparation. Dates for stoneware vessels range from the 18th through the early 20th century with Albany-slipped stonewares dating from 1805 to 1920 (Miller 2000). The Weir lid dating to 1907 is perhaps the best artifact for providing a *terminus ante*



Figure 6.16. Stoneware from 15FA290. a) Salt-glazed; b, d) Bristol-glazed; c) English salt-glazed; e) Hand-painted salt-glazed; f) Albany-glazed jug rim.



Figure 6.17. Weir Style Canning or Fruit Jar Lid Made from Stoneware with Bristol Glaze.



Figure 6.18. Albany Slipped Stoneware Jug from Interior of Feature 1 at 15FA290.



Figure 6.19. Complete Bottles from 15FA290 and Soda Bottle Fragment. a) Two-part mold with cup mold base (made after 1885); b) Swayzee's Improved Mason jar (1894-1906); c) Basal half of soda bottle from the Lexington Bottling Company; d) Two-part molded bottle (1870s-1890s).

quem date for occupation of the Feature 1 residence at 15FA290. The date of 1910 used as an estimate of the end of occupation of 15FA290 is probably not off by more than three years. Stoneware was recovered from Features 18, 32, 36, 38, 40, and 44, which span the occupation of the site. Stoneware was also recovered from the general rubble fill of the house foundation.

Container Glass

Glass artifacts placed in this subclass of Kitchen materials include fragments of glass storage and beverage containers. A total of 1,337 artifacts were assigned to this group, which represents 45.9 percent of the Kitchen group and 17.8 percent of the complete historic artifact assemblage. Within this group, there were three complete bottles. These included a Swayzee's Improved Mason jar (Figure 6.19 b), a large clear glass bottle (Figure 6.19 a), and a small clear glass bottle (Figure 6.19 d). The Swayzee's Improved Mason jar was manufactured between 1894 and 1906 at the Swayzee Glass Company in Swayzee, Indiana (Toulouse 1971). It is a machine-made jar with an external-thread ground lip and a rounded shoulder; it was recovered from the West Room rubble during mechanical excavation. The large, clear complete bottle was made in a two-piece mold with a separate cup mold base and was also recovered from the West Room during mechanical excavation of rubble. The lip is a standard improved tooled finish. Bottles manufactured in a two-piece mold with a separate base date from the 1850s to the mid-1920s, but the type of finish used on this bottle dates from 1885 to the early 1920s (Jones and Sullivan 1985). The small, clear complete bottle was also made in a two-piece mold with a separate base; it was found in the south wall of the Feature 1 foundation

during mechanical excavation. The separate base was probably a cup mold base, but the base had been ground in the finishing of the bottle, removing most distinguishing marks. The lip is an improved tooled flared finish. This bottle dates from the late 1870s to the 1890s.

Of the glass fragments, 79 fragments were identified as either partial or complete bottle lips. Of those, 18 had rough applied finishes and 33 had improved tooled finishes (Table 6.3). The applied finishes were common from the 1820s to the 1870s, while the improved tooled finishes were common from the 1870s to the early 20th century, when they were replaced by fully machine-made finishes. Representative samples of lip finishes are shown in Figure 6.20. Applied finishes were recovered from Features 15, 30, and 48 in both the East and West rooms of the house, as well as from the general rubble fill. Presence of this type of finish allows Feature 30 to be assigned to the early occupation segment. Tooled finishes were recovered from Features 32, 36, 44, and 50 in both the East and West rooms of the house. Two of these features, Features 32 and 50, date to the middle-to-late period of house occupation. In addition to the features, tooled finishes were also found in the general rubble fill of the house foundation. Three lip fragments were manufactured by either a semi-automatic or fully automatic bottle machine. Bottle production using semi-automatic bottle machines began in 1889 and peaked in 1917, while fully automatic bottle production began in 1904 (Jones and Sullivan 1985:39). The machine-made finishes were manufactured no earlier than 1889. These were all recovered from the general rubble fill of the house foundation.

Seventy-three complete or partial glass container base fragments were identified in the assemblage; selected exemplary specimens of these various base types are shown in Figure 6.20. The recovered bases included empointilled bases (n=3; Figure 6.20 b, g), Ricketts company mold bases (n=3; Figure 6.21), key mold bases (n=2), post mold bases (n=2; Figure 6.20 c), cup mold bases (n=19), turn mold bases (n=5), both semi-automatic and fully automatic bottle machine bases (n=15; Figure 6.20 a), and base fragments for which the manufacturing methods could not be identified (n=24). The empointilled bases found in this assemblage were common on a variety of different mold-made bottles and date from about 1800 to the 1850s (Jones and Sullivan 1985). These bases were recovered from Features 30 and 55 in both the East and West rooms as well as from outside the house foundation. Three glass fragments cross-mended to form a portion of a dark green Ricketts company mold base (Figure 6.21) that was partially embossed with “H. Ricketts & Co”. Bottles of this type were manufactured between 1821 and the 1840s (Jones and Sullivan 1985:30). This base was recovered from Feature 19 and dates to the early occupation period of the house. The key mold bottle bases have a mean production date between the 1840s and 1870s, while the post mold bases date between the 1850s and the early 1890s. Both of these types of bases were recovered from the general rubble fill of the house foundation. Cup mold bases were the most common base type; they date from 1850 to the present and were found in the house foundation rubble fill. The turn mold-bases have a date range from the 1870s to the 1920s and were recovered from the house foundation rubble fill. Of the machine-made bottle bases, seven were manufactured by semi-automatic bottle machines and eight were manufactured by fully automatic bottle machines. The semi-automatic machine-made bottles have date range of 1889 to approximately 1926 while the fully automatic machine-made bottles began production in 1904 (Jones and Sullivan 1985). Both types of machine-made bottle bases were recovered from the rubble fill of the East and West rooms.

The base of an embossed soda bottle (Figure 6.19 c) was also recovered from Feature 1 at 15FA290. The bottle fragments were able to be mended, and the embossed label was then discernable. It reads “Bleich BOTTLING CO. LEXINGTON KY.” The Bleich Bottling Company was probably one of several small bottling companies that operated in the Lexington area in the late 19th and early 20th centuries. A review of the Lexington City Directory for 1902/1903 shows a George A. Bleich on north Limestone Street, and lists “mineral waters” in association with this person, probably representing an occupation. No other Bleich is listed in any other city directories. The bottle base is a cup mold with a two-part mold body, probably made on a semi-automatic machine. Use of the semi-automatic machine began in about 1889 and continued into the early 1900s. This date range for this bottle is consistent with a 1902 listing for the George Bleich, who is likely associated with the Bleich Bottling Company and manufacture of the recovered bottle.



Figure 6.20. Examples of Container Glass Bases and Finishes from 15FA290. a) Machine-made base; b, g) Empontilled base; c) Post mold base; d) Double ring improved tooled finish; e) Glass stopper; f) Rough applied finish.

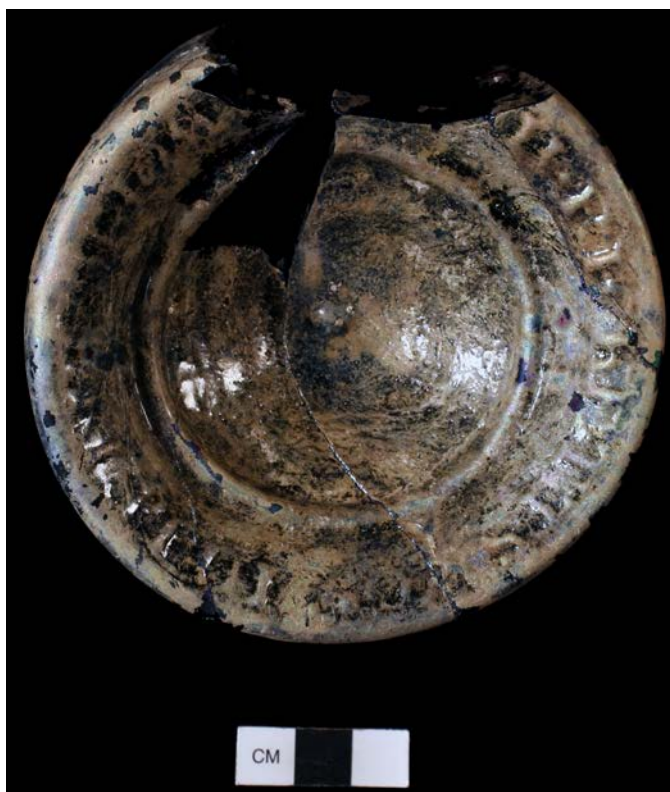


Figure 6.21. Ricketts Bottle Base from Feature 1 Interior at 15FA290. The Bottle was likely manufactured in the early 1820s.



Figure 6.22. Examples of Colored Glass Fragments Recovered from 15FA290. a) Carnival glass; b) Solarized yellow glass; c) Solarized amethyst glass.

Two glass stoppers were present within the assemblage of container glass. These stoppers were T-shaped and would have fit the top of a narrow-necked bottle (Figure 6.20 e). These items were recovered from the general rubble fill of the house foundation.

Glass body fragments (n=1,177) were recovered in a wide variety of colors (clear, aqua, amber, amethyst, green, blue, and white milk glass) and container types. Of the glass colors present within the sample, solarized amethyst-colored glass (n=42; Figure 6.22 c) is the most temporally sensitive, with a manufacturing date range of 1880 to 1914 (Baughner-Perlin 1982). These fragments were recovered from Features 9 and 18 as well as the general rubble fill of the house foundation. Feature 18 dates to the late occupation episode of the site. Other colored glass fragments of interest from 15FA290 include a single fragment of solarized yellow glass (Figure 6.22 b) made with selenium as a decolorizing agent, which dates from about 1914 to the 1930s. This fragment is beyond the date range of the house occupation established through all other lines of evidence, and it most likely is a post-occupation addition to the site. This fragment was also recovered from the general fill of the house. The majority of the container body fragments could not be assigned to a possible container type. Of those that were assignable, canning jars and beverage containers were the most common. Glass body fragments were recovered from almost all features at the site as well as from within and around the rubble fill of the house foundation. Fragments of a scroll flask (n=6; Figure 6.23) were identified; these have a date range from the 1830s to the 1850s (McKearin and Wilson 1978). These fragments were found near the brick cistern and in the rubble fill of the West room. Also, fragments of milk glass liners for canning jars (n=3) were identified. The patent for these liners was initially issued in 1869, and they were manufactured into the 1960s (Toulouse 1969). These liners were found in the general rubble fill of the house foundation.

Table Glass

Artifacts placed in this subclass of the Kitchen group include glass items used for serving and consuming food or beverages, such as wine glasses, drinking glasses, bowls, and covered dishes. Ninety-four fragments of glass were identified as table glass, which accounts for 3.2 percent of the Kitchen group artifacts



Figure 6.23. Scroll Flasks Recovered from 15FA290. a) Base b) Body.

and 1.2 percent of the total historic artifact assemblage. The table glass included various types, such as press-molded glass (n=66), optic-molded glass (n=11), etched glass (n=2), carnival glass (n=1), and unidentified molded table glass (n=14). Press-molded glass was the most common type of table glass and included objects such as bowls, lids, and wine glasses (Figure 6.24). Complete tableware objects of pressed glass were first manufactured in the United States in the 1820s and were mass-produced by the 1830s. However, technological advances in the manufacture of pressed glass between the 1860s and 1870s greatly lowered the cost of the finished objects and increased their production (Jones and Sullivan 1985). Optic-molded table glass was initially manufactured in the 18th century and experienced a revival in the late 19th to early 20th century (Jones and Sullivan 1985). Carnival glass was initially produced in 1905 but experienced a peak in popularity between 1907 and 1925, with production tapering off by 1931. Only a single fragment of carnival glass was recovered (Figure 6.22 a), and the low incidence is consistent with the minimal overlap between the date range for manufacture of carnival glass and the end of the occupational span of the house at 15FA290 (estimated at 1910). This fragment was found in the fill around the East room hearth.

Other Kitchen Materials

This subclass includes nonceramic and nonglass artifacts that are a part of the Kitchen group, and all of these items (n=126; Table 6.3) are made from metal or metal in combination with other materials. Specific artifact classes include kitchen utensils (n=29), metal can fragments (n=46), and metal container fragments (n=51). Four forks were recovered, one two-tine fork with a square shoulder and flat tang (Figure 6.25 a), two three-tine forks with flat tangs (Figure 6.25 b), and one four-tine fork with flat tangs. These forks were recovered from the general rubble fill of the house foundation. All four forks would have had scales. The two-tine fork is older, with a manufacturing date range of 1770 to about 1875 (Dunning 2000). The three-tine forks were manufactured from sheet steel which did not become common until after the 1850s. Two complete spoons were also identified in the assemblage. One spoon was silver-plated and is stamped with the name “Wm Rogers & Son. AA” on the reverse of the handle (Figure 6.25 c). This spoon was recovered from the East room. While this specific flatware pattern cannot be identified, the maker’s mark was used between about 1880 and 1902 (Hagan 1990). The second complete spoon was heavily corroded, and no marks or patterns could be discerned. This spoon was recovered from the general rubble fill of Feature 1.



Figure 6.24. Examples of Kitchen Group and Furniture Group Table Glass from 15FA290. All Items are press-molded. a) Vase; b) Drinking glass; c) Wine glass; d) Covered dish lid; e) Vase neck.



Figure 6.25. Kitchen Utensils Recovered from Feature 1 at 15FA290: a) Two-tined Fork; b) Three-tined Fork; c) Silver-plated Rogers and Co. Spoon.



Figure 6.26. Knives Recovered from 15FA290. a) Flat-bladed knife with fragment of wood handle and three-pin attachment found below foundation in builder's trench; b) Hump-back blade (1760-1820); c) Straight blade with incised bone scales; d) Straight blade with plain bone scales.

Six fragments of five knives were identified in the assemblage (Figure 6.26). All five knives have a choil, while two knife blades are hump-backed. One hump-backed blade has a flat tang with undecorated bone scales on the handle and was manufactured between 1760 and the 1820s (Dunning 2000). The second hump-backed blade lacks its tang but has a bulbous, up-turned blade tip (Figure 6.26 b; it was also manufactured between 1760 and 1820. Two of the straight knife blades have bolsters and flat tangs (Figure 6.26 d), while one has incised bone scales still attached (Figure 6.26 c). The other blade has a small fragment of wood adhering to its tang (Figure 6.26 a). The scales of this knife would have been made of wood and held to the tang with three pins. Its tip is rounded and there is a semicircular notch cut into the blade edge, which is broken. The two straight blades with bolsters are wider and longer than the knife blade without a bolster. Six utensil handles were present in the assemblage. All but one of the handles was a composite of a flat tang with one or both scales still present, and all scales were wooden. The composite handles are likely from knives. The noncomposite handle was of sheet steel that was cut and stamped into shape and was most probably from a spoon. This metal handle was heavily corroded which obscured any further identification. The broken knife blade (Figure 6.26 a) was found below the house foundation of in the Builder's Trench of the East Room. The knives with intact scales were recovered in the fill of the East room. The remaining knives were recovered in the general fill of the house foundation.

Forty-six fragments of tin cans (a.k.a. sanitary cans) were identified within the historic assemblage (none are illustrated). Eight of these fragments were parts of stamped-end cans, machine-made can ends with extended edges that fit over the side of the can. Stamped-end cans were initially produced in 1847 (Rock 2000). Eight fragments were from a perforated shaker-top lid. Thirty fragments were from hole-in-the-top cans, but these fragments appear to only represent one or two individual cans. This type of can was manufactured between about 1820 and 1847 (Rock 2000). The remaining items include 51 fragments of metal

Table 6.4. Architecture Group Artifacts from 15FA290. All proveniences have been combined.

Artifact	Date Range	Quantity	
Architecture, Nails		1,408	
Hand-wrought	1800-1830		154
Early machine-cut	1810-1840		81
Late machine-cut	1840-1880		432
Indeterminate machine-cut			472
Wire	1880-1910		269
Architecture, Brick		23	
Architecture, Glass		1,021	
Flat/Window Glass	See below		1,015
Plate glass			6
Architecture, Electrical Insulator		2	
Architecture-Related		29	
Drain pipe			15
Drain cap			1
Metal pipe			4
Plaster			6
Mortar			2
Paint			Trace
Unidentified Stone			Amounts 1
Architecture, Other Hardware		55	
Hinge			7
Finial			4
Pintle			1
Latch			13
Screw			8
Lock			2
Bolt lock			1
Handle			1
Fireplace screen			15
Stove door			2
Unidentified			1
Architecture Group Total		2,538	

containers of unknown manufacture. These containers may have either been tin cans or metal canisters, but there were no distinguishing attributes that would permit a more precise classification.

ARCHITECTURE GROUP

The artifacts in this functional group are materials commonly used to construct buildings as well as relatively permanent materials placed in structures. Artifacts that are most commonly associated with construction include hand-wrought, machine-cut, and wire nails; window glass; and brick. Other materials include items such as ceramic insulators, drain pipe fragments, and door hardware. A total of 2,538 artifacts were assigned to this group (Table 6.4), which represents 33.7 percent of the total historic assemblage. These items included nails (n=1,408), window glass (n=1,015), plate glass (n=6), door hardware (n=29), brick (n=23), mortar (n=2), ceramic drain pipe fragments (n=15), screws (n=8), plaster fragments (n=6), metal pipe fragments (n=4), ceramic insulators for electrical wiring (n=2), and a drain cap (n=1).

Window Glass

A histogram was constructed for the 15FA290 window glass thickness measurements (Figure 6.27).

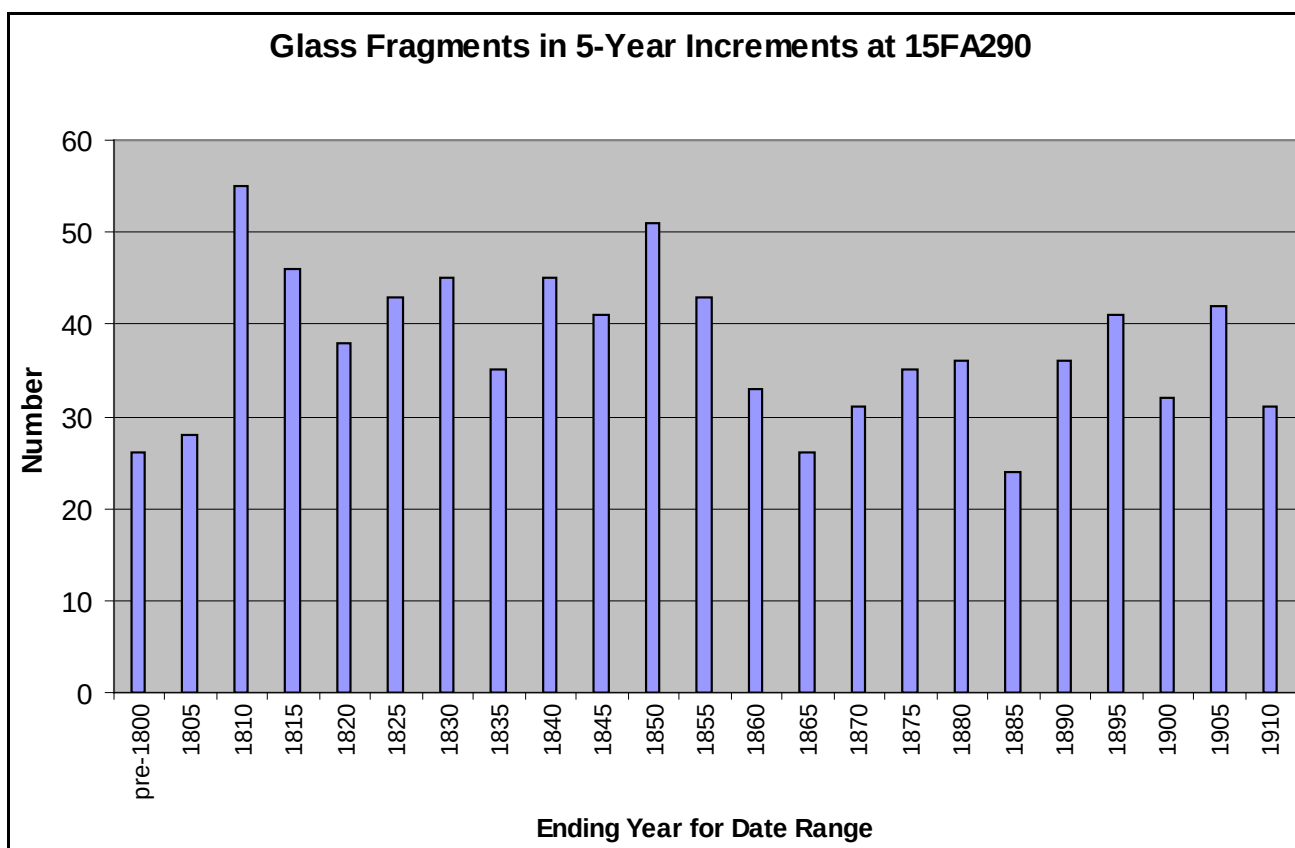


Figure 6.27. Frequency Distribution of Glass Fragments by Five-year Increment. Ending dates for increments are calculated using the Moir (1987) regression formula for window glass thickness.

The Moir formula (1987) was used to calculate the estimated manufacture date for each fragment, and those dates were grouped into 5-year increments, beginning at 1800 and continuing through 1910 (the estimated terminal date for occupation of 15FA290). Glass thicknesses that correspond to these date ranges vary from 1.04 mm (the 1800 date) to 2.34 mm (the 1910 date). Thicknesses less than 1.04 mm were grouped into a general “pre-1800” date range, while thicknesses more than 2.34 mm (n=108) were excluded. This histogram shows a fairly uniform distribution of glass fragments across the occupation span of the site residence. However, some information can be gleaned from this histogram and derivative date ranges. There is an initial minor mode in the distribution that corresponds to the 1806-1810 time range, and this increment has more glass fragments (n=55) than any other 5-year increment. The next possible minor mode corresponds to the 1846-1850 increment (n=51). This may indicate a significant repair or rebuilding episode during this age range. The other 5-year increments show little variation for the remainder of the time span of house use. If anything, the post-Civil War time span is marked by lower numbers of glass fragments than the pre-Civil War era, suggesting less frequent episodes of glass replacement. For the entire window glass assemblage that has thickness less than 2.34 mm from Feature 1 and associated contexts, the mean window glass thickness of 1.649 (n=863) corresponds to date of 1852, which is near the midpoint of the occupational date range for 15FA290 based on documentary data and other datable artifacts. Window glass recovered from specific features was used as one line of evidence for assigning features to a narrower date range within the total time span of house occupation. Moir regression date results obtained from individual features are discussed in the feature descriptions and feature temporal range assignments presented in Chapter 7.

Nails

A total of 1408 nails were recovered during these investigations at 15FA290 (Table 6.5), including

Table 6.5. Nail Penny Weight and Manufacturing Data for 15FA290. All proveniences have been combined.

Penny Weight	Manufacturing Method					Total
	Hand-wrought	Early Machine-cut	Late Machine-cut	Unidentified Machine-cut	Wire	
2d	2	5	21	2	6	36
3d	1	15	31	7	10	64
4d	5	4	30	7	13	59
5d	4	3	10	1	3	21
6d	8	3	25	5	10	51
7d	17	4	19	3	2	45
8d	20	3	34	1	42	100
9d	22	2	5	2	6	37
10d	3	1	16	2	20	42
11d	1					1
12d			1		1	2
16d			4		1	5
18d			1			1
20d			2		7	9
>20d					3	3
Fragments	71	41	233	442	145	932
Total	154	81	432	472	269	1408

hand-wrought nails (n=154), early machine-cut nails (n=81), late machine-cut nails (n=432), unidentified machine-cut nails (n=472), and wire nails (n=269). One horseshoe nail was also recovered, but that item is classified with Transportation functional group. As mentioned previously nails are a useful artifact class because the technology used to produce them is temporally diagnostic and they are commonly recovered at historic archaeological sites. Based on these recovered nails, especially the dominance of machine-cut and hand-wrought nails in the assemblage, these artifacts clearly point to an occupation that spans the 19th century.

Because nail technology is temporally sensitive, breaking the nail frequencies down by method of nail manufacture and penny weight provides some insight into not only house construction activities, but also dates for episodes of construction or repair. Based on documentary data and the recovered artifacts, we place the initial construction of the house at 15FA290 between the last years of the 18th century and the first decade of the 19th century. This period overlaps a major change in nail technology. The early years of the 19th century were characterized by the replacement of hand-wrought nails by early machine-cut nails. This overlap in manufacturing date ranges in the early 19th century is expressed in the current assemblage by recovery of substantial numbers of both nail types. For the purposes of our analyses, the hand-wrought and early machine-cut nails are grouped together, and collectively they represent the initial construction of the house. Recovery of these types of nails from individual features (aside from the rubble fill of the Feature 1 house) was another line of evidence indicating that a given feature was associated with the early period of site occupation. There is also evidence of additional episodes of house repair or rebuilding later in the 19th century, as shown by recovery of larger numbers of both late machine-cut nails and wire nails. These nail manufacturing methods are respectively indicative of construction or repair episodes that took place in the mid-19th century (between the 1830s and 1880) and in the late 19th to early 20th century. Again, recovery of nails of these types helped assign individual features to more specific episodes of site occupation.

Other Architecture Artifact Categories

Twenty-nine fragments of door hardware are present in the assemblage. These include a fragmentary



Figure 6.28. Selected Architectural Artifacts from Feature 1 at 15FA290. a) Strap hinge; b) Pintle with end bent backward by impact.

handle (n=1), and a pintle (n=1). Selected architectural remains are shown in Figure 6.28. The bolt fragment is from a sliding bolt with a metal base plate that would have been screwed or nailed in place. The actual bolt was not present in the assemblage, but based on the shape of the guides on the base plate, it appears to have been square, and the entire bolt was forged. The latch fragments are primarily from a portion of a spring latch and the hasps or lift bars of other latches. At least three of these latch fragments appear hand-wrought and likely date to the original construction of the Feature 1 house. The strap hinge fragments (Figure 6.28 a) are straight metal pieces that would have been used as window shutters; they are hand-forged and also probably date to the original construction of the house. One of the finials is a spear finial on a forged strap while the other two are machine-made, welded hook hinges that would have been used during the early 19th century (Priess 2000:52). The pintle (Figure 6.28 b) is a two-piece forged shank pintle that was used during the 19th century (Priess 2000:55). The end of the pintle is bent backward, indicating it likely impacted foundation stones when it was driven into the sill plate of the house. The lock fragments are parts of a rectangular plate stock lock. This lock would have been surface-mounted to a door and opened with a key. Stock locks were typically rectangular or trapezoidal until 1825 when a round housing for the mechanism was patented (Priess 2000:84). This stock lock also may have been part of the original construction hardware for the residence at 15FA290.

Two ceramic insulators used for electrical wiring were recovered from Feature 1 at 15FA290. These are ceramic knob insulators that were available in the Sears, Roebuck, and Company catalog in 1897. Other artifacts included in the Architecture group were ceramic drain pipe fragments, possible fragments of a metal pipe, and a drain cap. The drain pipe was a ceramic redware pipe with a coarse paste and salt glaze. The metal fragments may represent a pipe that was used as part of the plumbing within the house structure. Their highly fragmented and corroded state prevented further identification. The drain cap was a steel threaded cap with a brass drain plate that would have been screwed into place. It was probably manufactured after about 1890. Seventeen fragments of fireplace or stove hardware were present in this assemblage. These included 15 fragments of fireplace screen and 2 stove door fragments. They were highly corroded, and there were no distinguishing manufacturing marks on these items that could provide information as to manufacturer, age, or method of manufacture.

Table 6.6. Furniture Group Artifact Categories from 15FA290. All proveniences have been combined.

Artifact		Quantity	
Furniture, Furniture Parts		9	
	Drawer Pull		3
	Tack		2
	Escutcheon		2
	Caster		2
Furniture, Lighting		5	
	Lamp Burner		3
	Lamp Shade Arm		1
	Press Molded Glass Candlestick Base, Blue		1
Furniture, Miscellaneous		41	
	Ceramic Figurine Fragments		18
	Mirror Glass		6
	Enamel Chip		1
	Appliance Latch		1
	Handle		1
	Vase, Press Molded Glass	14	
	Clear		4
	Aqua		1
	White Milk Glass		9
	Furniture Group Total	55	

Only 23 brick fragments were retrieved from the excavations at 15FA290. Many more brick fragments were present in the rubble fill of Feature 1 and the fill of the cistern (Feature 24), but the decision was made to recover only a small sample. Very few complete bricks were observed, and most of these were from the rubble fill, which was relatively uninformative in terms of dating. However, all of the brick appears to be solid hand-made instead of machine made with holes. Of the collected fragments, two were partially vitrified or glazed, with one partially vitrified brick fragment having also been painted or plastered. The remaining brick fragments were small with no maker's marks evident. In addition to the brick fragments, two fragments of mortar were also collected. As with the brick, additional mortar fragments were encountered throughout the rubble fill of Feature 1, but these were not systematically collected.

FURNITURE GROUP

The artifact categories assigned to this functional group relate to the furnishings of a home. These items include parts of furniture, lamps, and decorative items placed around the home. Fifty-five artifacts were assigned to this functional group, which represent 0.7 percent of the total historic assemblage (Table 6.6). This assemblage included figurine fragments (n=18), press-molded glass candle holder and vase fragments (n=15; see Figure 6.24 a and e), mirror glass (n=6), drawer pulls (n=3), escutcheons (n=2; Figure 6.29 c), furniture tacks (n=2), casters (n=2; Figure 6.29 a), kerosene lamp parts (n=4), enamel chip (n=1), and a possible appliance latch (n=1; Figure 6.29 b). The figurine fragments were of molded, unglazed porcelain and were hand-painted. The lamp fragments included three burners and one lamp arm. One of the lamp burners was a Climax double wick lamp burner that was patented in 1890 (Russell 2003:239-240).

Lamp chimneys are normally common within 19th century Furniture group assemblages. None were identified in the 15FA290 assemblage, but given the presence of metal kerosene lamp parts, it is very likely that oil lamp chimneys were used at 15FA290. Their absence in the inventory can be ascribed partially to the effects of opportunistic sampling and partially to misidentification of these thin curved glass fragments as Kitchen group container glass. It is likely that some of the 1,177 glass fragments currently identified as container glass body fragments are actually oil lamp chimney fragments. The thin, clear or light green fragments are most likely to have been misidentified.



Figure 6.29. Selected Furniture Group Artifacts Recovered from Feature 1 at 15FA290. a) Caster with a glass wheel; b) Appliance latch; c) Brass escutcheon.

PERSONAL GROUP

Items in this group are those associated with the activities of individuals, including items relating to the use of medicinal products. A total of 94 artifacts (Table 6.7) were placed in this functional group (1.2 percent of the total historic assemblage), including coins (n=2), jewelry (n=4), doll fragments (n=4), ceramics (n=10), marbles (n=21), pipe fragments (n=4), personal hygiene items (n=14), a pocket knife (n=1), eyeglass fragments (n=2), a key (n=1), an ink well (n=1), slate pencils (n=4), medicine bottles, both whole and fragmented (n=21), and a glass syringe plunger (n=1).

The two coins recovered from Feature 1 at 15FA290 are both pennies. One (Figure 6.30 a) is a 1902 Indian Head penny, and the other (Figure 6.30 b) is an 1838 Matron Head large cent. These precisely dated artifacts provide information of the date range of occupation, and these dates are consistent with all other date ranges of artifacts discussed above. While the 1902 penny was recovered from the general rubble fill of West room of Feature 1, the 1838 large cent was recovered from Feature 42, a smaller short-term feature found intruding into the cellar floor of the Feature 1 residence. This specifically dated artifact allows Feature 42 to be associated with a narrow date range in the early to middle period of site occupation.

The jewelry in the assemblage consists of a locket or pendant (Figure 6.31), a brooch (Figure 6.32), a bead, and a portion of a clasp. The locket or pendant is gilt brass and oval in shape. The front was enameled with a decoration which could not be discerned due to corrosion. There does not appear to have been a hinge to open and close the piece; the two pieces were press-fitted. The contents probably would have been visible through the back which is a ring with some incised designs along the edge, while the interior consists of an oval ring encircling a crystal or glass bezel. The back also probably would have included another crystal or glass piece between which the contents, probably a lock of hair or possibly a cameo or photograph, were held. This locket was found in the Builder's Trench on the northeastern exterior corner of the house foundation.

Table 6.7. Personal Group Artifact Categories from 15FA290. All proveniences have been combined.

Artifact	Date Range	Quantity	
Personal, Personal Hygiene		18	
Toothbrush Fragments	1880-1910		4
Vulcanized Rubber Comb Teeth	1844-1910		7
Lice Comb			2
Compact Closure Edge			1
Chamber Pot Fragments			3
Powder Bottle Top			1
Personal, Toys		26	
Common Clay Marble			2
Blue Bennington Marble	1876-1910		7
Brown Bennington Marble	1876-1910		8
Glass Swirl Marble			3
Aggie Marble			1
Tea Set Plate			1
Doll Fragment			4
Personal, Ornamentation		4	
Brooch			1
Hair Pin			1
Locket			1
Bead			1
Personal, Medicinal		21	
Patent Medicine Bottle, Complete	1880-1910		1
Prescription Medicine Bottle, Complete			1
Prescription Medicine Bottle, Fragments			11
Medicine Bottle Fragments, Indeterminate			7
Syringe Plunger	Late 19 th C.		1
Personal, Smoking		4	
Salt Glaze Stoneware Bowl Fragment	Early-mid 19 th C		2
Molded Human Effigy Bowl Fragment	Early-mid 19 th C		2
Personal, Miscellaneous		21	
Coin	See below		2
Coin Bank Fragments	1875-1910		9
Eyeglass Lens			1
Eyeglass Frame			1
Pocket Knife			1
Pencil			4
Key			1
Jewelry Fastener Fragment			1
Ink Well	1880-1910		1
Personal Group Total		94	



Figure 6.30. Coins Recovered from Feature 1 at 15FA290. a) 1902 Indian Head cent; b) 1838 large cent.



Figure 6.31. Locket Recovered from Feature 1 at 15FA290. a) Reverse; b) Obverse.



Figure 6.32. Brooch Recovered from Feature 1 at 15FA290.

The brooch (Figure 6.32) is a simple brass circle with the remains of a thin metal pin that would have latched across the back. This brooch does not appear to have been decorated and may have been used to secure a shawl. The brooch was found in a backdirt pile from the mechanical excavation of the site. The bead is a clear glass bead with a drilled central hole, while the clasp portion is a fragment of a small hook. These two artifacts were both found in the general rubble fill of the house foundation.

Of the twenty-one marbles recovered, two were common clay marbles, fifteen were Bennington marbles, and four were machine-made glass marbles (Figure 6.33). Common clay marbles, or 'commies', are

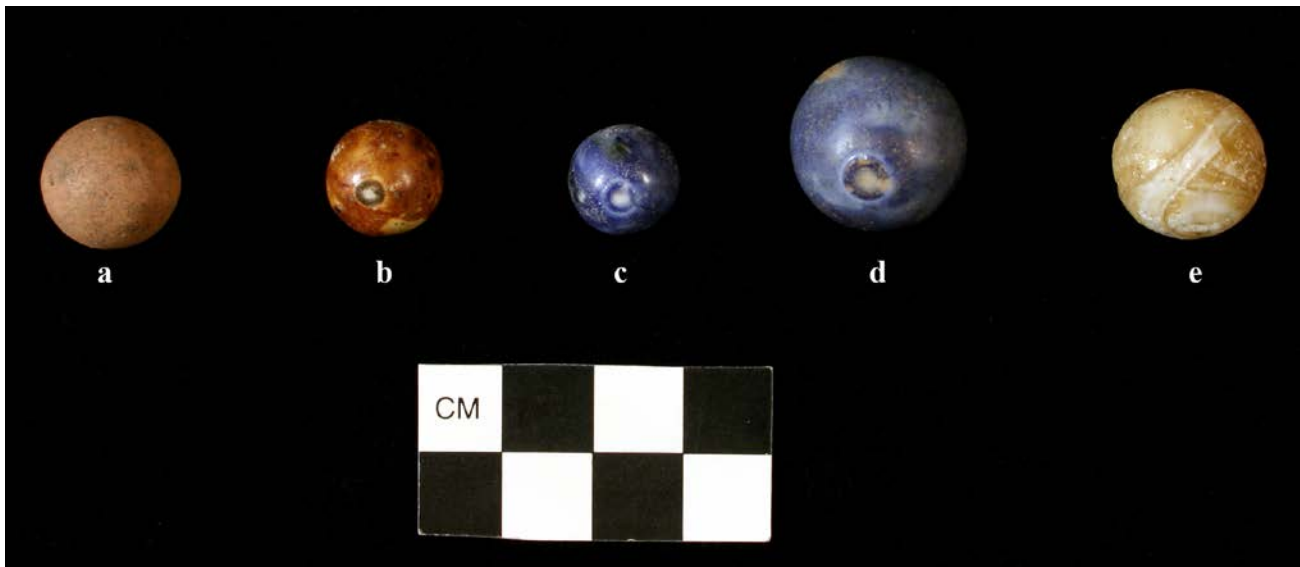


Figure 6.33. Examples of Marbles from Feature 1 at 15FA290. a) Common clay marble; b – d) Bennington marbles; e) Machine-made glass marble.

often present in sites dating from the colonial period to the 1920s (Carskadden and Gartley 1990). Bennington marbles, also called ‘crockers’, were manufactured from about 1876 to World War I but are not common in archaeological contexts until the 1890s (Carskadden and Gartley 1990). Machine-made glass marbles were first manufactured in 1902 and are still manufactured today (Carskadden and Gartley 1990). One common clay marble was found in Feature 51, which is assigned to the early to middle occupation phase of the site. A common clay marble was also found in Test Unit 9 north of the house foundation. The remaining marbles were found in the general rubble fill of the East, West, and North rooms of the house foundation.

The four doll fragments in the assemblage consist of porcelain appendages (feet and arms) and two fragments of porcelain doll faces (Figure 6.34). The doll appendages were recovered from Test Unit 13 in the West room, and the remaining doll fragments were from the general rubble fill of the East Room. The remaining ten ceramic items placed in the Personal group include a small porcelain plate from a child’s tea set and nine fragments of coin banks. The plate was found in the general rubble fill of the East room. The coin bank sherds (Figure 6.35) have a yellowware paste and a clear, green, or brown glaze. One of the larger sherds (Figure 6.35 a) is molded to resemble an animal ear and has a slot that was cut and glazed for inserting coins. These banks were molded to be ‘piggy’ banks. At least two different coin banks are represented in the assemblage based on glaze differences and the number of ear or tail moldings. However, they all show very similar styles of manufacture and are probably of similar age (late 19th to early 20th century). Two of these fragments were found in the West room fill while the remaining fragments were found in and around the East room fill.

Four fragments of smoking pipes were recovered from the 15FA290 excavations. These included two incomplete two-part composite pipes and two fragments of pipe bowls. The two-part composite pipes are both mold-made human effigy pipes with complete shanks and partially complete bowls (Figure 6.36 b-c). Both composite pipes have redware paste, with one pipe having a brown glaze and the other unglazed. Mold seams are prominent on the glazed pipe, while the unglazed pipe shows evidence of having its mold seams trimmed prior to firing. Effigy smoking pipes had become popular during the first half of the 19th century (Bradley 2000), and these fragments most probably date to that period. The unglazed effigy pipe was recovered from Feature 46 in the East room, which dates to the middle of the occupation sequence of the house. The glazed effigy pipe was found in Feature 51 and dates to the early to middle periods of site occupation. The other two fragments are undecorated stoneware pipe bowls, both of which were mold-made. Both stoneware fragments were recovered from the fill of the East room. None of the smoking pipes in the



Figure 6.34. Porcelain Doll Face Fragments from Feature 1 at 15FA290.



Figure 6.35. Personal Group Ceramics from 15FA290. a) Coin bank fragment with molded ear and glazed slot for coins at right margin; b) Coin bank fragment with stylized tail.



Figure 6.36. Selected Pipe Fragments from Feature 1 at 15FA290. a) Salt-glazed pipe bowl; b) Unglazed redware two-part bowl fragment; c) Glazed redware two-part bowl fragment.

15FA290 assemblage exhibit maker's marks, so further identification was not possible. Many local redware manufactories also produced smoking pipes in the early to mid-19th century.

Artifacts associated with personal hygiene in the 15FA290 assemblage (Figure 6.37) include fragments of a toothbrush (n=4; Figure 6.37 c), vulcanized rubber comb fragments (n=7), a hair pin (n=1), lice comb fragments (n=2; Figure 6.37 a-b), a powder can top (n=1), a circular closure that may be from a powder compact (n=1), and fragments of chamber pots (n=3). The toothbrush fragments are from the head of the brush and made of bone that has been painted green, with holes cut in the bone to hold bundles of bristles. The toothbrush was first patented in the United States in 1857, but mass production of such items did not begin until 1885 (Olmert 1996). These toothbrush fragments were recovered west of the brick cistern outside the house foundation. The vulcanized rubber comb fragments are comb tines and may have been used either to comb hair or to secure hair away from the face. The process for vulcanization of rubber was patented in 1844, and objects made from this material post-date that time (Anderson 1968). One of the tines was found in Feature 43 which is assigned on the basis of associated ceramics to the early to middle occupation phases of the site. The remaining comb fragments were found in the fill of both the East and West rooms. The hair pin is one-half of a bobby pin that would have been used to secure hair. This pin was found in Feature 50 in the East room, which dates to the middle to late periods of site occupation. The lice combs were made of cut bone and are highly fragmented. The circular closure is composed of a thin metal ring with a simple latch that would have joined the ring to its base; it may be the internal component of a cosmetic powder compact. The powder can top was made from tin and had a small, perforated opening with a screw cap top, which was not recovered. Both the closure and the can fragments were recovered in the general rubble fill of the house foundation. The chamber pot fragments are undecorated ceramic with a creamware paste and glaze. The fragments include two rims and one handle, and they appear to represent at least two separate vessels. One chamber pot was found in an early context, Feature 47, while the other chamber pot fragments were found in the general rubble fill of the West room.

Other artifacts in the Personal group included a portion of an eyeglass frame from a small pair of glasses, an eyeglass lens (from a different pair of glasses; Figure 6.38 b), a three- or four-blade pocket knife

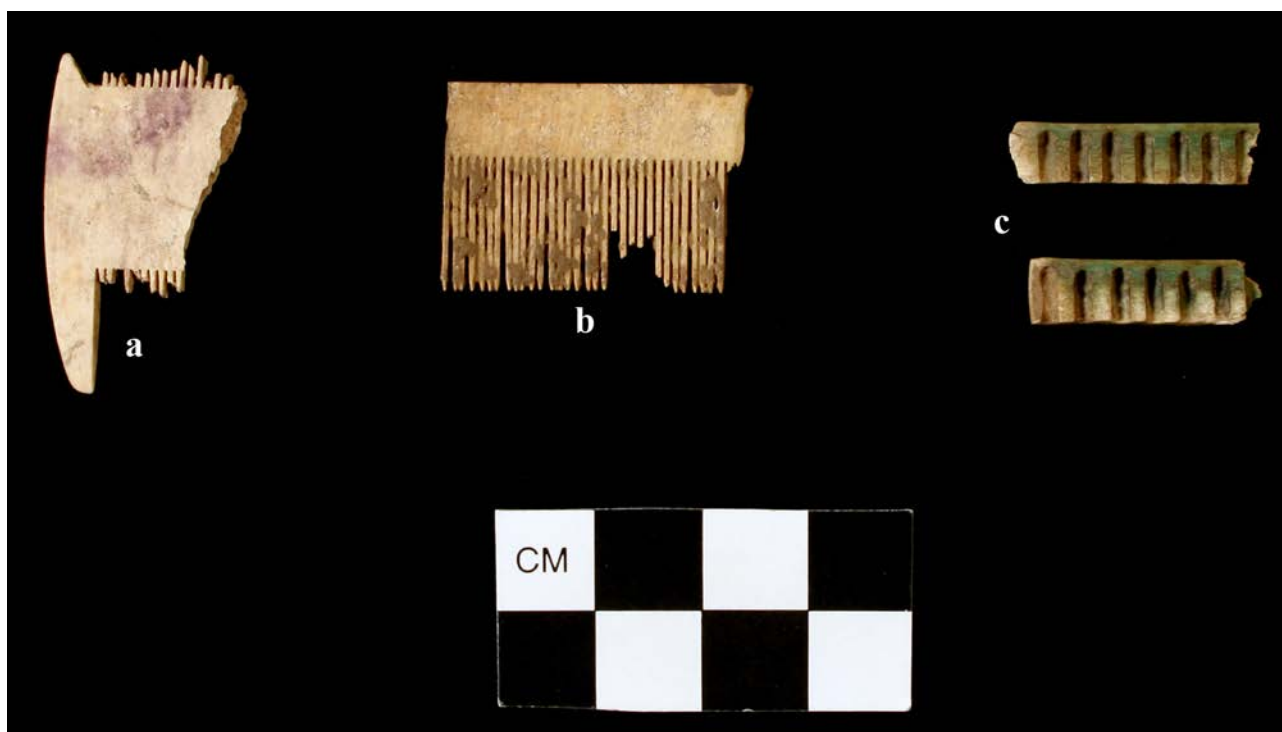


Figure 6.37. Personal Hygiene Items from 15FA290. a-b) Bone lice comb fragments; c) Toothbrush fragments.



Figure 6.38. Selected Personal Items from Feature 1 at 15FA290. a) Inkwell; b) Eyeglass lens; c) Pocket knife.



Figure 6.39. Patent Medicine Bottle from Feature 1 at 15FA290. Bottle is embossed panel-sided bottle sold by the T. A. Slocum Co. The word “Psychine” is embossed on the lower side panel (not visible in photo).



Figure 6.40. Glass Syringe Plunger from Feature 1 at 15FA290.

with bone panels on the outer casing (Figure 6.38 c), a key, slate pencil fragments, and a glass ink well (Figure 6.38 a). The ink well is aqua colored glass and was manufactured by a semi-automatic bottle machine; it dates from the 1880s to about 1910. The bottom of the ink well is embossed with “L.H. Thomas Co. Chicago” with “18/2” in the center. The L.H. Thomas Company manufactured ink in Chicago from the 1870s to the 1920s (Covill 1971). All of these items were recovered from the general rubble fill of the house foundation.

Twenty-one artifacts were considered to be related to medicine. This subgroup of the Personal group includes one complete Psychine patent medicine bottle, one complete prescription medicine bottle, 11 fragments of one prescription medicine bottle that likely refit, 6 fragments of indeterminate medicine bottles, and a glass syringe plunger. The Psychine medicine bottle (Figure 6.39) was embossed, “T.A. Slocum Co., Manfc. Chemists, New York London” with “Psychine” embossed on the side panel. Psychine was an alcohol-and-strychnine remedy for consumption (Adams 1905:50) and while it was initially manufactured in the late 1870s, it was not sold in embossed bottles until the 1880s (Fike 1987:178). The syringe plunger (Figure 6.40) was likely used in the late 19th century. Its presence, along with the mixture of patent medicine

Table 6.8. Artifacts in the Arms Group from 15FA290. All Proveniences have been combined.

Artifact	Date Range	Quantity	
Arms, Shell Casing		35	
Rim Fire	1855-1910	21	
0.22 Short			15
0.32 Short			3
0.32 Long			1
0.38			1
0.56			1
Center Fire		13	
0.32			2
0.38			1
0.44			1
12-gauge			9
Unidentifiable Casing	See below	1	
Arms, Lead Shot		3	
Arms, Gun Flints		3	
Arms Group Total		41	

and prescription medicine bottles, may indicate that one of the late-period site occupants had a chronic illness that was being treated through a combination of self-medication and professional medical assistance. All of these items were found in the general rubble fill of both the East and West rooms of Feature 1.

ARMS GROUP

The artifacts included in this functional group are associated with the making and using of firearms; this functional group accounts for 0.5 percent of the total historic assemblage (n=41). Artifacts assigned to this group (Table 6.8) include lead shot (n=3; Figure 6.41 a), rim-fire (Figure 6.41 b-e) and center-fire (Figure 6.41 f) shell casings (n=35), a French gun flint (n=1; Figure 6.42 a), and local chert artifacts likely reused as either gun flints or possibly as strike-a-lights (n=2; Figure 6.42 b-c).

The rim-fire shell casings include 0.22 caliber (n=15), 0.32 caliber (n=4), a 0.38 caliber (n=1), and 0.56 caliber (n=1) casings. Two of the 0.22 caliber and three of the 0.32 caliber casings were for Smith and Wesson revolvers (McKee and Mason 1980:78-79). The 0.56 caliber casing was a Spencer carbine rim-fire cartridge that was not fired (Figure 6.41 b; McKee and Mason 1980:78). Rim-fire ammunition was manufactured from approximately 1855 until the 1920s (Logan 1959).

The center-fire shell casings include 0.32 caliber (n=2), 0.38 caliber (n=1), 0.44 caliber (n=1), and 12-gauge (n=9) casings. Eight of the shell casings had discernable head stamps. These include a UMC 32, a UMC Co. Club No. 12, a UMC No. 12, a UMC Co. Arrow No. 12, a UMC Co. Nitro Club No. 12, a possible Remington Nitro Club, a Winchester Leader No. 12, and a possible Peters League. The Union Metal Company (UMC and UMC Co.) manufactured cartridges under that stamp from 1867 to 1911 (Steinhauer 2009). The Remington Company's head stamp was used between about 1890 and 1911, while the Winchester head stamp was used between 1866 and 1932 (Steinhauer 2009). The Peters head stamp was used between about 1887 and 1934 (Steinhauer 2009).

French gun flints were the most commonly used gun flints until about 1800 when English gun flints began to dominate the market (Kenmotsu 2000:344). However, French gun flints were still used into the 1830s when percussion caps quickly replaced flints as ignition mechanisms for firearms. The specimen from 15FA290 (Figure 6.42 a) is an imported French "honey-colored flint" gun flint, and it shows the wear patterns characteristic of mass-produced European gun flints—steep, crushed edges on opposite sides of a rectanguloid piece of chert that in turn shows evidence of being a medial segment of a longer prismatic blade. The other two probable gun flints are of interest due to the possible use of prehistoric artifacts by historic site



Figure 6.41. Arms-related Artifacts from 15FA290. a) Lead shot; b) Unfired Spencer cartridge; c – e) Spent rim-fire cartridges; f) Spent center-fire cartridge.



Figure 6.42. Gun Flints from 15FA290. a) French mass-produced gun flint. b-c) Prehistoric flakes made from Boyle chert that have been historically scavenged, modified, and reused as gun flints.

residents. They are Boyle chert flakes that likely were collected from the surrounding area, modified, and used as gun flints, or possibly as strike-a-lights. One specimen (Figure 6.43 b) is a reused biface thinning flake with crushing and a crescent-shaped snap fracture on the end opposite the bulb of percussion (the upper margin in Figure 6.42). Its use as a gun flint is somewhat equivocal and is based mainly on its shape and the

location of the crushing. The other specimen (Figure 6.42 c) more definitively exhibits attributes of gun flint use. This larger item is a secondary flake made from high-quality Boyle chert that has been modified on its left lateral edge to fit a gun lock. It also shows definite crushing and metal fragments embedded in the striking edge (upper margin in Figure 6.42). These attributes confirm its use as a gun flint, or possibly but less likely, as a strike-a-light. Due to the lateral edge modification and the rectanguloid shape, we favor the functional interpretation of these items as gun flints, rather than strike-a-lights.

It has been suggested that the size of the gun flint is indicative of the type and size of gun in which they were used. In the experience of one of the authors (SA) and in consultation with historic archaeologists and historic gun users, the collective opinion is that there is no correlation between gun flint size and firearm size. Gun flints were used until they were exhausted, and they become smaller with each use. The French gun flint shown in Figure 6.43 is most likely very small because it is an exhausted item, not because it was used in a small firearm such as a pocket pistol.

All three gun flints were recovered from within Feature 1, the residential foundation at 15FA290. Their recovery from interior house contexts strongly indicates that the early 19th century occupants of the house were collecting prehistoric materials from the vicinity, reusing them, and discarding them in secondary refuse contexts within the residential house. Their presence supports the argument (made in the previous section discussing the prehistoric assemblage) that many of the projectile points recovered from 15FA290 also may have been collected by the historic occupants of the house while engaged in farming, and later redeposited within or near the residence. Recycling of prehistoric chert artifact as gun flints by historic site residents is also consistent with the small size and exhausted condition of the high-quality French gun flint. Local materials were more likely to have been scavenged and recycled when the imported high-quality goods were exhausted.

ACTIVITIES GROUP

Artifacts placed in this functional group are related to activities conducted around a house or farm and included items such as tools or other hardware. Activities group artifacts number 209 and account for 2.8 percent of the total historic artifact assemblage from 15FA290 (Table 6.9).

Artifact categories within this group include graphite cores for dry cell batteries (n=2), bolts (n=11), nuts (n=7), washers (n=3), bucket and container fragments (n=22), chain segments (n=7; Figure 6.43 c), an eyed or Cotter pin (n=1), a punch, bar stock, and chisel set (Figure 6.44) found in close proximity (n=1 each), a hammer head (n=1), a file (n=1), a scissor handle (n=1), an internal component for a ratchet drill (n=1), a lawn mower blade (n=1), a clasp (n=1), bail hook (n=1; Figure 6.43 a), metal hooks (n=5; Figure 6.43 b), metal rings (n=5), springs (n=3), metal staples (n=12), and fragments of fence wire (n=119). Figures 6.43 and 6.44 show selected Activities group artifacts. Unfortunately, few of these artifacts could be assigned to specific date ranges, and those that could were almost always assignable to the later third of the occupational span of the site (1870s to 1910). Collectively, these artifacts would be expected to be recovered from any general residential household of this time span.

TRANSPORTATION GROUP

The Transportation group consists of artifacts related to domestic and farm-related transportation. The current artifact assemblage for this group (Table 6.10) includes horseshoes (n=7; Figure 6.45 a), horseshoe nails (n=2), possible horse tack buckles (n=3), a heel spur (n=1; Figure 6.45 c), a stirrup (n=1; Figure 6.45 b), and a whiffletree carriage bolt (n=1). Fifteen artifacts were placed in this functional group, representing 0.2 percent of the total historic artifact assemblage. Figure 6.45 shows selected Transportation group artifacts.

Table 6.9. Artifacts from the Activities Group. All Proveniences have been combined.

Artifact	Quantity	
Activities, Metal Tools	46	
Bar Stock		1
Chisel		1
Punch		1
Hook		5
Ratchet Drill Fragment		1
Scissor		1
Bucket		19
Chain		7
File		1
Clasp		1
Chaining Pin		1
Hammer		1
Ring		5
Bail Hook		1
Activities, Machinery Related	6	
Battery Core		2
Spring		3
Lawn Mower Blade		1
Activities, Miscellaneous	157	
Bolt		10
Nut		7
Staple		12
Metal Strap		1
Metal Container		3
Washer		3
Eyed Bolt		2
Wire (Fence)		119
Activities Group Total	209	



Figure 6.43. Activities Group Artifacts from 15FA290. a) Bail handle; b) Hook; c) Chain segment.



Figure 6.44. Punch (a) and Cold Chisel (b) Set from Feature 1 at 15FA290.

Table 6.10. Artifacts from 15FA290 Assigned to the Transportation Group. All Proveniences are combined.

Artifact		Quantity	
Transportation, Horse Related		14	
Horse Shoe			7
Horseshoe Nail			2
Spur			1
Stirrup			1
Tack Buckle			3
Transportation, Carriage Related		1	
Whiffletree Bolt			1
Transportation Group Total		15	



Figure 6.45. Transportation-related Artifacts from Feature 1 at 15FA290. a) Horseshoe; b) Stirrup; c) Heel spur.

Table 6.11. Clothing Group Artifact Categories Recovered from 15FA290. All proveniences are combined.

Artifact	Date Range	Quantity	
Clothing, Buttons		67	
Prosser	1840-1910	26	
4-hole			25
2-hole			1
Copper Alloy/Metal		17	
Stamped Disc	See below		13
Domed			2
Molded			1
Gilded Disc			1
Bone	1800-1840s	7	
4-hole			5
5-hole			2
Glass		2	
Domed Black Glass			1
Unidentified Glass			1
Vulcanized Rubber	1851-1910	1	
Shell	1800-1840s	13	
2-hole			7
4-hole			6
Unidentified Material		1	
Clothing, Fasteners		24	
Buckle	See below		12
Rivet			8
Snap			2
Hook			1
Eye			1
Clothing, Footwear		21	
Shoe Grommets			13
Heel			1
Misc. Shoe Body Fragments			7
Clothing Group Total		112	

CLOTHING GROUP

Artifacts placed in the Clothing group are associated with clothing, shoes, and clothing fasteners such as buttons and buckles. One hundred twelve items were placed in this group, comprising 1.5 percent of the total artifact assemblage from 15FA290 (Table 6.11). Artifact categories within the Clothing group include buttons (n=67; Figures 6.46 and 6.47), buckles (n=12; Figure 6.48), clothing fasteners (n=11), and shoe fragments (n=21).

The button types include cut bone (n=7; Figure 6.46 b, f), stamped metal disc buttons (n=15; Figure 6.46 c, j), glass buttons (n=2), a vulcanized rubber button (n=1; Figure 6.47), a molded metal button (n=1), Prosser molded glass buttons (n=26; Figure 6.46 d, h), cut shell buttons (n=13; Figure 6.46 a, e, i), and one button made of unidentified material (n=1). The bone and shell buttons in this assemblage are likely the oldest and would have been common from the early 1800s until the 1840s when factory-made buttons became widely available and inexpensive. Shank types for the stamped disc buttons include cone and wire shanks (n=3), common from the 18th to the early 19th century, omega shanks (n=2), common from 1800 on, and an alpha shank (n=1), common from approximately the 1770s to 1800 (Aultman and Grillo 2003). The vulcanized rubber button (Figure 6.48) was manufactured after 1851 when the vulcanization process was initially used for button manufacture (Luscomb 1967), and the Prosser buttons were manufactured after 1840 (Sprague 2002).

These buttons would have been used on a variety of garments. The metal and rubber buttons would have been preferred for clothing made of a heavier fabric, such as that used in overcoats and jackets, which



Figure 6.46. Selected Buttons from Feature 1 at 15FA290. a) Fish-eye shell button; b, f) Bone buttons; c) Brass button; d) Molded Prosser button; e, i) Shell buttons; g, j) Copper or brass buttons; h) Hand-painted Prosser button.



Figure 6.47. Goodyear Vulcanized Rubber Button from Feature 1 at 15FA290. Both faces are shown.



Figure 6.48. Suspender Buckles from Feature 1 at 15FA290.

would have been worn primarily by men. The remaining Prosser, shell, and bone buttons were suitable for lighter-weight garments, such as shirts, blouses, and under-garments. These buttons would have been used on the clothing of both men and women, and determining which gender would have used these buttons is difficult. However, Prosser buttons with molded designs would have been more commonly used on women's clothing; there is one example of this type of button in this assemblage (Figure 6.46 d).

Using buttons for dating purposes can be difficult. Buttons were often reused on different garments or saved for replacing lost buttons at a later date (Luscomb 1967). The dates of the buttons present in this assemblage approximate the span of occupation for 15FA290. One stamped metal disc button was recovered from an early occupation feature, Feature 5. A mix of Prosser molded, bone, stamped metal disc, and molded metal buttons was recovered from Features 37, 40, 41, 46, and 50, which are assigned to the middle segment of the 15FA290 occupation span on the basis of other artifacts. The remaining buttons were derived from the rubble fill of the house foundation and cannot be assigned to a specific occupation segment.

Of the twelve buckles in the assemblage, five were from suspenders (Figure 6.48) with one buckle having a maker's mark, "Nat. Susp. Co. Pat. 1866". The miscellaneous clothing fasteners included hook and eye pairs (n=2), rivets (n=6), a snap (n=2), and one fastener of unknown type. The shoe parts were highly fragmented, and little other identification was possible. However, all shoe parts are made of leather rather than rubber or synthetic material.

FAUNAL GROUP

Items assigned to the Faunal group consist of animal bone, egg shell, and mussel shell (n=1,153; 15.3 percent of the total historic assemblage). Faunal remains were recovered from a variety of contexts within Feature 1 and its immediate vicinity. They are either directly associated with the house's occupants or represent commensal use of the structure by small animals. Of 193 excavation contexts, 80 produced faunal remains. However, many of these contexts were heavily disturbed and temporally mixed, probably by the same commensal animals whose bones were recovered. Detailed faunal analyses were restricted to material from contexts that could be assigned to a specific temporal segment of the site's occupation span. Descriptions and results of faunal analyses are described in detail in Chapter 9.

Table 6.12. Artifacts from the Unassigned Materials Group. All Proveniences have been combined.

Artifact		Quantity	
Unassigned, Fuel Related		51	
	Charcoal		28
	Charred Wood		12
	Coal		9
	Wood		2
Unassigned, Miscellaneous Metal		337	
	Metal Strap		4
	Unidentified Copper Object		1
	Unidentified Metal		332
Unassigned, Unidentifiable Object		8	
	Metal Cone		1
	Unidentified Plastic		3
	Slate		1
	Unidentified Tool		1
	Nutshell		2
Yellow Pigment			Trace Amounts
Red Pigment			Trace Amounts
	Unassigned Group Total	396	

UNASSIGNED MATERIALS

Miscellaneous artifacts that could not be placed into specific and analytically useful functional categories, were considered unidentifiable, or were noncultural in origin were placed in this group. A total of 396 artifacts were assigned to this group, representing 5.5 percent of the total historic artifact assemblage from 15FA290 (Table 6.12). Items placed within this group include unidentifiable metal (n=337), charcoal (n=28), charred wood (n=12), coal (n=9), wood (n=2), and unidentifiable objects (n=8). As can be seen, most of the materials considered functionally unassigned consist of corroded fragments of metal and fuel of various kinds. In addition to these objects, yellow and red pigment was recovered during excavations, and these mineral samples are also included in the unassigned materials. This pigment was qualitatively analyzed, and the results are discussed in detail in Chapter 9.

ASSEMBLAGE INTERPRETATIONS AND ARTIFACTUAL SIGNATURES OF SPECIFIC PERIODS OF SITE OCCUPATION

The historic artifacts recovered from the present investigations generated an assemblage that represents a temporal span from the initial occupation of the site near the turn of the 19th century through its abandonment in the early 20th century. The date range indicated by this artifact assemblage is almost completely consistent with the archival and documentary records for the site, and only one artifact was recovered that dates completely outside the temporal range of the house occupation (a fragment of yellow solarized container glass, manufactured between about 1914 and 1930). Unfortunately, the large majority of the artifacts recovered from 15FA290 are from physically and temporally mixed contexts, and the artifacts from these contexts (see discussions and tables in Chapter 7) often represent the entire temporal span of just over 100 years of site use. However, excavations also revealed intact contexts that contained artifacts that could be dated to narrower temporal segments within the general 100-plus years of site occupation. These segments are defined here and are referred to as the Early segment, (dating from approximately 1800 to the 1830s), Middle segment (1830s to 1870s), and Late segment (1870s to 1910). Based on mixed subassemblages, some broader temporal spans were also identified that combine either Early and Middle segments (1800 to 1870s) or Middle and Late segments (1830s to 1910).

The authors fully acknowledge that there are indistinct temporal ranges for artifact manufacturing dates and that date ranges for multiple artifact categories are rarely fully coordinated. However, some means of assigning specific feature and excavation contexts to narrower temporal segments of site use was necessary if any of the research questions outlined in Chapter 4 were to be addressed. The authors devised methods of assigning specific contexts to more narrowly defined site occupation segments. Four commonly recovered artifact categories provide the most common and most consistent temporal information for most contexts. These include Kitchen group refined ceramics that have specific paste, decorative styles, and manufacturing attributes; container glass finishes and (to a lesser extent) bases; nails that exhibit specific manufacturing attributes; and dates calculated from window glass thickness. To these four can be added specific date ranges derived from artifacts that exhibit very specific and precisely datable decoration or manufacturing techniques, such as a maker's mark with a limited temporal range. However, most of these additional time-specific artifact categories are relatively rare and were derived primarily from general rubble fill contexts rather than from specific feature or depositional contexts within the site. Their recovery from mixed/disturbed contexts is not particularly useful even if the dating is very precise.

Finally, all of the assignments of specific features or excavation contexts to site occupation segments are based on the *preponderance* of the artifacts recovered from each context. An occasional item that is not temporally consistent with the majority can easily be accounted for by two characteristics of the site and associated contexts, both of which will become clearly illustrated in the discussions of individual feature and excavation contexts presented in Chapter 7. First, 15FA290 was an active residential and farm site for more than 100 years, and the human activities related to site occupation can easily result in displaced, reused, and modified artifacts that in turn create temporal variability in the assemblage from any given feature or depositional context. Second, rodent burrow activities have disturbed many of the features and the general fill within Feature 1, creating displaced artifacts and temporally mixed artifact assemblages. While every effort was made to excavate rodent burrow fill separately from more intact feature or unit/level excavation sediments, there is inevitably mixture of disturbed and intact deposits. This is perhaps best reflected in the recovery of small-bodied faunal remains (mice, rats, snakes, etc.) from many of the excavated feature contexts (see Chapters 7 and 9). For these reasons, few of the artifact assemblages from specific features or excavation contexts completely and unequivocally produced artifacts representing any single occupational segment. For our analyses, we relied on the preponderance of artifacts as well as characteristics of the excavation contexts and stratigraphic placement to make temporal assignments of features to occupation segments. With these cautionary notes in mind, the artifacts that characterize and differentiate these temporal segments of the 15FA290 occupation are discussed below. Figure 6.49 graphically shows temporal ranges for selected artifact categories. Assignment of specific features and excavation contexts to segments of the site chronology is presented at the end of Chapter 7, after discussion of individual excavation contexts, features, stratigraphy, and the associated artifact assemblages derived from them.

EARLY SEGMENT OCCUPATION (1800s-1830s) SIGNATURES

Ceramic types that characterize the Early segment of site occupation include creamware; pearlware with various decorations such as transfer prints, mocha, dense Old Blue transfer prints, and edge-decoration with embossed patterns; early whiteware, especially items decorated with flow blue or black transfer prints, and redware. Creamware was manufactured from about 1760 to 1820, and pearlware was manufactured from approximately 1780 to 1840. Mocha-decorated pearlware was manufactured from 1795 to 1840 and shell-edge pearlware with embossed patterns was manufactured from about 1823 to 1835. Black transfer-printed whiteware was some of the earliest transfer-printed whiteware and it was manufactured between about 1825 and 1855. Redware was manufactured from about 1750 to 1870, with its greatest popularity before 1850.

Container glass attributes that are most diagnostic of the Early segment of site occupation are the Rickett's Company mold bottle base, emponilled bases, and rough applied bottle lips. The Rickett's base was manufactured from 1821 to the 1840s. The use of rough applied lips on bottles and other glass containers dates from the 1820s to the 1870s. Earlier finishes were generally hand applied, but none were recovered from

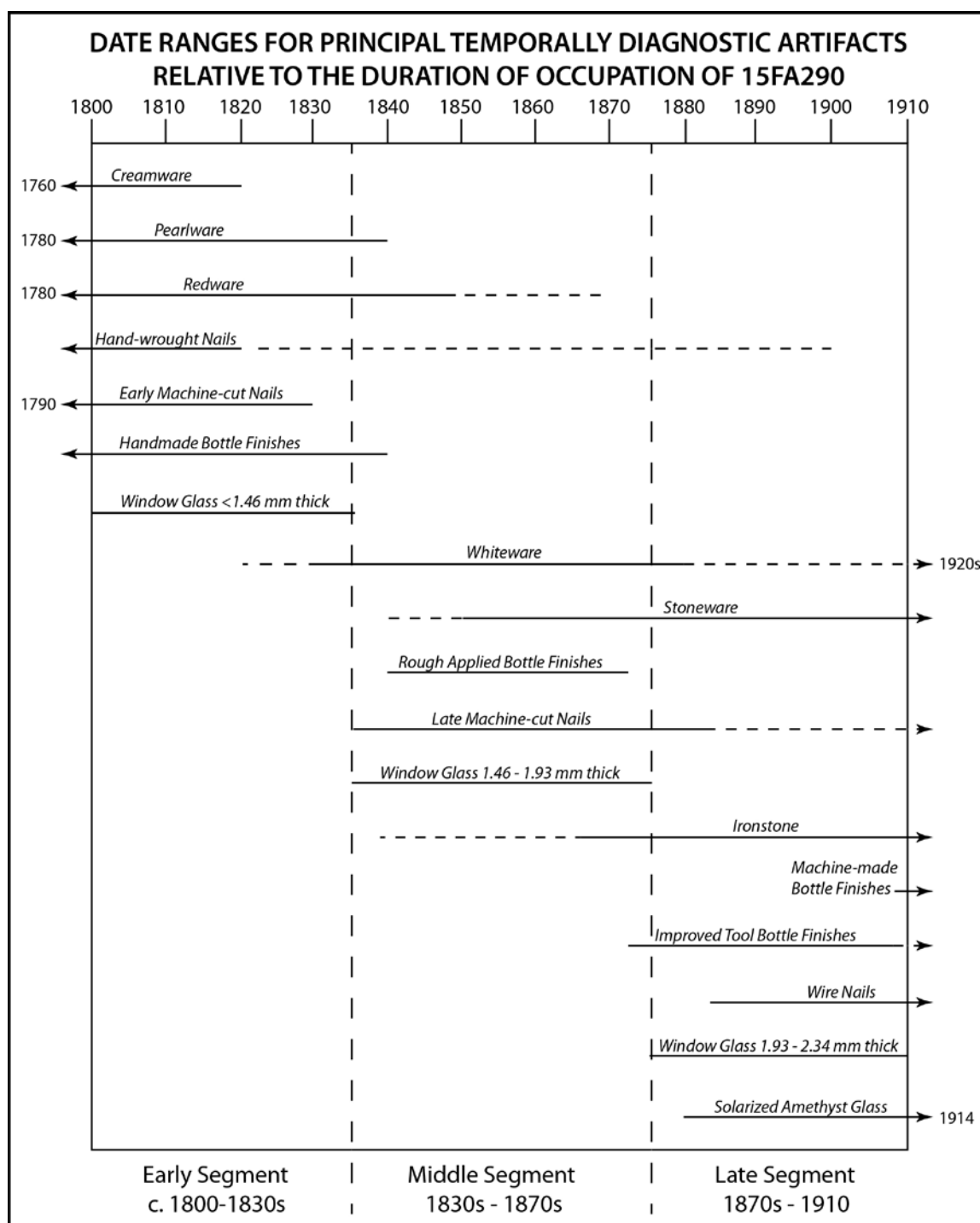


Figure 6.49. Date Ranges of Major Classes of Temporally Diagnostic Artifacts. These classes as well as specific datable artifacts are the basis for assigning individual excavation contexts to the Early, Middle, and Late occupation segments of 15FA290.

the excavations at 15FA290. Empontilled bases were manufactured between about 1800 and the 1850s and are here considered more characteristic of the Early segment than of later segments of site use.

Nail types, while temporally sensitive to some degree, do not change at the same time and rate as ceramic manufacturing attributes, decorative styles, or container glass manufacturing techniques. Nail types characteristic of the Early segment of occupation would include hand-wrought nails (except horseshoe nails)

and all styles of early machine-cut nails; these early machine-cut nails were manufactured between about 1790 and the 1830s. Late machine-cut nails began to be manufactured in the 1830s, and continued to be made into the 1880s, at which time they were largely but not entirely replaced by wire nails. Presence of late machine-cut nails alone is not sufficient to assign a context to either the Middle or Late segment of site use. If a feature produced a mixture of early and late machine cut nails, it might be considered an Early segment feature, potentially in use between 1800 and the 1830s or a Middle segment feature in use between the 1830s and 1870s. However, other datable artifact classes would also be considered in assigning a feature to an occupation segment.

Window glass fragments that are generally less than about 1.46 mm thick would have been manufactured during the time span of the Early segment occupation. Dates for window glass and the associated thicknesses related to specific site occupation segments are derived exclusively from the Moir (1987) regression formula.

MIDDLE SEGMENT OCCUPATION (1830s TO 1870s) SIGNATURES

Artifacts and manufacturing methods that are signatures of a Middle segment of site occupation (1830s to the 1870s) can also be identified (Figure 6.49). Of primary importance is the presence of whiteware as the dominant ceramic ware. Though whiteware was manufactured initially in the Early segment (beginning around 1820), and it continued to be manufactured into the Late segment (well into the 20th century), whiteware is most characteristic of the mid-19th century. Contexts that produced exclusively whiteware or that had only a small number of sherds assigned to earlier (creamware or pearlware) or later (ironstone) ware types were generally assigned to the Middle segment of site occupation. Redware continues to be made into the Middle segment, but it is being replaced by stoneware by the 1850s. Container glass also exhibits manufacturing attributes that can be linked closely to the Middle segment of site use. During this time span rough applied finishes were most common, though improved tool finishes may also be present toward the end of the Middle segment time range. Container glass bases are more variable during this period and include empontilled, cup mold, key mold, and turn mold bases.

Late machine-cut nails are the dominant nail type for the Middle segment, though their use begins prior to the Middle segment and continues afterwards. If only late machine-cut nails were present in a context, this was interpreted as evidence that the context was associated with the Middle segment of site use at 15FA290. Window glass with thickness between 1.46 and 1.93 mm corresponds to the 1835-1875 date range.

LATE SEGMENT OCCUPATION (1870s TO 1910) SIGNATURES

Artifacts and manufacturing methods that are characteristic of the Late segment of site occupation (1870s to 1910) were also identified (Figure 6.49). The main ceramic signature for this temporal period is the presence of ironstone as the majority ceramic ware in a given context, particularly the thicker molded or paneled ironstone varieties that are otherwise undecorated. Though ironstone was manufactured as early as the 1840s, its peak in popularity is in the late 19th and early 20th centuries, corresponding to the Late segment of site occupation for 15FA290. Contexts that produced exclusively ironstone or that had only a small proportion of sherds assigned to earlier ware types were assigned to the Late segment. Stoneware is the predominant coarse earthenware type, especially vessels that have white Bristol slip. Container glass attributes that are definitive of the Late segment include bottle manufacturing with the semi-automatic or automatic bottling machines, presence of machine-made finishes or improved tool finishes, and solarized amethyst glass.

Late machine-cut nails continue to be made and used in the Late segment, but the presence of wire nails is a definitive indicator of Late segment use of a feature or depositional context. Window glass thickness between 1.93 and 2.34 mm corresponds to the 1875-1910 date range.

SUMMARY OF MATERIALS RECOVERED

While there is some mixing within specific feature or excavation contexts, the artifacts recovered from 15FA290 generally support the attributed occupation dates derived from archival and documentary records. This assemblage points to the construction of the house in the very early years of the 19th century with a definite construction date no later than 1818 or 1819. Documentary data indicate the Feature 1 residence was almost certainly constructed and occupied by 1803, and the artifact assemblage does not contradict the earlier construction date. For the purposes of discussion, we have rounded the initial occupation date to 1800, with the understanding that it may vary slightly around this date. The artifact assemblage also indicates that occupation of the house was continuous throughout the 19th century until the house was abandoned and razed in the early years of the 20th century. For our purposes we have assigned a terminal date of 1910 for occupation of 15FA290. There may have been short periods when the house was unoccupied during the 19th century, but any such periods do not appear to have been of sufficient duration to create noticeable gaps in the artifact assemblage. Overall, the historic artifact assemblage is consistent with the date range for the house's construction and occupation that is documented in historic records (discussed in detail in Chapter 3).

Of most importance for later analyses is the fact that specific excavation contexts, depositional strata, and features can be assigned to specific temporal ranges that represent relatively discrete segments of the occupational time span of 15FA290. These contexts and the associated artifact subassemblages are discussed in detail in Chapter 7, which concludes with assignment of specific features and excavation contexts to various segments of the site occupation. Unfortunately, the artifacts recovered from contexts that were thoroughly mixed, such as the rubble fill of Feature 1, could not be assigned to one of these narrower temporal segments. However, many of the individual features identified within and around Feature 1, the residential structure at 15FA290, could be assigned to either Early, Middle, or Late segments of site occupation, or to combined Early-Middle or Middle-Late segments. These features and the artifacts derived from them provide avenues of analysis that permit the research goals identified in Chapter 4 to be addressed with some degree of success. For this reason, the following analytical and interpretive chapters (Chapters 8 and 9) focus almost exclusively on materials recovered from these more tightly dated contexts.

CHAPTER 7

RESULTS OF FIELD WORK

A variety of recovery techniques was employed during the course of Phase II/III investigations at 15FA290, including shovel testing, hand excavation of test units, mechanical removal of plow zone from block areas and rubble fill from the interior of Feature 1, and hand excavation of features. This chapter presents the results of these activities. These results are organized chronologically, beginning with the shovel testing program, and progressing through the test units, mechanical excavations, and feature excavations. The following discussion includes descriptions of the location, stratigraphy, and artifacts recovered from each collection unit (e.g. shovel test, test unit, mechanically stripped block, feature, etc.). This discussion focuses on the historic occupation of 15FA290. The prehistoric materials are not discussed here unless they relate to the later historic occupation of the site. Additional interpretations are presented regarding the depositional context in which artifacts, intact deposits, and features were identified, and the temporal segment of site occupation to which specific features or other excavation contexts can be assigned.

SHOVEL TESTS

This Phase II/III data recovery began with a limited shovel testing program designed to investigate areas with a high probability for having intact subsurface deposits, based on observations made during the Phase I survey. During Phase I survey, two shovel tests, ST246 and ST305, placed on a relatively level shoulder landform produced profiles indicating preservation of intact deposits below plow zone (Byron et al. 2007:41-44, and Figure 6.3, left). These shovel tests profiles showed 12 cm of dark yellowish brown silt loam plow zone underlain by a dark brown (10YR3/3) silt loam. They were each excavated to a depth of 50 cm, but no subsoil was identified. A relatively high density of artifacts was documented that included window glass, coal, brick fragments, machine-cut nails, and ironstone (Byron et al. 2007:Table 6.1). Artifacts were recovered from both soil strata. These shovel tests are shown on Figure 7.1, which also shows the locations of the various field tasks undertaken during the Phase II/III investigations (see also Figure 5.1).

Based on this potential for intact deposits on the upper shoulder, three transects of six shovel tests each were excavated across this landform at approximately 5-m intervals (Figure 7.1). Of these 18 shovel tests, 11 were positive for historic artifacts. The typical soil profile showed 20-30 cm of silt loam plow zone that varied in color from very dark grayish brown (10YR3/2) to dark yellowish brown (10YR4/4) to brown (10YR4/3), underlain by a dark yellowish brown (10YR4/4) silty clay subsoil. Variation in color of the plow zone is likely due to observational differences among individual field workers and to minor soil variation across the site; color and textures of plow zones documented in test units were more uniform. Throughout the shovel tested area, the interface between the plow zone and subsoil was diffuse, but it was distinguishable at depths between 18 and 34 cm below surface, with most transitions occurring between 25 and 30 cm. These profiles (a representative profile is shown in Figure 7.2) are similar to those described for most of the initial shovel tests at 15FA290. None of the shovel tests on the 5-meter grid had deposits as deep as those recorded for ST246 and ST305. The shovel tests conducted for the Phase II/III work indicate that the potentially intact deposit identified earlier was most likely the upper portion of the subsoil that included artifacts that were transported through bioturbation processes into the upper part of the subsoil. The only anomalous shovel test profile for those on the 5-meter grid was T3/H1 (see Figure 7.1), which had a thin humus layer underlain by disturbed yellow/red clay. This shovel test was adjacent to a farm road, and the anomalous profile is most likely due to road disturbances.

Artifacts recovered from shovel tests included prehistoric lithic flakes, late machine-cut nails, wire nails, window glass, coal, container glass, redware, stoneware, pearlware, creamware, whiteware, and ironstone (Table 7.1). These materials date from all periods of the site chronology, which generally spans the 19th century, and all were recovered from the plow zone. However, only 36 items were recovered, making an average of 2 items per shovel test, which is relatively low. Shovel test T2/H4 was the most productive with

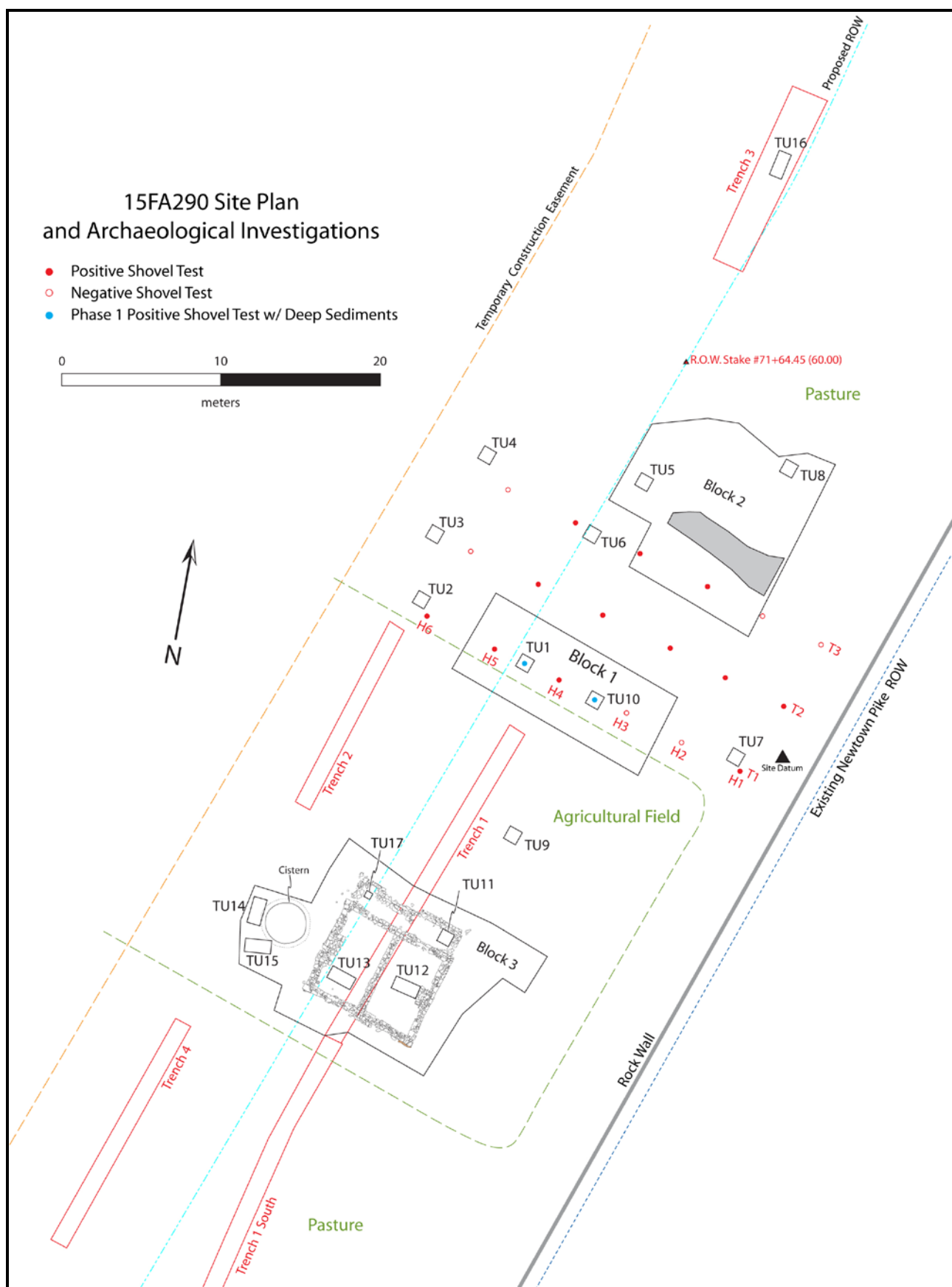


Figure 7.1. Site Plan and Archaeological Investigations at 15FA290. Only major features are shown.

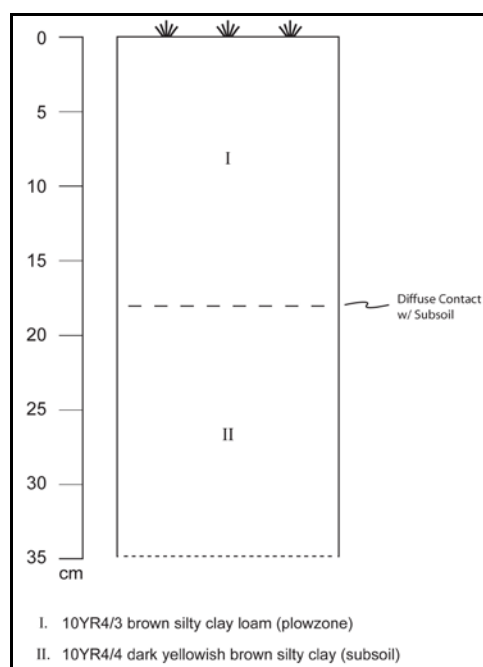


Figure 7.2. Representative Shovel Test Profile for Phase II/III Investigations at 15FA290. Shown is T1/H6.

Table 7.1. Historic Artifacts Recovered from Phase II/III Shovel Tests at 15FA290.

Shovel Test	Group	Material	Description	Vessel Portion	Comments	N
T1/H4	Architecture	Nail	Late machine-cut, 6d			1
		Nail	Late machine-cut, 8d			1
	Kitchen	Container glass	Clear	Body		1
T1/H5	Architecture	Brick			Handmade	1
		Nail	Wire, 8d			1
	Kitchen	Ceramic	Whiteware	Body	Burned	1
		Ceramic	Pearlware, blue transfer print	Body		1
		Ceramic	Ironstone	Body		1
	Fuel	Coal				1
T1/H6	Architecture	Window glass				2
	Kitchen	Ceramic	Stoneware, salt-glaze	Body		1
		Ceramic	Creamware	Body		1
T2/H1	Kitchen	Container glass	Clear	Body	Embossed design on fragment	1
T2/H2	Kitchen	Ceramic	Stoneware, Bristol glaze	Base		1
2		Container glass	Clear	Body		1
T2/H3	Architecture	Nail	Late machine-cut			1
	Kitchen	Ceramic	Whiteware	Body	Burned	1
T2/H4	Architecture	Brick			Handmade	1
		Nail	Late machine-cut			1
		Nail	Late machine-cut			1
		Nail	Late machine-cut			1
		Nail	Wire			1
		Window glass				1
	Kitchen	Ceramic	Creamware	Body		1
		Ceramic	Whiteware	Body		1
	Misc.	Coal				2
T2/H5	Architecture	Nail	Late machine-cut			1
T3/H3	Kitchen	Ceramic	Porcelain	Rim/Base	European porcelain	1
		Ceramic	Ironstone	Base		1
		Ceramic	Redware	Body		1
T3/H4	Architecture	Window glass				2
T3/H5	Architecture	Nail	Late machine-cut, 6d			1
	Kitchen	Ceramic	Whiteware	Body	Burned	1
TOTAL						36

10 artifacts. Overall, the grid of shovel tests identified no artifact concentrations or intact historic midden deposits and therefore provided little guidance for subsequent work.

INITIAL TEST UNIT EXCAVATIONS

Based on the Phase I survey data, results from the shovel test grid, and topographic and landform observations, ten 1-x-1-m test units were excavated (Figure 7.1). These units were opportunistically placed in areas that were more level topographically or showed potential for intact deposits or higher artifact density. These areas included the shoulder of the landform as well as a small bench positioned just downslope (north) from the shoulder. This section describes each test unit including its location, stratigraphic information, and the artifacts recovered.

TEST UNIT 1

Test Unit 1 was placed on the downslope bench near the location of the original ST 305, which had shown potential for intact deposits. Two strata were identified in this test unit, and these strata are replicated in the other nine initial test units. Stratum I was the plow zone and consisted of a brown (10YR4/3) clayey silt loam that extended to a maximum depth of about 26 cm below surface. This stratum was removed as a single level (Level 1), producing 126 historic artifacts (Table 7.2). Diagnostic artifacts included redware, yellowware, stoneware, creamware, whiteware, ironstone, porcelain, amethyst solarized container glass, applied finish container glass, and late machine-cut nails. These materials date from the late 18th century through the mid to late 19th century. Additionally 10 fragments of bone from large mammals were recovered.

Stratum II consisted of a brown (7.5YR4/4) silty clay loam subsoil. The only artifact recovered from this stratum was a single prehistoric sherd (described in Chapter 6) that was found at the interface between Strata I and II. One piece of bone from a large mammal was also recovered from Level 2. Excavations in this test unit were terminated once it was established that Stratum II was culturally sterile subsoil. No intact subplow zone deposits were identified in this test unit.

TEST UNIT 2

Test Unit 2 was located 10 m west of Test Unit 1 (Figure 7.1). Like Test Unit 1, Test Unit 2 exhibited two soil strata, a plow zone and culturally sterile subsoil. Stratum I in Test Unit 2 was a dark yellowish brown silt loam that extended to a maximum depth of about 37 cm below surface. This stratum was removed as a single unit (Level 1), producing 20 historic artifacts. Temporally diagnostic artifacts from this level included whiteware, stoneware, and late machine-cut nails. These materials date from the early to mid-19th century. Additionally one piece of large mammal bone was recovered from Level 1 (Table 7.2).

Stratum II was a dark yellowish brown (10YR4/4) silty clay. A disturbance was noted in the north wall of the unit caused by a root or burrowing rodent. No artifacts were recovered from Stratum II. Excavations in Test Unit 2 were terminated once it was established that Stratum II was culturally sterile.

TEST UNIT 3

Test Unit 3 was positioned five meters north of Test Unit 2 (Figure 7.1). The profile (Figure 7.3) also showed two strata, a plow zone and culturally sterile subsoil. Stratum I consisted of a brown (10YR4/3) silt loam that extended to a maximum depth of 32 cm below surface; it was excavated as a single level (Level 1). A total of 58 historic artifacts was recovered from Level 1. Temporally diagnostic artifacts included redware, stoneware, creamware, pearlware, whiteware, ironstone, porcelain, and late machine-cut and wire nails (Table

Table 7.2. Historic Artifacts Recovered from Initial Test Units at 15FA290. Numbers in parentheses are the counts of artifacts recovered from Level 2 in the respective unit.

Kitchen Group		TU1	TU2	TU3	TU4	TU5	TU6	TU7	TU8	TU9	TU10	Total
	Coarse Earthenware											
	Redware, Lead glazed	5		2	1	1	5	5	12	4 (1)	11	46
	Unglazed									3		3
	Stoneware, Salt glaze		1	2	2	4	1	1	1	2		14
	Albany Slip	2										2
	Yellowware	1										1
	Refined Earthenware											
	Creamware	1		5					4	7 (1)	5	22
	Pearlware, Undecorated			1			4	1	9	3 (1)		18
	Shell-edge								2	1		3
	Transfer print								8	1	3	12
	Sponged								1			1
	Whiteware, Undecorated	16	4	7	5		1	5	8 (1)	2	1	49
	Decal	1										1
	Molded	1										1
	Transfer print					1			4			5
	Hand-painted								2			2
	Ironstone, Undecorated	1		1		2			7	2		13
	Decal	1										1
	Molded	1										1
	Porcelain, Undecorated	1			1				1		1	4
	Container glass											
	Finish, Rough applied	1	1									2
	Base											0
	Body, Amethyst solarized	10								1	1	12
	Green/clear/aqua	31	4	16	7	9 (3)	7 (1)	11	12	16 (2)	12	125
	Table glass											
	Press-molded	1										1
	Etched		2									2
	Body, Amethyst solarized									1		1
	Clear/green	1										1
	Metal											
	Container, stamped can								1			1
Architecture Group												
	Nails, Hand-wrought									1		1
	Early machine-cut											0
	Late machine-cut	24	3	9	5	9 (1)	15	3	8	17		93
	Wire			2	2		3	1	1	2	1	12
	Window Glass	16		5		7	4	1	2	8	4	47
	Door Hardware		1									1
Activities Group												
	Fence wire		1	1		4				1	3	10
	Staple			1								1
	Nut			1								1
	Bolt					1		1			1	3
	Spring					1						1
Clothing Group												
	Button, metal			1		1						2
	Prosser molded		1					1				2
Personal Group												
	Slate pencil					1						1
	Marble, common clay									1		1
Arms Group												
	Rim fire, 0.22-calibre		1									1
Faunal Group												
	Large Mammal	11(1)	1	4	3	5	5	5	4		2	40
	Small Mammal									2	2	4
	Bird							1		2 (1)	1	4
TOTAL		126	20	58	26	46	45	36	87	77	48	569

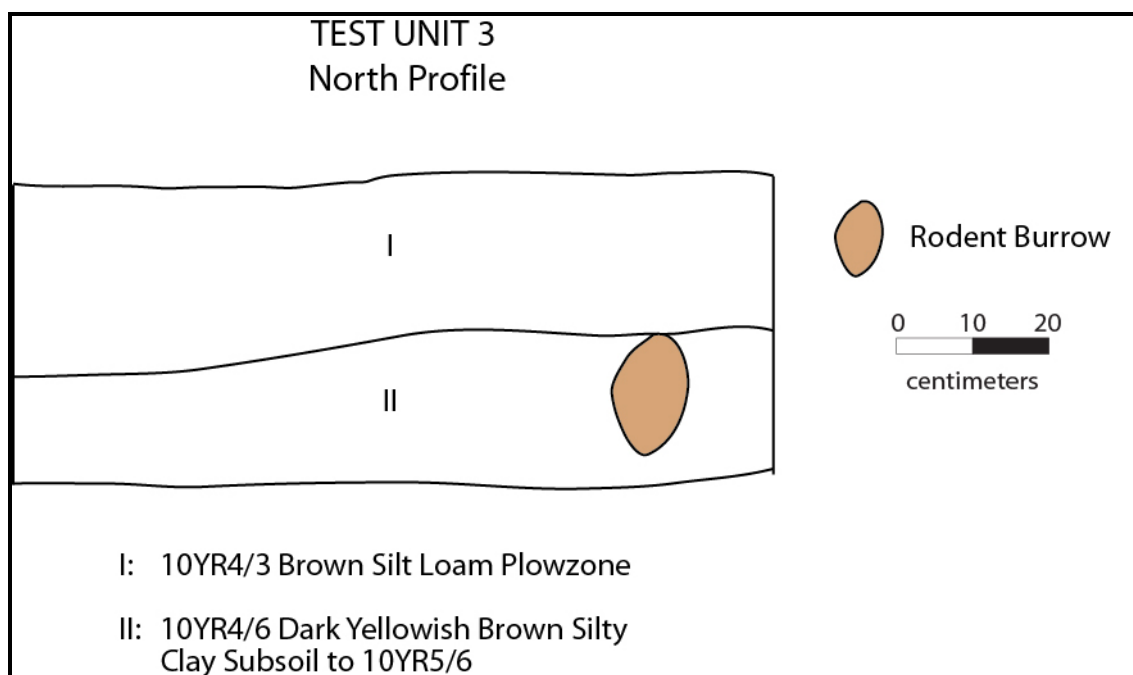


Figure 7.3. Representative Soil Profile for Initial Test Units Excavated at 15FA290. Shown is the north profile of Test Unit 3.

7.2). These materials date throughout the historic occupation of the site. Additionally, four pieces of bone from large mammals were also recovered. All four had cut marks suggesting that they were used for food.

Stratum II was a dark yellowish brown (10YR4/6) silty clay subsoil. A small number of artifacts was recovered in the upper few centimeters of this stratum at the interface with Stratum I. These artifacts included brick, fire cracked rock, and carbonized walnut shell (not included in Table 7.2). Below the diffuse boundary between the strata, Stratum II was culturally sterile. A rodent burrow was identified in the upper portion of Stratum II in the north wall of the test unit. Figure 7.3 shows the north profile of Test Unit 3, which is illustrated as representative of the initial set of test units excavated at 15FA290. Excavations in Test Unit 3 were terminated once it was established that Stratum II was sterile subsoil. No intact subplow zone deposits were identified in this test unit, though the diffuse boundary between the plow zone and subsoil could be mistaken for intact deposits, as was likely done in the Phase I survey.

TEST UNIT 4

Test Unit 4 was located seven meters north of Test Unit 3 (Figure 7.1). The profile of this test unit showed the now-familiar plow zone overlying culturally sterile subsoil. Stratum I in this location was a dark grayish brown (10YR4/2) silty clay loam that extended to a maximum depth of 35 cm below surface. Stratum I was excavated as a single level (Level 1). A total of 26 historic artifacts was recovered from Level 1 (Table 7.2). Temporally diagnostic artifacts included redware, whiteware, ironstone, porcelain, and late machine-cut nails. These artifacts date from the late 18th century through the mid to late 19th century. Three pieces of large mammal bone were also recovered from Level 1.

Stratum II (Level 2) was a dark yellowish brown (10YR4/4) silty clay subsoil. The upper 10 cm of this stratum produced two pieces of prehistoric lithic debitage. The subsequent 5 cm produced a single flake that was recovered near a rodent burrow. These materials were likely incorporated into the subsoil through bioturbations. Excavations in Test Unit 4 were terminated once it was established that Stratum II was culturally sterile subsoil. No intact subplow zone deposits were identified in this test unit.

TEST UNIT 5

Test Unit 5 was positioned five meters north and 13 meters east of Test Unit 4 (Figure 7.1). The Stratum I plow zone was described as a dark yellowish brown (10YR3/4) silt loam that extended to a maximum depth of only 16 cm below surface. This stratum was excavated as a single level (Level 1), and it produced 42 historic artifacts (Table 7.2). Temporally diagnostic artifacts included redware, whiteware, ironstone, stoneware, and late machine-cut nails. These materials date from the late 18th through the mid to late 19th century.

The base of the plow zone was distinct but showed numerous small root disturbances extending into the subsoil. Level 2 was excavated 10 cm into the subsoil. Four historic artifacts were recovered near the interface of Stratum I and Stratum II. The only diagnostic artifact was a machine-cut nail dating from the 19th century. Stratum II was a yellowish brown (10YR5/6) silty clay subsoil that produced no artifacts. Excavation of Test Unit 5 was terminated once it was established that Stratum II was culturally sterile subsoil and that no intact subplow zone deposits were present.

TEST UNIT 6

Test Unit 6 was positioned 11 meters north of Test Unit 1 (Figure 7.1). The Stratum I plow zone consisted of a dark brown (10YR3/3) silt loam that extended to a maximum depth of only 14 cm below surface; it was excavated as a single level (Level 1). A total of 44 historic artifacts was recovered from Level 1 (Table 7.2). Diagnostic artifacts included redware, pearlware, whiteware, stoneware, L-head nails, late machine-cut nails, and wire nails. These artifacts date throughout the historic occupation of the site. Additionally five pieces of large mammal bone were also recovered from Level 1.

Stratum II was a dark yellowish brown (10YR3/6) silty clay subsoil. Level 2 was excavated 10 cm into this stratum. Three artifacts were recovered near the interface with Stratum I. These materials include two prehistoric flakes and a single fragment of container glass. The underlying 5-8 cm of Stratum II was culturally sterile. Excavation of Test Unit 6 was terminated once it was established that Stratum II was culturally sterile subsoil and that no intact subplow zone deposits were present.

TEST UNIT 7

Test Unit 7 was located two meters north and 17 m east of Test Unit 1 (Figure 7.1). The profile for this unit showed the now-familiar Stratum I plow zone and underlying Stratum II sterile subsoil, but with some variations on the theme. Stratum I was described in this exposure as a dark yellowish brown (10YR3/4) silt loam that extended to a maximum depth of 47 cm below surface. Stratum I plow zone was excavated as a single unit (Level 1). In the western portion of the test unit a thin zone of dark yellowish brown (10YR4/6) silty clay was noted within Stratum I. This zone was identified at approximately 15 cm below surface, and it varied between 8 and 12 cm in thickness. This clay lens probably represents disturbance from use of the farm road that was immediately adjacent to the east of this test unit. Use of the farm road evidently displaced some subsoil laterally from the roadway. This lens was not identified in the eastern portion of the test unit. Below the lens, the soil was consistent with the upper part of the plow zone in both color and texture. Thirty-six historic artifacts were recovered from Level 1 (Table 7.2). Temporally diagnostic materials included redware, pearlware, whiteware, stoneware, a prosser button, late machine-cut nails, and wire nails. These artifacts date throughout the historic occupation of the site. Additionally, five fragments of large mammal bone and one fragment of bird bone were recovered in Level 1.

The transition to subsoil (Stratum II) was diffuse in Test Unit 7, with the gradual change possibly additionally obscured by farm road disturbances. The subsoil consisted of a dark yellowish brown (10YR4/6) silty clay. No artifacts were recovered from Stratum II. Excavations in Test Unit 7 were terminated once it

was established that Stratum II was culturally sterile subsoil. No intact subplow zone deposits were identified in this test unit.

TEST UNIT 8

Test Unit 8 was located seven meters north and nine meters east of Test Unit 5 (Figure 7.1). The profile again showed the usual two strata, a plow zone and underlying subsoil. Stratum I consisted of a brown to dark brown (10YR3/3 to 10YR4/3) silty clay loam that extended to a maximum depth of 38 cm below surface. Stratum I was excavated as a single level (Level 1), and 86 historic artifacts were recovered from it (Table 7.2). Temporally diagnostic materials included redware, pearlware, creamware, whiteware, ironstone, porcelain, stoneware, late machine-cut nails, and wire nails. These artifacts date throughout the historic occupation of the site. Of all of the initial test units placed in what was later interpreted as the outer houselot portion of the site, Level 1 of Test Unit 8 had the highest density of historic ceramics (n=59). Four fragments of large mammal bone were also recovered from Level 1.

The interface between Stratum I and Stratum II (subsoil) was irregular (Figure 7.4) but clear. Stratum II consisted of a yellowish brown (10YR3/6) silty clay (Figure 7.4). Level 2 was excavated into the upper 10 cm of this stratum. The only artifact recovered from this level was a whiteware sherd found at the interface between Stratum I and Stratum II. This artifact dates to the early to mid-19th century. Excavations in Test Unit 8 were terminated once it was established that Stratum II was culturally sterile subsoil and that no intact subplow zone deposits were present.

TEST UNIT 9

Test Unit 9 was placed 12 meters south and 6 meters east of Test Unit 1 (Figure 7.1). The profile for the unit was typical, and included the Stratum I plow zone, a dark yellowish brown (10YR3/2) silt loam with small limestone rock inclusions. This stratum, which extended to a maximum depth of 27 cm below surface, was excavated as a single level (Level 1). Seventy-two historic artifacts were recovered from Level 1 (Table 7.2). Temporally diagnostic materials included redware, pearlware, creamware, whiteware, ironstone, stoneware, amethyst solarized container glass, wrought nails, late machine-cut nails, and wire nails. These artifacts date throughout the historic occupation of the site. Additionally, one fragment of bird bone and two fragments of small mammal bone were also recovered.

Stratum II is the subsoil, which consisted of a dark yellowish brown (10YR3/6) silty clay loam. Level 2 was excavated to sample the upper portion of this deposit. The upper portion of Level 2 near the interface with Stratum I produced five historic artifacts, including container glass (n=2), redware (n=1), pearlware (n=1), and creamware (n=1). The ceramics all date from the late 18th to early 19th century. One fragment of bird bone was also recovered in Level 2. These materials were likely transported into Stratum II through the actions of root and rodents, though the early date suggests a possible early 19th century midden remnant might be present at the Stratum I/II interface. The lower part of Level 2 was culturally sterile. Excavations in Test Unit 9 were terminated once it was established that Stratum II was culturally sterile. No intact deposits were identified in this test unit.

TEST UNIT 10

Test Unit 10 was placed 12 meters north of Test Unit 9 and about 5 meters east of Test Unit 1, in the vicinity of ST 246, which had produced deep, potentially intact subplow zone deposits in the Phase I survey (Figure 7.1). However, no intact deposits were found, and the profile for Test Unit 10 only showed the familiar, though somewhat deep, plow zone (Stratum I) and subsoil (Stratum II). The plow zone was a dark yellowish brown (10YR3/4) silt loam that extended to a maximum depth of 37 cm depth; it was excavated as

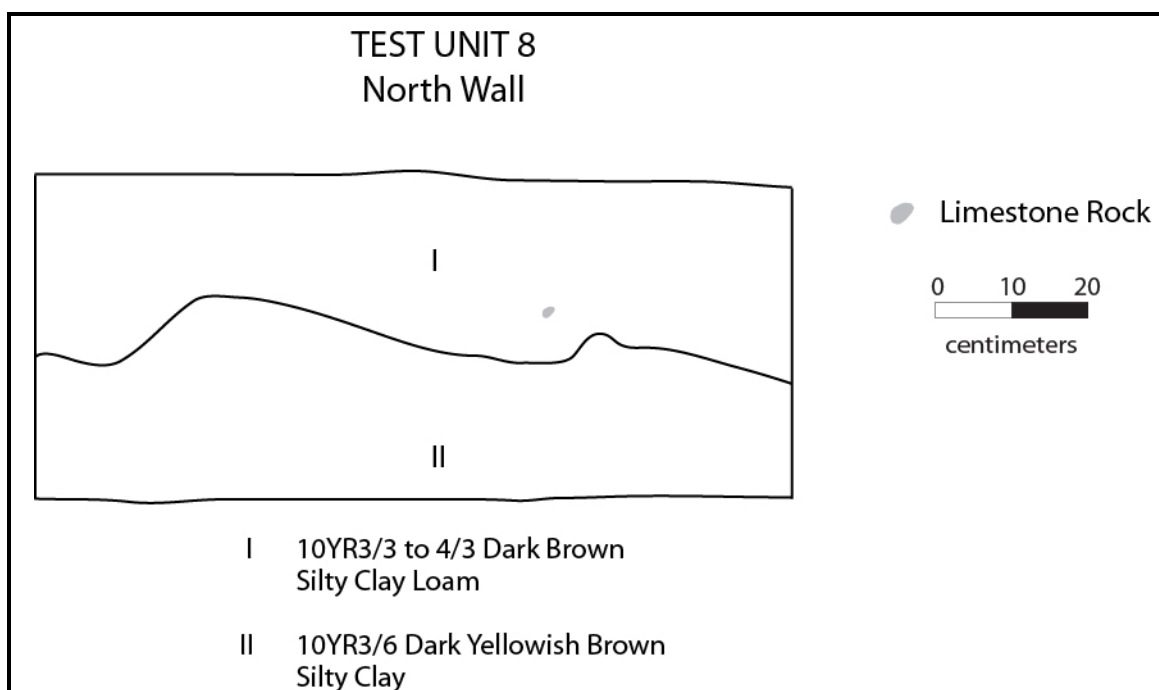


Figure 7.4. Soil Profile for Test Unit 8 at 15FA290. Note irregular boundary between strata.

a single level (Level 1). Forty-eight historic artifacts were recovered from Level 1. Diagnostic artifacts included redware, creamware, pearlware, whiteware, porcelain, amethyst solarized container glass, and a wire nail. These materials date throughout the historic occupation of the site. Additionally, two fragments of large mammal bone, two fragments of small mammal bone, and one fragment of bird bone were recovered from Level 1.

Stratum II was a dark yellowish brown (10YR4/6) silty clay loam subsoil that produced no artifacts. Excavations in Test Unit 10 were terminated once it was established that Stratum II was culturally sterile subsoil and that no intact deposits were present.

ARTIFACT DENSITY AND DISTRIBUTION AMONG INITIAL TEST UNITS

Overall, the artifact density for the initial set of test units is relatively low, as indicated in Table 7.3. Test Unit 1 had the highest artifact density (0.48 items per excavated liter), while Test Unit 2 had the lowest (0.05 items/liter). The overall low artifact density is not surprising, given that all of the initial test units except for Test Unit 9 were placed within what is now interpreted as the Outer Yard of the farmstead; Test Unit 9 is within the Inner Yard (see discussion below of spatial interpretations of the site).

The locations of high- and low-density test units do not seem to form any specific pattern. The high-density Test Unit 1 is only about 8 meters away from the lowest-density Test Unit 2 (see Figure 7.1) and is only 5 meters from Test Unit 10, which also had low artifact density (0.13 items/liter). The only spatial pattern that is visually evident from the overall artifact density data is that the units with the highest artifact density (Test Units 1, 5, 6, and 9) are all distributed in a roughly linear pattern grid north from the residence foundation. This artifact distribution may be at least in part the result of agricultural practices (plowing and disking) that have distributed artifacts north of their presumed origin near the residential structure. However, plow drag is probably not the only factor involved in the artifact distribution. Additional exploration of the distributions of specific artifact classes was undertaken in an attempt to define disposal areas or activity areas within this part of the site.

Table 7.3. Artifact Density for Initial Test Units at 15FA290.

	TU1	TU2	TU3	TU4	TU5	TU6	TU7	TU8	TU9	TU10	N
Number of artifacts	126	20	58	26	46	45	36	87	77	48	569
Liters excavated	260	370	320	350	150	140	470	380	270	370	3080
Artifact density (items/liter)	0.48	0.05	0.18	0.07	0.31	0.32	0.08	0.23	0.29	0.13	0.18

The artifacts recovered from the initial test units (Table 7.2) were grouped into three major classes that reflect remains of types of activities to explore differential distribution of these activities among test units. If there is differential distribution, this might suggest activity areas within the part of the site subjected to the initial test unit excavation (Outer Yard and Inner Yard north of the residence). The three major classes used here are labeled Serving, Storage, and Architecture. The Serving class includes all refined earthenware ceramics except for porcelain, plus table glass; these presumably reflect food serving and consumption activities. The Storage class reflects food or other storage activities and includes redware, stoneware, and container glass. Architecture class artifacts reflect construction or repair activities and include all nails and window glass. The remaining functional groups and artifact classes listed in Table 7.2 are either not related to these types of activities or are very rare and are not sufficiently represented to be relevant for statistical analysis. Table 7.4 shows the distribution of these classes by test unit. A chi-square test indicates that there is a low probability ($p < 0.0001$) that the distribution is the result of random activities. However, we note that significance in chi-square tests is strongly correlated with the number of observations—the higher the number, the more likely that the distributions will be found to be statistically significant. With a total of 491 artifacts, the potential for a statistically significant chi-square statistic is increased, simply because of the mathematics of the test. Given this caution, it may still be fruitful to examine the distribution of the artifact classes more closely. There are several cells in Table 7.4 that contribute substantially to the total chi-square statistic value and are thus more responsible for the overall low probability of the distribution. Specifically, Test Units 1, 5, and 6 have much lower numbers of Serving class artifacts and much higher numbers of Architecture class artifacts than would be expected from a random distribution of material. These test units might indicate a portion of the site that is the former location of outbuildings, such as a barn or shed. Such buildings would have architectural remains but food consumption/serving would not necessarily be an activity carried out in these buildings. Test Unit 8 has much higher than expected numbers of Serving class artifacts and lower than expected numbers of both Storage class and Architecture class artifacts. This unit is farther downslope and relatively remote from the residence foundation. This may have been a part of the site used for disposal of household refuse. Finally, Test Unit 10 had higher than expected numbers of Storage class artifacts and lower than expected numbers of Architecture class artifacts. This part of the site may have been the location of a storage-related outbuilding such as a shed or above-ground root cellar (there was no evidence for an excavated root cellar or any other feature at this location). These distributional data suggest that there is potential for recovering remains of activity areas or outbuildings in some parts of the site, though the excavated test units did not reveal any direct evidence of features or building foundations.

The artifact classes used in Table 7.4 do not discriminate among different segments of the time span that the site was occupied, which essentially span the 19th century. To explore possible differential use of site areas through time, the artifacts shown in Table 7.2 were grouped into three temporal segments that represent the early, middle, and late portions of the 19th century (Table 7.5). Artifact categories assigned to the early 19th century include redware, pearlware, creamware, hand-wrought nails, and rough-applied container glass finishes. Artifacts associated with the mid-19th century are whiteware, except the decal-decorated items. Artifacts associated with the late 19th century are ironstone, decal-decorated whiteware, solarized amethyst glass, and wire nails. Unfortunately, late machine-cut nails and stoneware, while broadly temporally sensitive, were manufactured in both the mid- and late 19th century, so they are omitted from Table 7.5. Though artifacts dating to all three segments of the 19th century are widely distributed among all of the test units, there appear to be areas with higher and lower concentrations of material dating to one of these periods. A chi-square test of significance is not indicated, as there are many cells in the table with expected values less than five. However, the expected values can still be used to identify which cells are strongly divergent from expectations. This comparison shows that Test Unit 1 has lower than expected numbers of early 19th century artifacts and higher than expected numbers of both mid- and late 19th century artifacts. In contrast, Test Units

Table 7.4. Distribution of Selected Major Artifact Classes by Initial Test Unit at 15FA290.

Major Artifact Class	TU1	TU2	TU3	TU4	TU5	TU6	TU7	TU8	TU9	TU10	N
Serving	24	6	14	5	3	5	6	45	17	9	134
Storage	49	6	20	10	14	13	17	25	26	24	204
Architecture	40	3	16	7	16	22	5	11	28	5	153
Total	113	15	50	22	33	40	28	81	71	38	491

Table 7.5. Distribution of Temporally Sensitive Artifact Categories by Initial Test Unit at 15FA290.

Temporal Range	TU1	TU2	TU3	TU4	TU5	TU6	TU7	TU8	TU9	TU10	N
Early 19 th century	7	1	8	1	1	9	6	46	19	19	117
Mid-19 th century	17	4	7	5	1	1	5	14	2	1	57
Late 19 th century	14	0	3	1	2	3	1	8	4	2	38
Total	38	5	18	7	4	13	12	68	25	22	212

8, 9, and 10 all have higher than expected numbers of early 19th century artifacts and less than expected numbers of either mid- or late 19th century artifacts. These observations suggest that the Test Unit 1 area may have been more intensively used during the mid- and late 19th centuries, while Test Units 8, 9, and 10 may have been used more intensively during the early 19th century. This in turn suggests that activity areas may have changed through time, or that outbuildings may have been erected or razed in several locations over the time span of site occupation. The high artifact density in Test Unit 1 suggests that this area may have served as a refuse disposal area during the mid- and late 19th century.

These observations suggest that there may be concentrations of artifacts, features, or building remains preserved north of the residence foundation. However, no direct evidence of such features was found during excavation of the initial series of test units, and overall, the artifact density is low in this portion of the site. Subsequent work focused on more productive areas, including the residence and nearby features.

MECHANICAL REMOVAL OF PLOW ZONE

Based on the results of the shovel testing program and excavation of the initial ten test units at 15FA290, a series of three block areas and additional longer trenches were selected for mechanical removal of plow zone. These areas were stripped using a trackhoe equipped with a 4-foot wide smooth-edged bucket to reveal subsurface features or areas of remnant intact deposits at the base of the plow zone. In each block or trench, 30-40 cm of plow zone sediment was removed. Though there was variation in the quantity of historic artifacts recovered from the initial test units, most of the units were qualitatively very similar. All units produced container glass, kitchen ceramics, and both machine-cut and wire nails, and all but two units (TU2 and TU4) yielded window glass (Table 7.2). There was little evidence in the test units to indicate that structural remains were more likely to be preserved in any specific area within the site. In addition, five test units produced creamware, six produced pearlware, and all produced whiteware. There was little evidence to suggest that different parts of the site might contain substantially earlier occupation that was not mixed with later materials. Placement of blocks and trenches therefore was determined by density of artifacts and local topographic features, with the goal of exposing a larger sample of the site area than was possible through hand excavations.

BLOCK 1

Block 1 was located near the middle of the site on a small bench-like and more level area just north of the shoulder (Figures 7.1 and 7.5). This block was placed here based on the results of the shovel tests and the findings from Test Units 1 and 10. Test Unit 1 had the highest artifact density of the initial test units, and both test units produced creamware (along with TU 3, TU 8, and TU 9). It also was likely that the small and more level bench was an artificial feature that might be related to the location of a residence or outbuilding structure, and the block encompassed the deep shovel tests (ST 246 and ST305) documented in the Phase I



Figure 7.5. View of Block 1 at 15FA290 (looking east-northeast). Identified features are covered with plastic.

survey (see Figure 7.1). Block 1 was roughly rectangular with the long axis oriented grid east west. The block measures approximately 15.5 m east-west and 6.25 m north-south, covering a total area of about 97 m². A moderate number of historic artifacts (n=100) was recovered through opportunistic sampling of deposits exposed during the mechanical stripping. These include hand-wrought nails, late machine-cut nails, wire nails, container glass, window glass, mirror glass, a door latch fragment, redware, stoneware, pearlware, creamware, porcelain, and ironstone (Table 7.6). As expected, these materials date from all periods of the site chronology, which spans the 19th century and extends into the early 20th century. No structural remains were identified in Block 1, but intact deposits in the form of five features were identified (Features 11-15) which are mapped on Figure 7.6 and described individually in a following section.

BLOCK 2

Block 2 was placed on a more level bench-like area approximately 6.5 m downslope (north) of the north edge of Block 1 (Figures 7.1 and 7.7). The placement of this block was based on its topographic setting and the results from Test Unit 8, which had the second highest number of artifacts of the initial ten test units. Test Unit 8 also produced creamware and the highest number of pearlware sherds of any of the initial test units (Table 7.2). This block was irregular in shape, and measured a maximum of about 14 m north-south and 12.25 m east-west (160 m²). Only a moderate number of historic artifacts (n=56) was recovered through opportunistic collection of artifacts during the stripping of Block 2. These include late machine-cut nails, wire nails, window glass, container glass, a metal buckle, a possible latch fragment, redware, stoneware, pearlware, whiteware, porcelain, and ironstone (Table 7.6). As in Block 1, date ranges for these materials span the entire occupation of the site. No structural remains were identified in Block 2, but three features were identified (see Figure 7.6). These features include two post holes (Features 16 and 17), and a remnant of a driveway (Feature 18). These features are described in detail in a following section.

BLOCK 3/TRENCH 1

Because no structural remains were identified in Blocks 1 or 2, which were areas considered to be high probability for such remains based on topography and artifact densities, the decision was made to excavate a series of trenches across the site to prospect for architectural remains. Trench 1 began approximately 1.5 m south of Block 1 (Figure 7.1) and extended upslope (south) for a distance of 26.25 m.

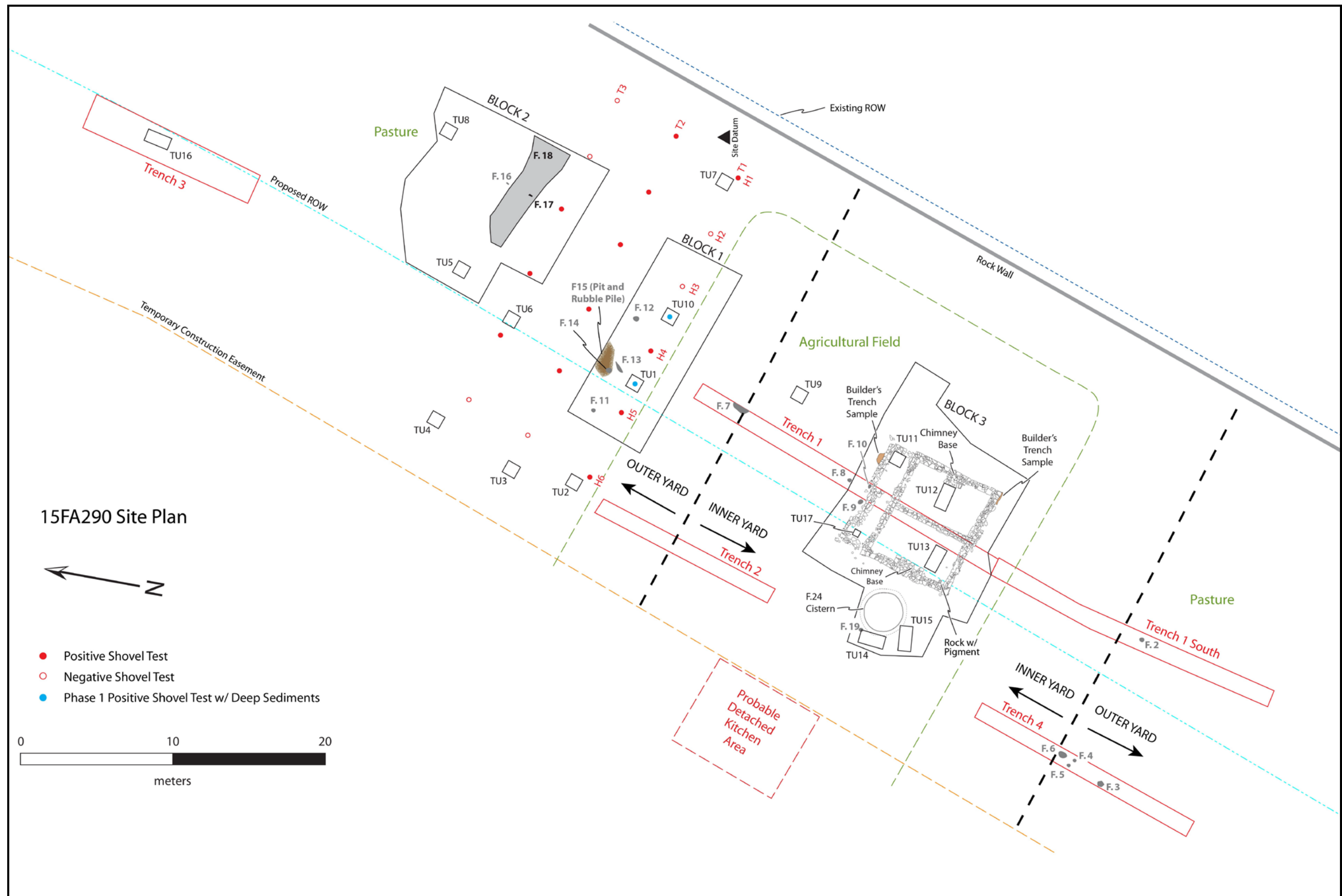


Figure 7.6. Detailed Site Plan of 15FA290 Showing Archaeological Investigations, Feature Locations, and Interpretations of Site Layout.

Table 7.6. Historic Artifacts Recovered from Mechanical Blocks 1, 2, and 3 at 15FA290.

Group and Artifact Category		Block 1	Block 2	Block 3 East Side	Block 3 West Side	Total
Kitchen Group						
	Coarse Earthenware					
	Redware, Lead glazed	2	2	2	5	11
	Unglazed	1				1
	Stoneware, Salt glaze	2	6	4	2	14
	Albany slip	1		7		8
	Salt and Albany	1	4	1	1	7
	Yellowware, Total			1	1	
	Refined Earthenware					
	Creamware, Undecorated	1				1
	Pearlware, Undecorated	3	1			4
	Shell edge		2	5	4	11
	Flow blue			1	2	3
	Transfer print		3	2	5	10
	Annular band			1		1
	Whiteware, Undecorated		1	6		7
	Hand-painted		1		1	2
	Annular band			1	1	2
	Ironstone, Undecorated	23	10	7		40
	Decal	1		3		4
	Molded	1		10	2	13
	Transfer print	3	1	3		7
	Shell edge	1		3		4
	Maker's mark	1		1		3
	Hand-painted				1	
	Porcelain, Undecorated	2	1			3
	Molded	2		2		4
	Decal	1	1		1	3
	Hand-painted	1	2		1	4
	Transfer print				2	2
	Gilded band			2		2
	Container glass					
	Finish, Improved tool	1		4		1
	Machine-made	1		2		
	Stopper			1		
	Base, Unidentified	1			1	2
	Cup mold	1	2	6		9
	Post mold			1		1
	Machine-made			3		3
	Body, Clear	2	2	7		11
	Aqua	23	3	8		34
	Green		1		2	3
	Amber	3		2		5
	Blue	2	1			3
	Solarized amethyst	2	2			4
	Table glass, Press molded	2	1	6		10
	Metal					
	Container, Stamped can end		1			1
Furniture Group						
	Ceramic	1		7		1
	Mirror glass	2				2
	Container glass			9		
	Furniture hardware			1		

Table 7.6 (concluded).

Group and Artifact Category		Block 1	Block 2	Block 3 East Side	Block 3 West Side	Total
Architecture Group						
	Nails, Hand-wrought	1		18	2	21
	Early Machine-cut				2	2
	Late Machine-cut	1	2	15	11	29
	Wire	2	1			3
	Unidentified Machine-cut			1	1	2
	Unidentified				1	1
	Window Glass	3	2	20	3	28
	Door Hardware	4	1	1		6
Activities Group						
	Staple				1	1
	Ring	1				1
	Hook			1		
Clothing Group						
	Button, Shell			3		3
	Buckle		1			1
	Rivet			1		1
Personal Group						
	Marble, common clay			1		1
	Ceramic, Piggy-bank fragment			1		
	Key				1	1
	Toothbrush				4	4
Arms Group						
	Lead Shot				1	1
	Center fire cartridge, 0.32 caliber				1	1
Transportation Group						
	Horseshoe		1			1
TOTAL		100	56	181	60	397



Figure 7.7. View of Block 2 at 15FA290 after Plow Zone Removal (looking northwest). Large dark stain that is outlined is Feature 18, and plastic covers two postholes (Features 16 and 17).



Figure 7.8. Removal of Plow Zone Overburden from East Side of Block 3, Exposing Feature 1 Foundations and Interior Rubble Fill (looking grid northeast).

Trench 1 was about 1.25 m wide. No artifacts were recovered in the northern half of Trench 1, but two post holes (Features 7 and 8) were identified (described below). The exterior north wall of the residential structure, Feature 1, was encountered about 15 m south of the beginning of Trench 1. After encountering the limestone foundation blocks, Trench 1 was continued an additional 11.25 m south, exposing the south wall of the north room of Feature 1, the interior dividing wall between the east and west rooms, and the exterior south wall of Feature 1. Once the north-south extent of Feature 1 was determined, the southern half of Trench 1 was expanded east and west to become Block 3 (Figures 7.1 and 7.6).

After initially defining the north and south exterior walls of Feature 1, the trackhoe was used to expose the other exterior walls of the house and remove plow zone overburden from the top of Feature 1 (Figure 7.8). The east half of Feature 1 was stripped first, including a buffer area outside the foundation to prospect for potential foundation additions, features, or intact midden deposits. None were identified on the east side of the foundation. The rubble fill inside the foundation walls was not removed mechanically at this time. A large number of artifacts was opportunistically recovered during stripping of the east side of Block 3, and these include a hand-wrought latch fragment, hand-wrought nails, early machine-cut nails, late machine-cut nails, window glass, buttons, porcelain figurine fragments, container glass, a clay marble, redware, stoneware, yellowware, pearlware, whiteware, porcelain, and ironstone (Table 7.6). These materials date to all stages of the house chronology, spanning the duration of the 19th century and extending into the early 20th century.

The west side of Feature 1 was then stripped of plow zone, revealing the full extent of the foundation. As was done for the east side, the rubble fill on the interior was left intact. A lower number of artifacts was recovered from the west side through opportunistic sampling, but the specimens include a similar range of residential and architectural debris—hand-wrought nails, early machine-cut nails, late machine-cut nails, window glass, a .32-caliber center-fire shell casing, redware, yellowware, stoneware, pearlware, and porcelain (Table 7.6). Only three fragments of ironstone were recovered. These materials may date slightly earlier than the artifacts collected from the east side, as most are consistent with the early and middle periods of the house chronology. However, as these collections were made opportunistically and not through systematic screening or surface collection, differences in the temporal span or numbers of artifacts is not considered significant for interpretation of the history of occupation of the house. Several features and intact deposits were identified



Figure 7.9. Feature 1 in Block 3 at 15FA290 (looking northeast). The exterior foundation walls have been exposed and cleaned, and plow zone remnants have been removed, but interior test units have not been excavated. Note the narrow room along the north (left) side that runs the length of the structure.

during the stripping on the west side of Block 3, including two post holes (Features 28 and 29), and a Portland cement-lined cistern and associated builders' trench (Feature 24). These features are described in detail below. In the area around the cistern, a low number of artifacts was recovered that include wrought nails, early machine-cut nails, late machine-cut nails, unidentified machine-cut nails, a lead shot, pearlware and porcelain. Most of these materials are associated with the Early segment of historic occupation. Additionally, a remnant buried A horizon was identified in the vicinity of the cistern. This original A horizon deposit was sealed under a layer of yellow clay that was backdirt from the cistern construction that had been spread out on the old ground surface in the area immediately adjacent to the cistern, capping a remnant of original A horizon that contained artifacts dating to the earliest period of house occupation. This A horizon remnant was later sampled through hand excavation of additional test units (see next section). The clay cap of the cistern backdirt thins to the south and west of the cistern, and eventually is incorporated into the plow zone, which has allowed mixing of later materials to some degree. Materials recovered opportunistically from the intact A horizon deposit include container glass, redware, stoneware, whiteware, ironstone, and four fragments of a bone toothbrush head (Table 7.6). Though there is a stronger emphasis on early 19th century materials, a few mid- or late 19th century items are also included, such as the ironstone.

After the plow zone was mechanically removed from Feature 1, additional hand cleaning of plow zone remnants was performed within and around Feature 1 to fully expose the foundation walls and the interior rubble fill (Figure 7.9). A 1:20 scale drawing was made of Feature 1 showing *in situ* foundation rocks and providing details of construction attributes. Additional excavations that were conducted within Feature 1 were added to this detailed map. Feature 1 is described and discussed in detail in a subsequent section.

ADDITIONAL TEST UNITS WITHIN BLOCK 3

After the Feature 1 house foundation and surrounding area was exposed and plow zone remnants were removed, six additional test units were excavated within Block 3 (Figures 7.1 and 7.6). Of these, four were placed in the interior of Feature 1 (Test Units 11, 12, 13, and 17). These units were excavated to obtain information about the interior fill sequence and stratigraphic contexts within the Feature 1 house foundation, and to extract a larger sample of artifacts from excavated and screened contexts. Two test units (Test Units

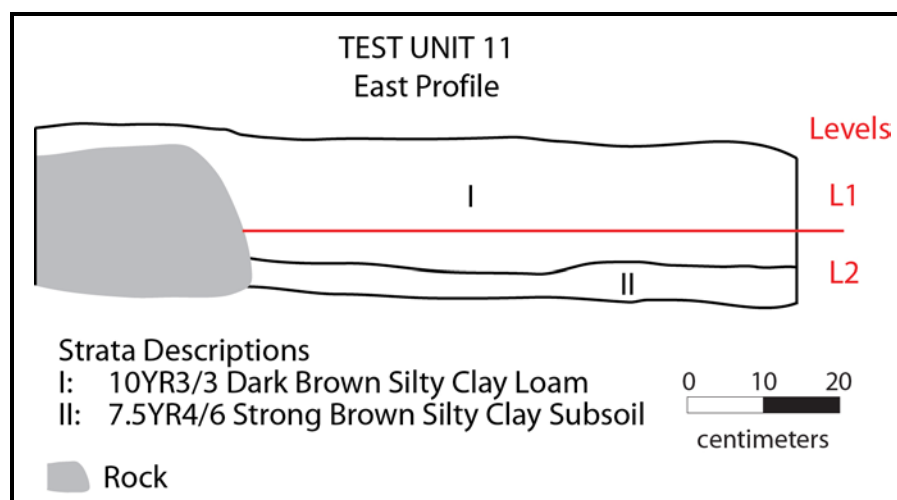


Figure 7.10. East Profile of Test Unit 11 at 15FA290.

14 and 15) were excavated near Feature 24 to obtain a larger sample of artifacts from the intact A horizon underlying the cistern backdirt. All of these units were excavated in 10-cm arbitrary levels, and sediment was screened to ensure standardized recovery of artifacts. During these excavations, bricks were not systematically collected or analyzed, as they were considered to be rubble at the time of excavation. In retrospect, counting or weighing the brick rubble may have allowed us a better interpretation of the Feature 1 structure and its construction methods. Descriptions of these additional test unit excavations follow.

TEST UNIT 11

Test Unit 11 was a 1-x-1-m unit placed in the interior northeast corner of Feature 1 (Figures 7.1 and 7.6). This unit location was chosen to test the integrity of the deposits in the north room of Feature 1. The profile of Test Unit 11 (Figure 7.10) showed two soil strata, a rubble fill and the underlying subsoil. Stratum I was a dark yellowish brown (10YR3/3) silty clay loam with inclusions of brick and limestone rock, which extended to a maximum depth of about 19 cm below the stripped surface. This stratum was sampled in Level 1 and the upper six centimeters of Level 2. This deposit is interpreted as rubble fill created when the structure was razed. Stratum II was a strong brown (7.5YR4/6) clay subsoil. This stratum was identified in the lower four cm of Level 2, and the boundary between Strata I and II is abrupt. No artifacts were recovered from this stratum, and it appears that any original A horizon was removed prior to house construction. Excavations in Test Unit 11 were terminated once it was established that Stratum II was culturally sterile subsoil. No intact deposits were identified in Test Unit 11.

A total of 443 artifacts were recovered from Test Unit 11 (Table 7.7). Approximately 47.4 percent (n=210) of the artifacts were recovered from Level 1. Diagnostic artifacts recovered include redware, stoneware, pearlware, whiteware, porcelain, hand-wrought nails, early machine-cut nails, late machine-cut nails, wire nails, and a rim fire .22 caliber shell casing. These artifacts date throughout the occupation of the house. Such mixing is not unexpected given that Stratum 1 was a fill deposit associated with the house demolition. Level 2 produced 218 artifacts (49.2 percent of the unit total), which included the lower portion of Stratum I and Stratum II (subsoil). Diagnostic artifacts from this level include redware, stoneware, whiteware, ironstone, porcelain, hand-wrought nails, early machine-cut nails, late machine-cut nails, wire nails, and a prosser button. Like the Level 1 artifacts these materials date throughout the use-life of the house. Finally a small assemblage of artifacts (n=15, 3.4 percent of the total) was recovered beneath a rock in the northeast corner of the unit (Stratum I). Diagnostic artifacts included whiteware, porcelain, early machine-cut nails, late machine-cut nails, and wire nails. These materials are also of mixed age dating throughout the 19th century.

Table 7.7. Historic Artifacts Recovered from Test Unit 11 at 15FA290.

Artifact Group and Attributes		Level 1	Level 2	Under Rock in NE Corner	Total
Kitchen Group					
	Coarse Earthenware				
	Redware, Lead glazed	2	2		4
	Stoneware, Salt glaze and Albany slip	2	2		4
	Refined Earthenware				
	Pearlware, Undecorated	1			1
	Whiteware, Undecorated	2	6	1	9
	Transfer-printed		1		1
	Molded	1			1
	Ironstone, Molded		1		1
	Porcelain, Undecorated		2		2
	Molded		1		1
	Decal	1			1
	Container glass				
	Finish, Improved tool		2		2
	External threads (fruit jar)	1			1
	Base, Unidentified	1	1		2
	Cup mold	2			2
	Body, Unidentified manufacture	29	61	5	95
	Mold seam	2			2
	Solarized amethyst		1		1
	Table glass, Press molded	1	3		4
	Utensil handle		2		2
Furniture Group					
	Porcelain figurine	1	1	1	3
Architecture Group					
	Nails, Hand-wrought	18	5		23
	Early Machine-cut	11	7		18
	Late Machine-cut	21	9		30
	Wire	28	21	2	51
	Unidentified Machine-cut	7	10		17
	Window Glass	30	38	2	70
	Door Hardware		1	1	2
Activities Group					
	Metal ring		1		1
Clothing Group					
	Button, Prosser		1		1
	Metal		1		1
	Rivet		1		1
	Footwear	1			1
Personal Group					
	Prescription medicine bottle		1		1
Arms Group					
	Lead Shot	2			2
	Rim fire cartridge, 0.22 caliber	2			2
Faunal Group					
	Large mammal	9	4		13
	Small mammal	15	21		36
	Reptile	6			6
	Bird	13	10	3	26
	Fish		1		1
Miscellaneous/Unassigned Group					
	Enamel chip	1			1
TOTAL		210	218	15	443

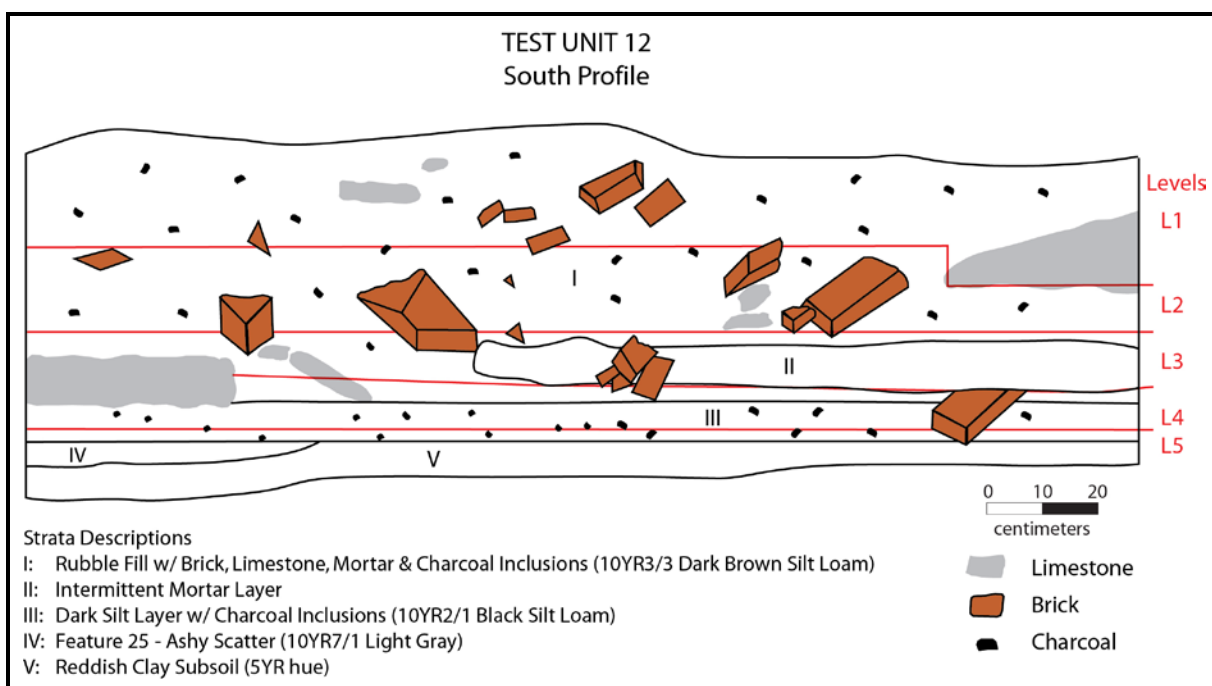


Figure 7.11. South Profile of Test Unit 12 at 15FA290.

TEST UNIT 12

Test Unit 12 was a 1-x-2-m unit excavated in the East Room of Feature 1 in front of the chimney base (Figures 7.1 and 7.6). This unit was placed at this location to determine if any intact deposits were present inside Feature 1, in particular the presence of possible small pit cellars near the chimney base. Test Unit 12 was excavated in arbitrary 10 cm levels, but due to the large size and number of rubble inclusions in the strata, some levels were more than 10 cm thick. The profile of the south wall of the test unit shows five distinct soil strata (Figure 7.11), and these strata are correlated with arbitrary levels in Table 7.8. Stratum I was a dark brown (10YR3/3) silt loam with rubble fill that extended to a maximum depth of 50 cm below the cleaned surface. Inclusions in this stratum included brick, limestone, mortar, and charcoal. Stratum I was sampled by Levels 1, 2, 3 and the upper 5 cm of Level 4. This stratum clearly represents a layer of rubble fill derived from the destruction of the house, which occurred between 1904 and 1912. Stratum II was contained within Stratum I and was observed only in the western half of the test unit. Stratum II is a 9-cm thick lens of mortar first identified at a depth of 33 cm below surface near the base of Level 2. No artifacts were derived from Stratum II. Stratum III was an 8-cm layer of black (10YR2/1) silt loam with charcoal inclusions. This stratum was confined to the lower half of Level 4 and the upper part of Level 5, and it was initially identified at a depth of 50 cm below surface. It likely represents deposits that gradually accumulated under the floor of the east room during the temporal span of site occupancy (19th century). Additionally, numerous rodent burrows were noted in this stratum indicating that bioturbation has disturbed these deposits.

Stratum IV was identified below Stratum III in the southeast corner of the test unit. This deposit consists of a thin lens of light grey (10YR7/1) ash at a depth of 52-56 cm below surface, and it was excavated as part of Level 5. This lens had a maximum thickness of 5 cm, and it covers only the eastern 40-50 cm of the unit. No artifacts were associated with this lens. Based on its depth and its position just south of Feature 25 (an ash pit which was also identified in Level 5), it is most likely that the Stratum IV ash lens is associated with the feature, possibly representing some horizontal scattering of the feature fill due either to bioturbation from rodent burrows or spreading of the feature contents by house occupants. Stratum V was identified at the base of Level 5. This stratum consists of a reddish (5YR hue) clay subsoil. No artifacts were recovered from this stratum, but two linear features (Features 26 and 27) intruded into Stratum V from the base of Level 5 (see descriptions of these features below). Excavations were terminated once it was determined that Stratum

Table 7.8. Correlation of Arbitrary Levels and Natural/Cultural Strata for Test Unit 12.

Level	Strata	Strata Interpretations	Associated Diagnostic Artifacts	Date Range
1	I,	Rubble fill from house razing	redware, creamware, pearlware, whiteware, ironstone, porcelain, stoneware, wrought nails, early cut nails, late cut nails, wire nails, prosser button	late 18 th to 20 th century
2	I	Rubble fill from house razing	pearlware, whiteware, ironstone, porcelain, wrought nails, late cut nails, wire nails,	late 18 th to 20 th century
3	I II (west half only)	I Rubble fill from house razing II Mortar lens within rubble	stoneware, ironstone, porcelain, wrought nails, late cut nails, wire nails, rim fire .22 cartridge	late 18 th to 20 th century
4	I, III	I Rubble fill from house razing III Subfloor accretional deposit	redware, stoneware, pearlware, whiteware, ironstone, wrought nails, early cut nails, late cut nails, wire nails	late 18 th to 20 th century
5	III, IV, V	III Subfloor accretional deposit IV Ash lens V Culturally sterile subsoil	pearlware, whiteware, ironstone, porcelain, late cut nails, prosser button	late 18 th to mid 19 th century



Figure 7.12. Top of Subsoil in Test Unit 12 at 15FA290. Note dark red color and presence of linear features (F26 to left and F27 to right) that traverse the unit. The level floor is about 55 cm below top of rubble fill.

V was culturally sterile subsoil. Features 26 and 27 were left intact in the base of the unit because both features traversed the width of the test unit and extended farther to the north and south (Figure 7.12). It was expected that these features would be excavated following the mechanical removal of rubble fill from the east room. Unfortunately both features were obliterated by poor control of the trackhoe during rubble fill removal. However, based on their shape, depth, and location within the east room it was determined that Features 26 and 27 were extensions of Features 42 and 43, respectively (see descriptions below).

A total of 1153 artifacts were recovered from Test Unit 12 (Table 7.9). Approximately 27 percent (n=312) of all of the recovered artifacts were from Level 1, which sampled Stratum I. Temporally sensitive

Table 7.9. Artifacts Recovered from Test Unit 12 at 15FA290.

Artifact Group and Attributes		Level 1	Level 2	Level 3	Level 4	Level 5 Zone 1	Level 5 Zone 2	Total
Kitchen Group								
	Coarse Earthenware							
	Redware, Lead glazed	2						2
	Unglazed				1			1
	Slip decoration	1						1
	Stoneware, Salt glaze	1			1			2
	Albany slip				3			3
	Salt glaze and Albany slip			1				1
	Refined Earthenware							
	Creamware, Undecorated	2						2
	Pearlware, Undecorated	2			1	1		4
	Underglaze hand-painted	1	1					2
	Transfer print		1			2		3
	Whiteware, Undecorated	12	3					15
	Factory-made slipware				1	1		2
	Underglaze hand-painted		1					1
	Transfer-printed						1	1
	Ironstone, Undecorated	20	1	9	13			43
	Molded	1			1			2
	Decal decorated	1		3		2		6
	Porcelain, Undecorated			1	2	2	1	7
	Molded	1		3	6	1		11
	Gilt			1				1
	Container glass							
	Finish, Improved tool			3		2		5
	Unidentified					1		1
	Stopper			1				1
	Base, Cup mold				1			1
	Body, Unidentified manufacture type	70	11	48	125	16		270
	Embossed lettering	1			2			3
	Decal				1			1
	Mold seam					2		2
	Etched					1		1
	Solarized amethyst, all fragment types				2			2
	Table glass, Body, unidentified manufacture	1		6	5			12
	Lid		1					1
	Metal							
	Sanitary can fragments					8		8
Furniture Group								
	Porcelain figurine		1		1			2
	Glass vase	2						2
	Appliance latch	1						1
	Lamp hardware				1			1
	Mirror glass					2	1	3
Architecture Group								
	Nails, Hand-wrought	10		7	10			27
	Early machine-cut	3	1		5			9
	Late machine-cut	11	6	1	16	2		36
	Unidentified machine-cut	1	3	9	21	5		39
	Wire	7	3	13	35			58
	Window Glass	73	9	18	60	3	2	165
	Door Hardware	2			4			6
	Plaster	2						2
	Drain pipe	2						2
	Brick		2					2
	Screw					1		1
Activities Group								
	Staple	1						1
	Scissor handle	1						1

Table 7.9 (concluded).

Artifact Group and Attributes	Level 1	Level 2	Level 3	Level 4	Level 5 Zone 1	Level 5 Zone 2	Total
Clothing Group							
Button, Shell	1			1			2
Bone				2			2
Glass			1				1
Prosser	1				2		3
Metal					1	1	2
Buckle	1						1
Footwear			1	9			10
Personal Group							
Prescription bottle fragment	11						11
Toy fragment			1				1
Jewelry			1	1			1
Comb				1	1		2
Arms Group							
Rim fire cartridge		1	2				3
Miscellaneous/Unassigned Group							
Unidentified metal	47	45		62		1	155
Coal	2						2
Faunal Group							
Large mammal			5	16	15	19	55
Small mammal	5		1	46	20		72
Reptile						1	1
Bird	12	2	11	18	4	4	51
Fish			1	1			2
TOTAL	312	92	148	475	95	31	1153

materials from this level include redware, creamware, pearlware, whiteware, ironstone, stoneware, wrought nails, early machine-cut nails, wire nails, and a prosser button. These artifacts date throughout the use-life of the house extending from the late 18th century through the early 20th century. All of these artifacts were derived from Stratum I, a rubble fill deposit associated with the razing of the house. Additionally, 17 pieces of bone were recovered from this level including small mammal (n=5) and bird (n=12). Level 2 also sampled the Stratum I fill deposits. A total of 92 artifacts (8 percent of the total) were recovered from this level. Diagnostic artifacts include pearlware, whiteware, ironstone, hand-wrought nails, late machine-cut nails, and wire nails. Like the Level 1 artifacts, the materials from Level 2 date throughout the lifespan of the house. Two pieces of bird bone were also recovered from Level 2. Level 3 also contained fill deposits associated with the razing of the house and also sampled Stratum II, a mortar lens that was generally devoid of artifacts. A total of 148 artifacts (13 percent of the total) were recovered from Level 3. Diagnostic artifacts include stoneware, ironstone, wrought nails, late machine-cut nails, wire nails, and a .22 caliber rim fire shell casings. Like Levels 1 and 2, these artifacts also date throughout the use-life of the house. Faunal remains from this level included large mammal (n=5), small mammal (n=1), bird (n=11), and fish (n=1) remains. Level 4 included the lowest portion of the Stratum I rubble fill deposits and the upper portion of a subfloor accretional deposit (Stratum III). Because the stratum change was not identified until the base of the level, artifacts from Stratum I and Stratum III were not separated, thus the assemblage from this level contains a mixture of artifacts from both strata.

About 41 percent of all of the artifacts recovered in Test Unit 12 came from Level 4 (n=475). Temporally diagnostic artifacts include redware, stoneware, pearlware, whiteware, ironstone, wrought nails, early machine-cut nails, late machine-cut nails, and wire nails. These materials date throughout the use-life of the house. Eighty-one pieces of bone were recovered from Level 4, including large mammal (n=16), small mammal (n=46), bird (n=18), and fish (n=1). The final level of Test Unit 12 was Level 5; it sampled a mixture of three strata—Stratum III, Stratum IV (ash lens), and Stratum V subsoil. Level 5/Zone 1 is the lowest remnant of Stratum III and was excavated separately when possible. Level 5/Zone 2 includes a mixture of the Stratum IV ash lens and Stratum V subsoil. Presumably the artifacts recovered from this zone

derive primarily from Stratum IV, though it is possible that a few artifacts could have been trampled into the upper 1-2 cm of the otherwise culturally sterile subsoil of Stratum V. A total of 95 artifacts were recovered from Level 5/Zone 1 (8 percent of the total). Diagnostic artifacts include pearlware, whiteware, ironstone, late machine-cut nails, and prosser buttons. These materials date from the late 18th century through the mid-to late 19th century. Faunal remains from Level 5/Zone 1 include large mammal (n=15), small mammal (n=20), and bird (n=4) bones. Artifacts from Level 5/Zone 2 (n=31; 2 percent of unit total) are few, but include a transfer-printed whiteware fragment and a metal button. Faunal remains from this zone include large mammal (n=19), reptile (n=1), and bird (n=4). Artifacts from Level 5 differ slightly from those recovered from the rubble fill sampled in Levels 1-4. The strata within Level 5 are all below the house demolition fill and are derived from actual occupations of the house. In addition, there is a slightly more limited temporal range, and artifacts diagnostic of the Late segment of house occupation are not represented. No wire nails or solarized amethyst glass fragments were found in Level 5, and the bottle glass is not machine-made. All materials from Level 5 (either zone) could have been made during the Early or Middle segments of site occupation.

TEST UNIT 13

Test Unit 13 was a 1-x-2-m unit excavated in the west room of Feature 1 (Figure 7.6). Specifically this test unit was positioned near the southern edge of the west chimney base, with the west wall of the unit about 64 cm from the interior face of the west foundational wall of Feature 1. The unit was oriented with its long axis east-west. This test unit was excavated to determine if intact cultural deposits were present within the west room of Feature 1, particularly small pit cellars that might have been excavated below the cellar floor near the chimney base. Test Unit 13 was excavated primarily in 10-cm arbitrary levels, but Levels 6 and 7 attempted to employ natural strata rather than arbitrary levels because it was initially thought that Level 6 represented a buried A horizon. However, it became apparent that the strata were thin, discontinuous, and complex, and excavations returned to 10 cm arbitrary levels in Levels 8, 9 and 10. Nine distinct soil strata were identified in Test Unit 13 (Table 7.10). Strata 1, 2, 3, and the upper part of Stratum 4 are all different zones of rubble fill derived from the razing of the house. The lower part of Stratum 4 and Strata 5, 6, 7, and 8 all represent thin layers of accretional deposits that accumulated below the house floor and on top of the cellar floor within the house foundation. Stratum 9 was culturally sterile subsoil. Figure 7.13 is a photograph of the west wall of Test Unit 13, and Figure 7.14 shows a drawing of the adjacent east and south profiles of Test Unit 13.

Stratum 1 was a yellowish brown (10YR5/6) silt loam containing small but abundant fragments of rock and brick. This stratum extended from the stripped surface to a maximum depth of 20 cm and was sampled by Levels 1 and 2. Stratum 2 was exposed at the surface in the western portion of Test Unit 13 and underlay Stratum 1 in its eastern portion. Stratum 2 was a dark grayish brown (10YR4/2) silty mottled clay with abundant brick and limestone inclusions. Stratum 2 extended to a maximum depth of 53 cm in the eastern portion of the unit. In the south wall this stratum was contained within the western portion of Levels 1 through 4 and the upper portion of the east part of Level 5. In the east profile Stratum 2 correlates with Levels 3, 4, and 5. Stratum 2 was underlain by Stratum 3, a layer of metal upholstery springs and wire that was probably the remains of a bed frame. Stratum 3 varied in thickness from 1 to 12 cm. Stratum 3 was sampled in portions of Levels 4, 5, and 6. Stratum 3 was underlain by a grayish brown (10YR5/2) silty clay loam (Stratum 4). This stratum had a maximum thickness of 22 cm and was sampled by Levels 6 and 7 and the upper portion of Level 8. The lower boundary of Stratum 4 marks the transition from the rubble fill to accretional floor deposits. The upper portion of Stratum 4 (mainly Level 6) included large amounts of limestone rubble. At the base of Level 6 (59-63 cm depth), the limestone is no longer present, and this marks the base of the rubble fill and the top of accretional subfloor fill deposits. Though Levels 1 through 6 sampled various mixtures of Strata 1 through 4, the artifacts from these levels all represent material derived from the rubble fill created by razing of the house. While these levels are technically stratigraphically mixed, they can be grouped interpretively as rubble fill.

Table 7.10. Correlations between Arbitrary Levels and Strata for Test Unit 13.

Level	Strata Sampled	Interpretation	Diagnostic Artifacts	Date
1	1, 2	Fill from house razing	Redware, ironstone, porcelain amethyst solarized glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails	late 18 th to 20 th century
2	1, 2	Fill from house razing	Stoneware, ironstone, wrought nails, late machine-cut nails, wire nails, center fire 12 gauge casing	late 18 th to 20 th century
3	2	Fill from house razing	Redware, pearlware, ironstone, porcelain, amethyst solarized glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails, Prosser button	late 18 th to 20 th century
4	2, 3	Fill from house razing	Pearlware, whiteware, ironstone, amethyst solarized glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails	late 18 th to 20 th century
5	2, 3	Fill from house razing	Pearlware, ironstone, porcelain, amethyst solarized glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails	late 18 th to 20 th century
6	3, 4, 5, and 8	3 Fill from house razing 4 Accretional subfloor deposit 5 Ash or mortar lens 8 Clay lens	Whiteware, stoneware, early machine-cut nails, late machine-cut nails, wire nails	19 th century
7	4, 6, 7, and 8	4 Subfloor accretional deposit 6, 7 Accretional subfloor deposit (hearth cleaning) 8 Clay lens	Stoneware, creamware, whiteware, ironstone, porcelain, applied finish container glass, early cut nails, wire nails	19 th to 20 th century
8	4, 6, 7, 8, and 9	4 Accretional subfloor deposit 6, 7 Accretional subfloor deposit (hearth cleaning) 8 Clay lens 9 Subsoil	Redware, pearlware, whiteware, ironstone, porcelain	late 18 th to mid-19 th century
9	8, 9	8 Clay lens 9 Subsoil	redware, pearlware, creamware, whiteware	late 18 th to early 19 th century
10	9	Subsoil	redware, pearlware	late 18th to early 19th century



Figure 7.13. West Wall of Test Unit 13 at 15FA290. Note the rubble fill overlying the thinly stratified subfloor accretional deposits that contain individual coal and ash lenses. Also note the extensive rodent disturbances in the subsoil, which were initially identified as possible features.

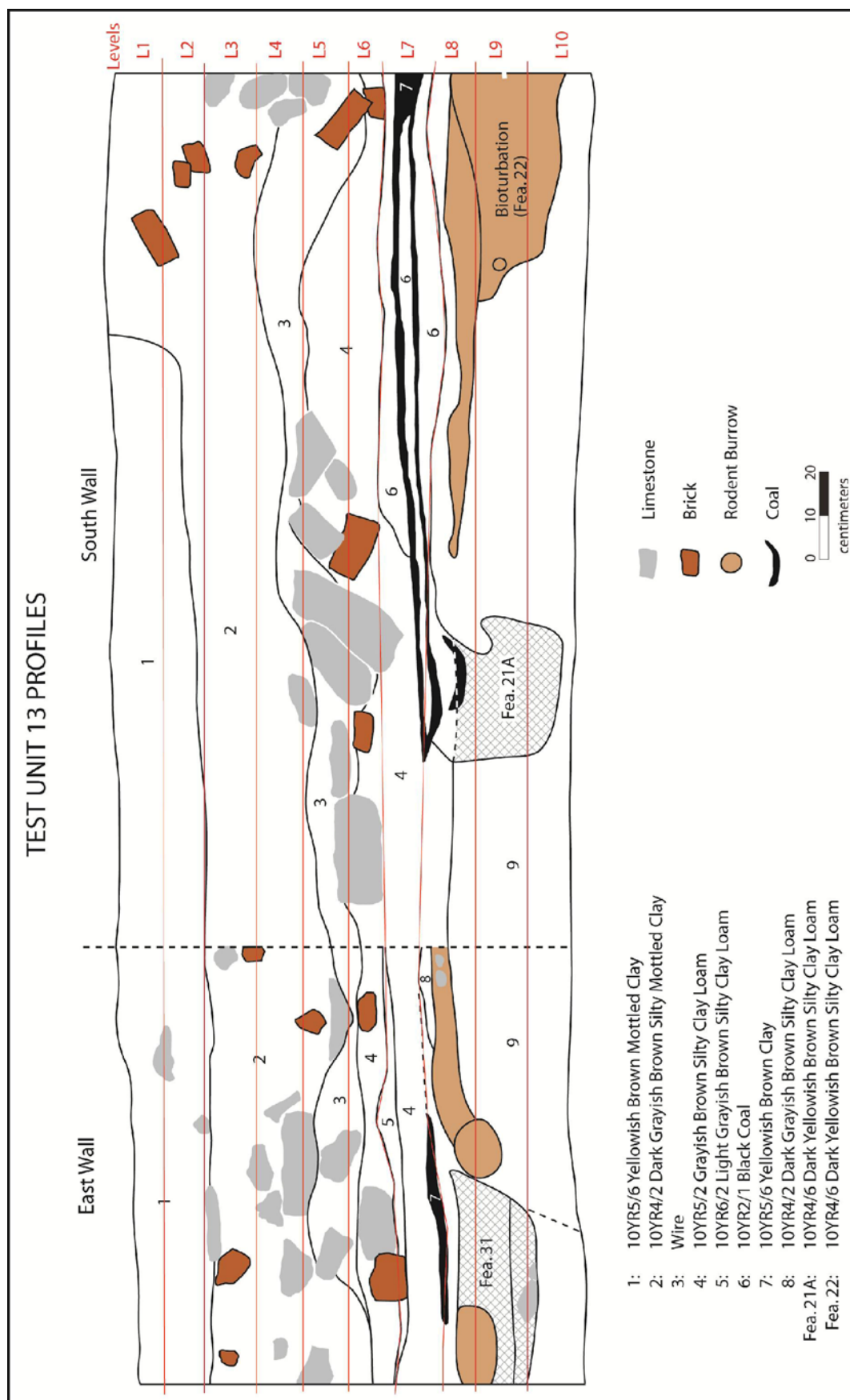


Figure 7.14. Adjoining East and South Profiles of Test Unit 13 at 15FA290.

At a depth of about 62 cm below the stripped surface, the deposits transition fairly abruptly from rubble fill to the accretional subfloor deposits. These include the lower portion of Stratum 4 that is free of limestone, a thin lens of ash or mortar designated Stratum 5, probable hearth cleaning episodes represented by Strata 6 and 7, and the upper part of Stratum 8; these strata correlate were sampled by the lower portion of Level 6 and by Levels 7 and 8. One of the characteristics of these subfloor accretional deposits is that they exhibit multiple, thin, and discontinuous lenses of different sediments superimposed over each other (see Figure 7.13). Each thin lens probably represents a specific depositional episode, but these were so thin and discontinuous that they could not be excavated individually. When excavators tried to follow an individual surface or lens laterally, it soon faded out or became intermixed with a different kind sediment. In this way the accretional subfloor deposits in Test Unit 13 are very similar to sediments that accumulate in caves and rock shelters. While there is little stratigraphic continuity and excavation of individual depositional events is extremely difficult, general types of filling episodes can be distinguished.

In the east profile, the upper boundary of the accretional subfloor deposits was marked by Stratum 5, a thin lens of white (10YR8/1) ash or mortar that varied in thickness from 1 to 5 cm. This stratum was not present in the south wall profile. In the southern portion of the unit Stratum 4 was underlain by a light grayish brown (10YR6/2) silty clay loam (Stratum 6) that varied between 10 and 15 cm thick. This stratum consisted of a series of three thin lenses of sediment (2 to 7 cm thick) separated by thin layers of black (10YR2/1) coal fragments (Stratum 7). Strata 6 and 7 were sampled in Levels 7 and 8 and probably represent multiple hearth cleaning and disposal episodes with debris scattered across the aggrading subfloor surface. Stratum 7 was also identified in the east profile in Levels 7 and 8. Also in the east profile a thin lens of yellowish brown (10YR5/6) clay (Stratum 8) was identified near the interface of the accretional floor deposits and subsoil. This lens was 3 cm thick at its thickest point and extended 23 cm from the southeast corner of the test unit. Stratum 8 is positioned immediately above a rodent burrow and likely represents subsoil that was displaced by the animal. The presence of abundant rodent burrows is another characteristic of the accretional subfloor deposits (Strata 4-8) and the subsoil sediments immediately underlying the accretional deposits. These animals were apparently present while the site was occupied, and their activities have severely disrupted the integrity of the accretional subfloor deposits, making it even more difficult to excavate strata individually. In the south and west parts of the test unit the base of Stratum 6 marks the transition from the accretional floor deposits to subsoil. In the eastern portion of the test unit this transition is at the base of Stratum 8.

Subsoil (Stratum 9) was encountered in the lower five cm of Level 8. Stratum 9 was a yellowish brown (10YR5/4 to 10YR5/6) clay. There is no evidence for a remnant A horizon in this unit, which implies that the topsoil was removed from the house footprint during preparation for its construction. The upper portion of Stratum 9 showed evidence of severe bioturbation from burrowing rodents. In the east wall profile a large rodent burrow at the interface of Levels 8 and 9 extended along the wall to the southeast corner of the unit. On the south wall a second large rodent disturbance was also noted (originally labeled Feature 22; see Figure 7.14). A third large disturbance was located in the northwest corner of the test unit at the same level (originally labeled Feature 23; see Figure 7.13). The location of these burrows is consistent with what would be expected in subfloor midden deposits. In addition to the rodent disturbances several cultural features also originated at the top of the subsoil. Features 20, 21, 21A, and 31 were all identified in Level 9 (see subsequent section for detailed feature descriptions). All of these features appear to have been small pits that were used as refuse and ash dumps. All of these pits were first identified in Level 9, but the east wall profile (Figure 7.14) shows Feature 31 beginning at the base of Level 8, within the subfloor accretional deposits. At a depth of approximately 104 cm below the starting surface, no additional cultural or animal disturbances were noted in the subsoil, and excavations were terminated.

A total of 814 historic artifacts were recovered from Test Unit 13 (Table 7.11). One hundred twenty-one (14.9 percent of the total) artifacts were recovered from Level 1 which samples Strata 1 and 2, both of which are interpreted as fill deposits associated with the razing of the structure. Diagnostic artifacts from Level 1 include redware, ironstone, porcelain, amethyst solarized container glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails, and a rim fire .38 caliber shell casing. These materials date throughout the use life of the house structure. The mixing of artifacts is not unexpected given the nature

Table 7.11. Artifacts Recovered from Test Unit 13 at 15FA290.

		Level										
Artifact Group and Attributes		1	2	3	4	5	6	7	8	9	10	Total
Kitchen Group												
	Coarse Earthenware											
	Redware, Lead glazed	1							2	2	2	7
	Unglazed	1										1
	Slip decoration	1										1
	Stoneware, Salt glaze exterior/Albany slip interior							1				1
	Albany slip		1					1				2
	Bristol glaze						1					1
	Refined Earthenware											
	Creamware, Undecorated							1		1		2
	Pearlware, Undecorated			1	2	1			2	1	1	8
	Old Blue			1								1
	Transfer print			1							2	3
	Edge-decorated								1	2		3
	Whiteware, Undecorated				1		2		1	3		7
	Underglaze hand-painted							3	1	1		5
	Ironstone, Undecorated	5	1	7		2		5				20
	Molded	1			1				1			3
	Decal decorated				1	1						2
	Porcelain, Undecorated	1				1			1			3
	Decal-decorated			1					2			3
	Molded							2				2
	Container glass											
	Finish, Rough applied	1	1		1			4				7
	Base, Unidentified					2		1				3
	Post mold					1						1
	Semiautomatic machine					1						1
	Body, Unidentified manufacture type	18	7	16	16	19	5	28	12	1		122
	Embossed lettering							1				1
	Solarized amethyst, all vessel fragment types	4		1	10	5						20
	Table glass, Rim, Drinking glass	1		2								3
	Base, Press-molded				1	1						2
	Drinking glass				1							1
	Body, Press-molded				1			4				5
	Etched								1			1
	Metal											
	Sanitary can fragments			10	30	20						60
	Knife blade				1							1
	Utensil handle fragment							5				5
Furniture Group												
	Furniture hardware (caster, pull, etc.)					1					1	2
	Fireplace screen						10					10
Architecture Group												
	Nails, Hand-wrought	5	6	7	3	7					1	29
	Early machine-cut	4		1	1	4	1	2				13
	Late machine-cut	15	5	17	7	6	3					53
	Unidentified machine-cut	4	4	11	1	7	1	4		2		34
	Wire	4	9	11	4	30	1	10				69
	Window Glass	36	14	37	13	13	11	52	11	1		188
	Door Hardware			1	1			1				3
	Plaster	1										1
	Drain pipe	4		1								5
	Brick *			1								1
	Screw					2	1					3
Clothing Group												
	Button, Prosser			1		2						3
	Metal	1						1				2
	Rivet							1				1

Table 7.11 (concluded).

		Level										
Artifact Group and Attributes		1	2	3	4	5	6	7	8	9	10	Total
Activities Group												
	Metal Container	3										3
	Drill Part	1										1
	Wire	1	7									8
	Nut					1						1
	Staple					4						4
	Chain							6				6
	Metal Ring							1				1
Personal Group												
	Toy fragment			1		1		1				3
	Comb fragment	1										1
Arms Group												
	Rim fire cartridge	1										1
	Center-fire cartridge		1			1						2
Transportation Group												
	Horse shoe				1							1
	Stirrup										1	1
Miscellaneous/Unassigned Group												
	Unidentified metal					2				1	2	5
Faunal Group												
	Large mammal	2			1		1	7	6	1		18
	Small mammal	2		1			1	2	1			7
	Bird	3	5	9	4	2		2	2			27
TOTAL		121	61	139	102	137	38	146	44	16	10	814

* Brick fragments were abundant in Test Unit 13, but only one a sample of whole brick was collected.

of these fill deposits. Additionally seven pieces of faunal bone were recovered from Level 1 including large mammal (n=2), small mammal (n=2), and bird remains. Level 2 also samples the fill deposits from Strata 1 and 2. A total of 61 artifacts (7.5 percent of the total) were recovered from this level. Temporally diagnostic artifacts from Level 2 included ironstone, stoneware, wrought nails, late machine-cut nails, wire nails, and a 12 gauge shell casing. Like the artifacts from Level 1, these artifacts date throughout the uselife of the house structure. Five pieces of bird bone were also recovered from Level 2, Level 3 samples the Stratum II deposit. A total of 139 historic artifacts (17.1 percent of the total) were recovered from this level. Diagnostic artifacts recovered from Level 3 included redware, pearlware, ironstone, porcelain, amethyst solarized container glass, wrought nails, early machine-cut nails, late machine-cut nails, wire nails, and a prosser button. These materials date throughout the uselife of the house. Ten fragments of faunal bone were also recovered from this level including small mammal (n=1) and bird (n=9) remains. Level 4 sampled the fill deposits from Strata 2 and 3. One hundred two historic artifacts (12.5 percent of the total) were recovered from this level. Diagnostic artifacts included pearlware, whiteware, ironstone, amethyst solarized container glass, wrought nails, early machine-cut nails, late machine-cut nails, and wire nails. Like the other levels excavated into these fill deposits, the artifacts from Level 4 date throughout the uselife of the house. Faunal remains from Level 4 included one large mammal fragment and four bird remains. Level 5 also samples Strata 2 and 3. A total of 137 (16.8 percent of the total) historic artifacts were recovered from this level. Diagnostic artifacts included pearlware, ironstone, porcelain, amethyst solarized container glass, wrought nails, early machine-cut nails, late machine-cut nails, and wire nails. These artifacts date throughout the uselife of the house. Additionally two fragments of bird bone were also recovered

Level 6 marked an important shift as this level contained the base of the demolition fill deposits (Stratum 3) as well as the upper portion of a subfloor accretional deposit (Stratum 4), and lenses of ash or mortar and clay (Strata 5 and 7) respectively. The subfloor deposits are associated with the occupation of the house rather than its destruction. Unfortunately these stratum changes could not be identified until the base of the level was reached, so none of the artifacts could be confidently assigned to either the rubble fill or the more intact accretional deposits that comprise the level. The absence of solarized amethyst glass in Level 6

and subsequent levels is perhaps one of the best indicators of the more intact and temporally earlier character of the accretional subfloor fill deposits of Strata 4 through 8. Thirty-eight artifacts (4.7 percent of the total) were recovered from Level 6. Diagnostic artifacts included whiteware, stoneware, early machine-cut nails, late machine-cut nails, and wire nails. These artifacts date throughout the 19th century. Two fragments of bone were also recovered; one large mammal fragment and one small mammal fragment.

Strata 4, 6, 7, and 8 were all samples in Level 7. Strata 4, 6, and 7 are all subfloor accretional deposits. Two of these Strata (6 and 7) are probably related to hearth cleaning episodes. Stratum 8 was a lens of clay. Unfortunately these strata were not identified until the level was completed and the strata could be seen in profile. Consequently the artifacts cannot be separated by individual stratum. However, all materials from Level 7 represent materials that accumulated while the house was occupied, and are not the result of post-occupation destruction. One hundred forty-six artifacts (17.9 percent of the total) were recovered from Level 7. Diagnostic artifacts included stoneware, creamware, whiteware, ironstone, porcelain, applied finish container glass, early machine-cut nails, and wire nails. These materials date from the early 19th century through the early 20th century. Additionally 11 pieces of bone were also recovered. These include large mammal (n=7), small mammal (n=2), and bird (n=2) remains.

Level 8 samples the same strata as Level 7. In addition Stratum 9 (subsoil) was also identified in this level. Also like Level 7, artifacts were not separated by stratum in Level 8. Forty-four artifacts were recovered from this level (5.4 percent of the total). Diagnostic artifacts included redware, pearlware, whiteware, ironstone, and porcelain. These artifacts date from the late 18th century through the 19th century. Additionally, nine pieces of bone were recovered including large mammal (n=6), small mammal (n=1), and bird (n=2) bones.

Level 9 sampled a portion of Stratum 8 (clay lens) and Stratum 9 (subsoil). Only 16 historic artifacts (2 percent of the total) were recovered from this level. This level is the lowest sample of accretional subfloor deposits, so the date range of the recovered artifacts is theoretically the earliest of the levels in Test Unit 13. Diagnostic artifacts from this level included redware, pearlware, creamware, and whiteware. These artifacts date from the late 18th to the mid-19th century, which is slightly earlier than the date range for the Level 8 assemblage. One piece of bone from a large mammal was also recovered in this level,

The final level in Test Unit 13 was Level 10 which sampled the uppermost part of Stratum 9 subsoil. Ten artifacts were recovered from this level (1.2 percent of the total). Diagnostic artifacts included redware and pearlware. These materials date from the late 18th century to the early 19th century, and are probably related to the initial occupation of the house. Their presence within subsoil matrix is likely due to trampling or the effects of rodent activity at the interface between culturally sterile subsoil and the overlying accretional subfloor deposits of Strata 4 through 8.

TEST UNIT 14

Test Unit 14 was a 1-x-2-m unit excavated in the inner house lot area west of the cistern (Feature 24; see Figures 7.1 and 7.6); it was oriented generally north-south on the long axis. This unit was excavated to test the deposits around Feature 24, a cement-lined cistern with an upper vault of brick, which was identified during mechanical excavation of Block 3. The profile for this test unit shows five distinct soil strata (Figure 7.15 and Table 7.12). Plow zone had been mechanically removed from the Test Unit 14 area, so the unit started at a stripped surface, not original ground surface. Stratum I was an olive yellow (2.5Y6/6) clay that extended between 6 and 10 cm below surface. This stratum was confined to Level 1 and was present only in the eastern half of the unit. Stratum I is almost identical to the subsoil surrounding the base of the cistern (see description below of Feature 24), which reached a depth of about 2.5 meters below surface. Stratum I is interpreted as a deep subsoil that was brought to the surface as backdirt when the cistern was constructed, and it was apparently spread laterally in around the cistern. In the northeast corner of the test unit Stratum I was underlain by a small pit, designated Feature 19 (originally Stratum II; Table 7.12). In the remainder of the

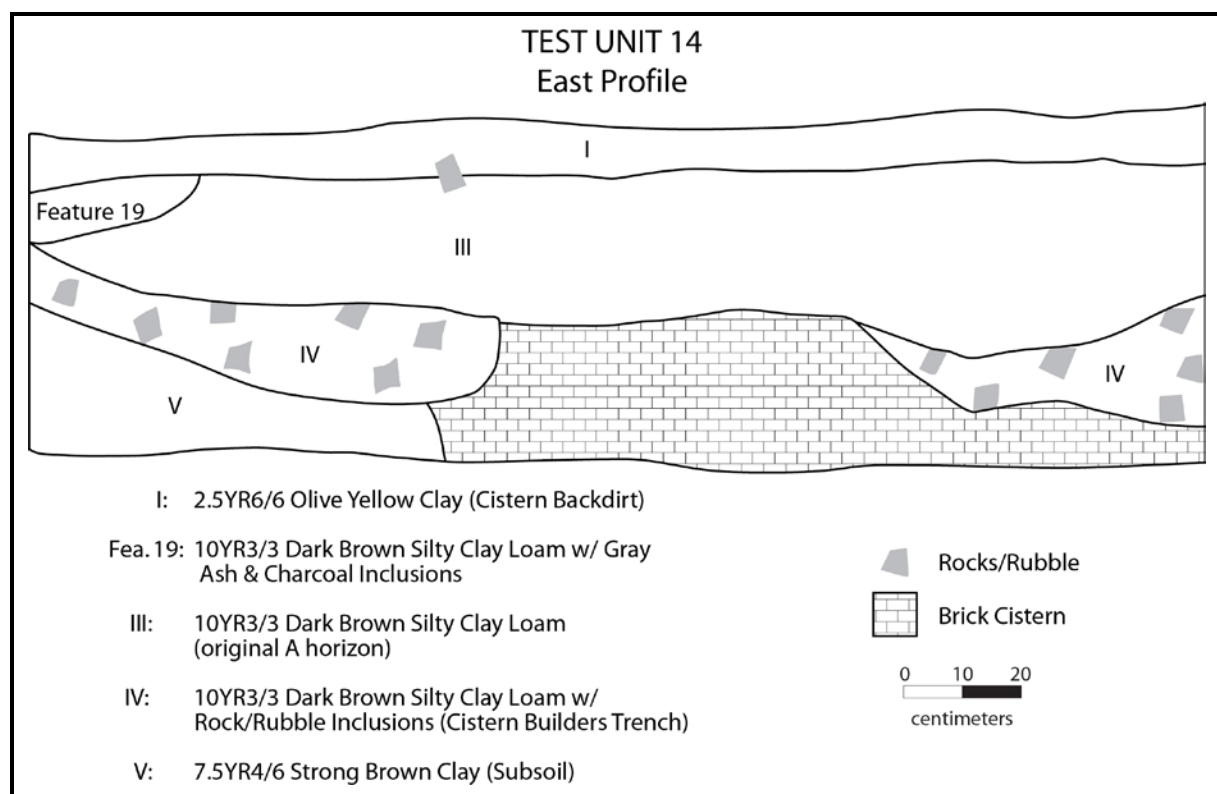


Figure 7.15. East Profile of Test Unit 14 at 15FA290. Feature 19 was originally designated as Stratum II.

Table 7.12. Correlations between Arbitrary Levels and Strata for Test Unit 14.

Level	Strata Sampled	Interpretation	Diagnostic Artifacts	Date
1	I, II, III	I—Backdirt from Feature 24(cistern) II—Feature 19 (pit) A horizon remnant	Redware, creamware, pearlware, whiteware, yellowware, wrought nails, early machine-cut nails, late machine-cut nails, wire nails	late 18th to 20th century
2	III	III A horizon remnant	Wrought nails	early 19th century
3	III, IV	III—A horizon remnant IV—Feature 24 builders' trench	None	
4	IV, V	IV—Feature 24 builders' trench V—Subsoil	None	
5	V	Subsoil	None	

test unit, Stratum I was underlain by Stratum III, a dark brown silty clay loam. This stratum varied in thickness between 24 and 34 cm, and was sampled by the lower portion of Level 1, Level 2, and the upper part of Level 3. The extent of Stratum III across Test Unit 14 suggests that it represents a remnant A or AB horizon that had been penetrated and partially undermined by construction of Feature 24. Alternatively this stratum may represent a displaced A horizon that was removed, then redeposited during construction of Feature 24. In either event, it contains artifacts indicative of the construction date range of the Feature 24 cistern. Stratum III was undercut by Stratum IV, the builders' trench for Feature 24 (discussed in detail in the description of Feature 24). In addition to the builders' trench a small segment of the cistern wall was exposed in the east wall of the test unit at a depth of about 30 cm below surface (Figures 7.15 and 7.16). In the northern portion of the test unit, Stratum IV was underlain by Stratum V a strong brown (7.5YR4/6) culturally sterile clay subsoil. The upper part of Stratum V was included within Level 4. Stratum V was not identified in the south part of the test unit due to the intrusion of the cistern and the associated builders' trench. Excavation was terminated in Test Unit 14 once it was established that Stratum V was culturally sterile subsoil.



Figure 7.16. Photograph of East Wall of Test Unit 14 at 15FA290. The yellow clay cistern backdirt is clearly seen overlying an A horizon remnant and the builders' trench and cistern itself.

Table 7.13. Artifacts Recovered from Test Unit 14 at 15FA290.

Artifact Group and Attributes	Level 1	Level 2	Level 3	Level 4	Level 5	Total
Kitchen Group						
Coarse Earthenware						
Redware, Lead glazed	14					14
Yellowware, Undecorated	1					1
Refined Earthenware						
Creamware, Undecorated	1					1
Pearlware, Undecorated	2					2
Edge-decorated	1					1
Whiteware, Factory-made slipware	2					2
Container glass						
Body, Unidentified manufacture type	7					7
Architecture Group						
Nails, Hand-wrought	2	2				4
Early machine-cut	5					5
Late machine-cut	5					5
Unidentified machine-cut	5					5
Wire	1					1
Window Glass	19	1				20
Brick *	1					1
Clothing Group						
Button, Metal		1				1
Faunal Group						
Large mammal	5	4				9
Miscellaneous/Unassigned Group						
Unidentified metal			1			1
Charred wood		3				3
Total	71	11	1	0	0	83

* Brick fragments were abundant in Test Unit 14, but only one brick was collected.

A total of 121 historic artifacts was recovered from Test Unit 14. Approximately a third of these were recovered from Feature 19 (pit). These artifacts are described and interpreted below in the discussions of these features. The discussion here focuses on the remaining 83 artifacts (Table 7.13), recovered from general level excavations within Test Unit 14. Seventy-one artifacts were recovered from Level 1.

Temporally diagnostic materials recovered included redware, creamware, pearlware, whiteware, yellowware, wrought nails, early machine-cut nails, late machine-cut nails, and wire nails. These artifacts date throughout the use-life of the house from the late 18th to early 20th century, though they are heavily weighted toward the first half of the 19th century. Three strata were sampled by Level 1; the Stratum I clay backdirt from Feature 24, Stratum II later identified as a pit feature (Feature 19), and the A horizon remnant of Stratum III that was partially buried by Stratum I. The artifacts recovered from this level are thought to be associated mainly with Stratum III, as the clay subsoil backdirt would be culturally sterile, and artifacts associated with Feature 19 were bagged separately from the general excavation level when possible. The portion of Stratum III that underlies Stratum I is interpreted as representing the ground surface during the Early period of the house chronology, prior to construction of the Feature 24 cistern. The mixing of later artifacts (e.g., wire nail) with the earlier materials in this stratum most likely took place in the portion of the unit that lacked the Stratum I cap. Only 11 artifacts were recovered from Level 2, and the only temporally diagnostic artifacts were two wrought nails which date from the late 18th to early 19th century. The faunal assemblage from Level 2 consisted of four pieces of large mammal bone. One artifact, a metal strap (Unassigned group), was recovered from Level 3 which also sampled the Stratum III A horizon remnant, as well as Stratum IV the builders' trench for Feature 24. This artifact was not temporally diagnostic. No artifacts were recovered from Levels 4 or 5.

TEST UNIT 15

Test Unit 15 was another 1-x-2-m unit located south of Test Unit 14, and oriented roughly perpendicular that unit, with the long axis running parallel to the southern edge of the Feature 24 cistern (Figures 7.1 and 7.6). This test unit was placed to obtain a larger sample of historic artifacts from the A horizon remnant around the cistern. This test unit was excavated in four arbitrary 10-cm levels, and like Test Unit 14, the excavations began at the top of the mechanically stripped surface and not the original ground surface. The profile for this test unit shows only two soil strata (Figure 7.17 and Table 7.14). Stratum I was a dark brown (10YR3/3) silt loam that extended throughout the test unit, except for the very northeastern edge, closest to the cistern. At the northwest edge of the unit Stratum II was identified. This stratum consisted of an olive yellow (2.5Y) clay, corresponding to either Stratum I cistern backdirt or Stratum IV builders' trench deposits identified in Test Unit 14. Unlike Test Unit 14, the clay zone in Test Unit 15 did not seal a substantial area of intact deposits. Stratum II extended from the surface to a depth of 27 cm and was confined to the northwest part of the unit. Stratum II was underlain by the wall of the cistern, which suggests that Stratum II is more likely builders' trench fill. Because the artifact density in Test Unit 15 was so low, excavations were terminated at a depth of about 55 cm below surface.

Only seven historic artifacts were recovered from Test Unit 15 (Table 7.15). All but two artifacts were recovered from Level 1. Temporally diagnostic artifacts from this level included redware, stoneware, and ironstone. These materials date from the late 18th century through the late 19th century. The mixing of older and more recent artifacts is not unexpected given that the remnant A horizon (Stratum I) identified in Level 1 was not capped by cistern backdirt. One fragment of large mammal bone was also recovered from Level 1. Two artifacts, both redware body sherds, were recovered from Level 2, again in Stratum I contexts. These artifacts date from the late 18th to mid-19th century. These artifacts suggest that the A horizon remnant represents the ground surface at the time of the house's construction.

TEST UNIT 17

Test Unit 17 was a 50-x-50-cm unit placed at the interior northwest corner of Feature 1 (Figures 7.1 and 7.6). This unit was excavated to test the integrity of deposits in the north room of Feature 1 and to determine if specific artifacts had been cached at this corner location. The unit was excavated in four arbitrary 10-cm levels. The unit profile showed only two soil strata, rubble fill and underlying subsoil (Figure 7.18 and Table 7.16). The Stratum I rubble fill was a clayey silt loam with rock and brick fragment inclusions

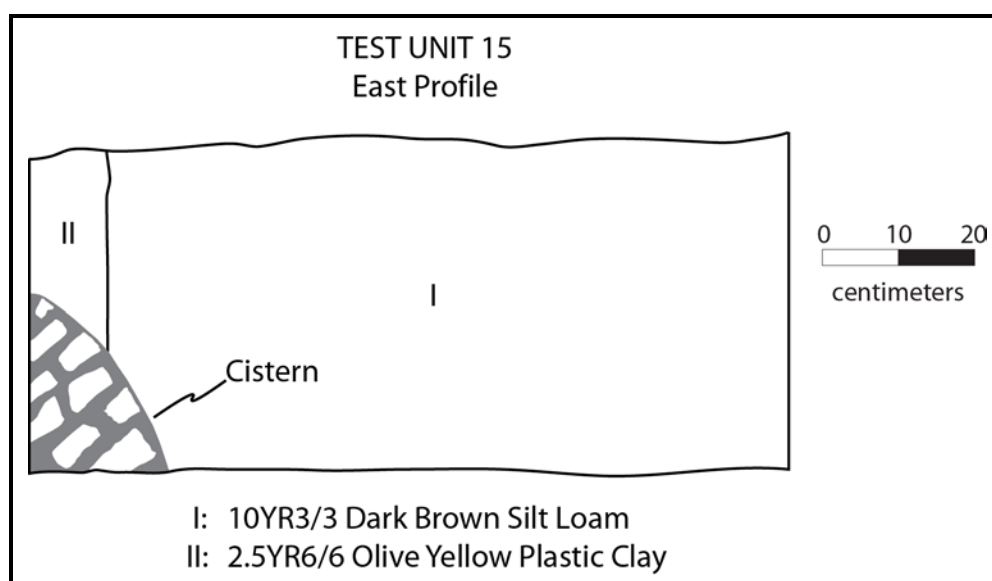


Figure 7.17. East Profile of Test Unit 15 at 15FA290.

Table 7.14. Correlations between Arbitrary Levels and Strata for Test Unit 15.

Level	Strata Sampled	Interpretation	Diagnostic Artifacts	Date
1	I, II	I—A horizon remnant II—Builders' trench fill	Redware, stoneware, ironstone	late 18th to late 19th century
2	I, II	I—A horizon remnant II—Builders' trench fill	Redware	late 18th to late 19th century
3	I, II	I—A horizon remnant II—Builders' trench fill	None	
4	I	I—A horizon remnant	None	

Table 7.15. Artifacts Recovered from Test Unit 15 at 15FA290.

Artifact Group and Attributes		Level 1	Level 2	Level 3	Level 4	Total
Kitchen Group						
	Coarse Earthenware					
	Redware, Lead glazed	1	2			3
	Stoneware, Salt-glazed	1				1
	Refined Earthenware					
	Ironstone, Undecorated	1				1
Architecture Group						
	Window Glass	1				1
Faunal Group						
	Large mammal	1				1
Total		5	2	0	0	7

that varied in color from dark yellowish brown (10YR3/6) in the upper 8-12 cm to dark brown in the lower 22-30 cm. The texture of the soil was consistent throughout, and the color variation is most likely due to changes in moisture content, as the unit had been exposed for some time prior to excavation. Stratum II subsoil was a dark yellowish brown (10YR4/6) silty clay. This stratum was encountered in the lower portion of Level 4. Excavations in Test Unit 17 were terminated once it was established that Stratum II was culturally sterile subsoil and that no intact deposits or features were present in this location.

One hundred forty-six artifacts were recovered from Test Unit 17 (Table 7.17). Approximately 19.2 percent of the test unit assemblage (n=28) was recovered from Level 1, which sampled the rubble fill deposit associated with house demolition. Diagnostic artifacts from Level 1 included ironstone, wrought nails, early

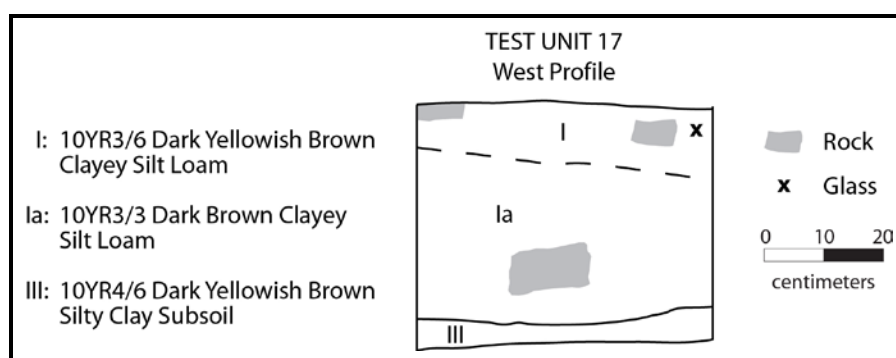


Figure 7.18. West Profile of Test Unit 17 at 15FA290.

Table 7.16. Correlations between Arbitrary Levels and Strata for Test Unit 17.

Level	Strata Sampled	Interpretation	Diagnostic Artifacts	Date Range
1	I	Fill from house razing	Ironstone, wrought nails, early machine-cut nails, late machine-cut nails, wire nails	late 18 th to 20 th century
2	I	Fill from house razing	redware, porcelain, solarized amethyst container glass, late machine-cut nails, wire nails	late 18 th to 20 th century
3	I	Fill from house razing	redware, stoneware, ironstone, porcelain, late machine-cut nails, wire nails	late 18 th to 20 th century
4	I, II	I—Fill from house razing II—Subsoil	stoneware, wire nails	19 th to 20 th century

Table 7.17. Artifacts Recovered from Test Unit 17 at 15FA290.

Artifact Group and Attributes	Level 1	Level 2	Level 3	Level 4	Total
Kitchen Group					
Coarse Earthenware					
Redware, Lead glazed		1	1		2
Stoneware, Salt-glazed			5	1	6
Salt-glazed exterior/Albany slip interior			2		2
Refined Earthenware					
Ironstone, Undecorated	2		16		18
Porcelain, Chinese export		1	1		2
Container glass					
Lip, Semi-automatic bottle cap seat				1	1
Base, Unidentified manufacture type		1			1
Body, Unidentified manufacture type		15	4	1	20
Solarized amethyst glass, all vessel parts		1			1
Metal, sanitary can fragment				1	1
Architecture Group					
Nails, Hand-wrought	2				2
Early machine-cut	1				1
Late machine-cut	8	3	3		14
Unidentified machine-cut	1	7	3		11
Wire	9	3	4	1	19
Window Glass	4	8	4		16
Plaster	1				1
Activities Group					
Fence wire		3	2		5
Bolt		1			1
Clothing Group					
Rivet		1	1		2
Faunal Group					
Large mammal			5		5
Miscellaneous/Unassigned Group					
Unidentified metal		10	2		12
Charcoal and coal			4		4
Total	28	55	58	5	146

machine-cut nails, late machine-cut nails, and wire nails. These artifacts date throughout the uselife of the house, but the stratum clearly originates with the early 20th century razing of the structure. Level 2 also sampled the demolition fill deposit, producing 37.7 percent of unit assemblage (n=55). Diagnostic artifacts included redware, Chinese export porcelain, amethyst solarized container glass, late machine-cut nails, and wire nails. Like the materials from Level 1, the Level 2 artifacts reflect a mixture of materials dating throughout the uselife of the structure. Fifty-eight artifacts (39.7 percent of the total) were recovered from Level 3, which also sampled the rubble fill. Diagnostic artifacts from this level included redware, stoneware, ironstone, porcelain, late machine-cut nails, and wire nails. Additionally five pieces of bone from large mammals were also recovered. The materials from this level are consistent with the mixing of artifacts derived from demolition of the house in the early 20th century. Brick fragments were abundant in the first three levels of Test Unit 17, but none were collected. Five artifacts were recovered from the lower portion of Stratum I in Level 4. The only diagnostic artifacts were two wire nails which date to the late 19th or early 20th century. In Test Unit 17 there was no evidence of subfloor midden accumulation below the rubble fill, like lower cultural strata observed in Test Units 12 and 13.

TRENCHES AND SUPPLEMENTAL TEST UNIT

While additional test units were being excavated inside Block 3 and within Feature 1, a series of four additional trenches was excavated across the site to prospect for potential outbuildings. All trenches were oriented grid north-south on the long axis, parallel to the direction of Newtown Pike. In all instances, the trackhoe was used to remove plow zone and expose a smooth surface within the upper subsoil, along with any features or structural remains that might be present. The locations of these trenches are shown in Figures 7.1 and 7.6.

TRENCH 1 SOUTH

Trench 1 South was a southern extension of Trench 1 (Figures 7.6 and 7.19). The trench measured approximately 1.5 m wide and extended for a distance of about 23.25 m, with a slight dogleg to the east about halfway along its length. No outbuilding foundations or pier supports were identified in Trench 1 South, but one posthole—Feature 2—was found approximately 12.5 m from the north end of the trench (Figure 7.6). A low number of artifacts (n=13) was opportunistically recovered from Trench 1 South, but the assemblage included window glass, container glass, stoneware, and yellowware (Table 7.18).

TRENCH 2

Trench 2 was positioned with its north end about two meters south of Test Unit 2 (see Figures 7.6 and 7.20). This trench was about 1.25 m wide and extended south for a distance of 14.75 m, traversing the northern part of what is interpreted as the Inner Yard. No structural remains, intact deposits or features were identified in this trench. A very low number (n=3) of artifacts was recovered opportunistically from the trench, including single examples of container glass, whiteware, and porcelain (Table 7.18).

TRENCH 3

Trench 3 was located near the northern edge of the site with its southern end approximately 12.5 m north of Block 2 (Figures 7.6 and 7.21). This trench was wider than others, measuring about 2.4 m wide at the south end and 2.75 m wide at the north end. Trench 3 was about 14 m long and extended downslope to the north from the core of the site, traversing mainly portions of the Outer Yard. The northern end of the trench traversed a topographically low area that may have once been a spring (see Figure 7.21). No structural remains were identified in this trench, but a large, dark stain was noted in the northern third of the trench at



Figure 7.19. Trench 1 South at 15FA290 (looking south). Feature 2, a posthole, is covered with black plastic.



Figure 7.20. Trench 2 at 15FA290 (looking south). No features were found in Trench 2.

Table 7.18. Historic Artifacts Recovered from Selected Trenches at 15FA290.

Artifact Group and Attributes		Trench 1 South	Trench 2	Trench 3	Trench 4	Total
Kitchen Group						
Coarse Earthenware						
	Redware, Lead glazed			6		6
	Unglazed			1		1
	Stoneware, Salt-glazed			5		5
	Salt-glazed exterior/Albany slip interior	1				1
	Yellowware	1		1		1
Refined Earthenware						
	Pearlware, Undecorated body			1		1
	Undecorated base			1		1
	Blue transfer-printed			1		1
	“Old Blue” transfer-printed			1		1
	Hand-painted underglaze			1		1
	Whiteware, Undecorated body		1			1
	Undecorated rim				2	2
	Brown annular band, rim			1		1
	Hand-painted floral rim			1		1
	Green transfer-printed body				1	1
	Ironstone, Undecorated body			1	2	3
	Undecorated rim			6	1	7
	Undecorated base			2	2	4
	Molded rim			2		2
	Hand-painted pour spout			1		1
	Hand-painted base			1		1
	Purple transfer-printed rim			1		1
	Base with unidentified partial maker’s mark			1		1
	Porcelain, Undecorated body				1	1
	Undecorated base			1		1
	Molded rim		1			1
	Molded and decal-decorated rim				1	1
Container glass						
	Lip, Solarized amethyst with double ring improved tool			1		1
	Base, Semiautomatic machine		1			1
	Base, turn mold			1		1
	Body, Unidentified manufacture type, various colors	8		1	5	14
	Solarized amethyst glass, body				1	1
	Table glass, press-molded				3	3
Architecture Group						
	Window Glass	3			3	6
Activities Group						
	Iron bucket or pot base			1		1
Faunal Group						
	Unidentified large mammal			7	2	9
Total		13	3	47	24	87

the bottom of the plow zone, and artifacts were abundant in this area. This stain was not assigned a feature number and was considered a remnant of an artifact-laden A horizon. Test Unit 16 was placed over this stain to test its integrity and determine if it represented the remains of a springhouse, privy, or other feature. The results are described below. A moderate number of artifacts (n=47) was recovered from Trench 3 including a bucket base, container glass, redware, stoneware, yellowware, pearlware, whiteware, ironstone, and porcelain (Table 7.18). These materials date throughout the chronology of the site, but there was a relatively high proportion of early to middle 19th century materials, particularly pearlware and whiteware. The location of these artifacts downslope from the site core suggest that this area may have been used as a refuse dump.

TRENCH 4

Trench 4 was located approximately 8.75 m west of Trench 1 South (Figure 7.7). Trench 4 measured



Figure 7.21. Trench 3 at 15FA290 (looking south-southeast). Note the darker sediments in the middle ground.



Figure 7.22. Trench 4 at 15FA290 (looking north). Features 3, 4, 5, and 6 (all postholes) are covered with black plastic.

Table 7.19. Historic Artifacts Recovered from Unit 16 at 15FA290.

Artifact Group and Attributes		Level 1/Total
Kitchen Group		
	Coarse Earthenware	
	Redware, Lead glazed	4
	Unglazed	2
	Stoneware, Salt-glazed	2
	Refined Earthenware	
	Pearlware, Hand-painted, handle for lid	1
	Whiteware, Undecorated body	2
	Brown annular band, body sherd	1
	Hand-painted body sherd	2
	Blue transfer-printed body sherd	1
	Purple transfer-printed body sherd	1
	Porcelain, Undecorated body	2
	Container glass	
	Base, empontilled	1
	Base, turn mold	1
	Body, Unidentified manufacture type, various colors	6
Architecture Group		
	Window Glass	1
	Nail, Early machine-cut	2
	Late machine-cut	3
	Unidentified machine-cut	6
	Wire	1
Faunal Group		
	Unidentified large mammal	9
Miscellaneous Group		
	Unidentified metal	1
Total		13

1.25 m wide and about 14.75 m long (Figures 7.6 and 7.22). No structural remains were found in this trench, but a series of postholes was identified near the middle of the trench (Features 3, 4, 5, and 6; see Figure 7.22). A low number of artifacts was recovered from Trench 4 (n=24), but this small assemblage includes window glass, container glass, whiteware, ironstone, and porcelain (Table 7.18). The low artifact density is consistent with the trench's location in a side yard south of the Feature 1 residence.

TEST UNIT 16

Test Unit 16 was a 1-x-2-m unit placed in the bottom of the northern third of Trench 3 (Figure 7.6) to further investigate a dark stain that was identified through mechanical stripping of plow zone from Trench 3 (Figure 7.21). This stain was initially thought to potentially represent the remains of a springhouse, privy, or other cultural feature. One 10-cm arbitrary level was excavated in this test unit. The soil consisted of a dark yellowish brown (10YR4/6) silty clay loam with discolorations consistent with burning. The upper portion of this deposit contained high concentrations of ash and charcoal, but the lower part of the level exposed subsoil throughout with abundant root casts evident on the level floor. Following excavation of Level 1, the center of the unit was cored to a depth of 60 cm to investigate underlying deposits. The core soil profile showed silt loam soil with abundant root casts (no detailed profile is available). Considering this, the dark stain was interpreted as most likely representing a tree fall, and excavations in Test Unit 16 were terminated. However, this area also may represent a trash disposal area as well, perhaps an area utilized expediently for this purpose after a tree was removed or died.

A total of 49 historic artifacts were recovered from Unit 16 (Table 7.19). Temporally diagnostic artifacts included redware, stoneware, pearlware, whiteware, porcelain, early machine-cut nails, late machine-cut nails, and wire nails. These materials date from the late 18th century through the early 20th century, but with the exception of the single wire nail, most of the remains are more strongly associated with the early to



Figure 7.23. Feature 1 House Foundation at 15FA290 after Excavation of Supplemental Test Units (looking southeast). Test Unit 17 is the small test unit in the foreground.

mid-19th century. Additionally, nine large mammal bone fragments were recovered. The recovered artifacts suggest that this low-lying area on the periphery of the site may have been used as a refuse dump during the early and middle portions of the 19th century. Use of the area as a trash dump is supported by the evidence of burning, with ash and charcoal observed in the sediment, some of which was discolored by firing, and recovery of burned artifacts from Unit 16 (one porcelain and two whiteware).

MECHANICAL REMOVAL OF RUBBLE AND CLEANING OF FEATURE 1

Completion of Test Units 11, 12, 13, and 17 within the Feature 1 house foundation (Figure 7.23) demonstrated that features were present in the subsoil below the house. Based on this information, the remaining rubble fill was removed from the interior of Feature 1. Only one of the test units (Unit 13) showed evidence of significant accumulation of subfloor midden, and these deposits were heavily disturbed by rodent burrows, reducing their research potential. The other test units showed rubble fill directly overlying the subsoil surface interior to the Feature 1 residence. Under these circumstances, the decision was made to mechanically remove the rubble fill from the interior of Feature 1 rather than to hand-excavate these deposits. Excavation by heavy machinery would potentially also remove the relatively thin subfloor accretional deposits where they were present, and some information inevitably would be lost. However, such loss was offset by the more rapid removal of sediment when heavy machinery was employed, and a sample of the subfloor accretional deposits had been acquired from Unit 13 excavations. Mechanical excavation was designed to remove the mixed rubble fill deposits and reveal features intruding into the subsoil beneath the house. Stripping of the Feature 1 interior began in the east room, followed by the west room. The rubble fill that was removed varied in thickness between about 15 cm to as much as 70 cm. Mechanical removal of sediment from the North Room of Feature 1 was not as complete as in other rooms. However, no subfloor

midden had accumulated in the North Room, and the shallow depth to culturally sterile subsoil indicated that there was no excavated cellar or crawlspace. It is unlikely that any features were missed as a result.

Artifacts were collected opportunistically from each room during sediment removal. Even though there was no volumetric control maintained over artifact collection, it was clearly observed that the deposits in the East Room had higher artifact density than in the West Room. Artifacts were particularly plentiful near the partially collapsed eastern chimney base and in the southeast corner of the room, where subfloor accumulations of midden deposits were thickest. Collected materials include wrought nails, early machine-cut nails, late machine-cut nails, unidentified machine-cut nails, wire nails, window glass, buttons, shoe fragments, bone, container glass, fragments of a yellowware piggy bank, stoneware marbles, redware, stoneware, yellowware, creamware, pearlware, whiteware, porcelain, and ironstone (Table 7.20). As expected, these artifacts date from all periods of the house chronology, reflecting the mixed nature of the rubble fill deposits.

Artifact density in the West Room was also high, compared to other sections within Feature 1. Recovered artifacts from the west room include the same general suite of artifact classes identified in the east room, and also added ammunition cartridge casings, an oil lamp burner, a drawer pull, a caster, a 1902 Indian Head penny, a pocket knife fragment, and horseshoe fragments to this assemblage (Table 7.20). These artifacts also date from all periods of the house chronology. Of interest is the 1902 penny, which indicates that the house was occupied in that year or afterward. This confirms the inferences drawn from the historic maps that indicate 15FA290 was abandoned and razed between 1904 and 1912.

The North Room was only partially cleared of rubble, but Table 7.20 shows some interesting patterns of recovered artifacts. Recovery of creamware and hand-wrought nails from the North Room indicates that this room was an integral part of the original house construction, and not a later addition. This is consistent with the soil profile for Unit 17, which showed no evidence of an A horizon remnant, which might be present if the North Room was a later addition to the house.

One nearly unique deposit was identified during the West Room fill removal. This was a piece of loose foundation rubble with a mass of dry red pigment on its upper surface (Figure 7.24). This foundation rock was positioned along the west interior wall of Feature 1, about 26 cm north of the southwest interior corner of the West Room. This rock was incorporated into the rubble fill and was not integral to the foundation. However, it had probably not been moved far from its original location, and the rubble fill may have accumulated around it when the structure was razed. The rock is a rough-cut limestone block similar to the foundation stones, and it measures approximately 27 cm east-west and 19 cm north-south. The pigment was present only on the upper face of the rock, and remnants of the same pigment were also found on the interior south face of the west room foundation (see Figure 7.24). It does not appear that the stone was intentionally covered in the pigment, and the pigment is most likely a secondary deposit. This interpretation is supported by the presence of the pigment smear on the south wall. However, the pigment may have been cached or stored under the floor of the house, and it was possibly used to create home-made paint.

Mechanical excavation of the Feature 1 interior was designed to keep the exterior and interior foundational walls intact as much as possible. This strategy meant that some sediments were not accessible by the machine, and these remnant sediments (in corners and adjacent to foundational walls) were removed by hand after mechanical excavation. The entire interior floor was cleaned by hand, creating a clean surface that showed features and bioturbation disturbances intruding into culturally sterile subsoil. Artifacts were again opportunistically collected during removal of the rubble fill remnants. Once cleaned, the interior floor of Feature 1 was photographed (Figure 7.25) and mapped, with features and new foundation wall data added to the master 1:20 scale map that was created after Feature 1 was initially exposed (see below Figure 7.26). The east room stripping resulted in the recognition of eleven new features—Features 41, 42, 43, 44, 45, 46, 47, 48, 48, 49, 50, and 51. Eleven more features were identified in the west room after the mechanical stripping—Features 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, and 40. Detailed feature descriptions are provided in the next section.

Table 7.20. Historic Artifacts Recovered During Rubble Fill Removal and Cleaning of Feature 1.

Artifact Group and Attributes		East Room	West Room	North Room	General Feature 1	Builders Trenches	Total
Kitchen Group							
	Coarse Earthenware						
	Redware, Lead glazed	3	4	5	3	1	16
	Incised			1			1
	Stoneware, Salt glaze	6	3	2	9		20
	Albany slip exterior		2		13		15
	Albany slip interior/salt glaze exterior	26	1	2	2		31
	Bristol glaze exterior/Albany slip interior	28	7				35
	Yellowware, Undecorated	1			4		1
	Engine-turned bands	1	1				2
	Refined Earthenware						
	Creamware, Undecorated	4	2		3	1	10
	Hand-painted			1			1
	Pearlware, Undecorated	1	1	2	4	2	10
	Green or blue edge-decorated with impressed patterns	3	2		6		5
	Edge-decorated with impressed patterns	1		3	1		5
	Blue edge-decorated	1					1
	Annular band	2					2
	Hand-painted			1	1	1	3
	Blue transfer-printed	3	3	9	12		27
	Flown blue transfer-printed	1		1	1		3
	Mocha or cable decorated		4		2	1	7
	Whiteware, Undecorated	16	2	4	6	1	29
	Annular band	1					1
	Hand-painted	1	1	1	1		4
	Blue transfer-printed	3	1		2		6
	Purple transfer-printed	1	1		1		3
	Transfer-printed and molded (rim)	3					3
	Sponge-decorated				1		1
	Molded rim/base	1	1				2
	Molded and painted	3			2		5
	Molded and decal-decorated (late revival)	1					1
	Unidentified maker's mark on base				1		1
	Ironstone, Undecorated	30	11	6	24		71
	Transfer-printed	1		1			2
	Molded and transfer-printed	2					2
	Molded	11	2		11		24
	Molded and decal decorated	5			3		8
	Decal decorated	1					1
	Unidentifiable maker's mark (base)	1		1	1		3
	Burned refined earthenware (not porcelain)			1			1
	Porcelain, Undecorated	11	3	1	2	2	19
	Molded	1			8		9
	Molded and gilt	2					2
	Gilt	4			1		5
	Overglaze hand-painted		1	1			2
	Molded and decal-decorated	1			3		4
	Undecorated European	4					4
	European, decal-decorated or overglaze painted	2					2
	Container glass						
	Body fragment, various colors, unidentified manufacture type	50	38	6	31	4	129
	Body fragment, molded scroll flask		1				1
	Finish, Improved tool	11	7		5		23
	Applied tool	4	1				5
	Threaded		1		1		2
	Machine-made		2				2
	Crown cap	1			2		3
	Base, Cup mold or post mold	7	3		3		13
	Key mold		1		1		2

Table 7.20 (continued).

Artifact Group and Attributes	East Room	West Room	North Room	General Feature 1	Builders Trenches	Total
Kitchen Group, Container Glass (continued)						
Turn mold	1		2			3
Machine-manufactured	5	2		1		8
Semiautomatic bottle	4		2	1		7
Unknown manufacture			1	5		6
Canning jar lid liner	1					1
Solarized amethyst glass, all vessel parts			1			1
Stopper for glass bottle	1					1
Table glass						
Optic-molded fragments	5	1		4		10
Press-molded fragments	10	3		5	1	19
Cup mold or paste mold base fragments	2					2
Metal						
Kitchen utensil/utensil handle	4	3		2	1	10
Metal container fragment		6		1		7
Architecture Group						
Nails, Hand-wrought (6d to 11d range)	22	9	4	22		57
Early machine-cut (2d to 10d range)	1		12	6		19
Late machine-cut (2d to 20d range)	36	15	14	34	3	102
Unidentified machine-cut	6	9	8	10	3	36
Wire (8d to 20d range)	4	3	8	16		31
Window Glass	31	99	16	114	40	300
Plate glass	1	2				3
Hand-wrought hinge strap		2				2
Hand-wrought pintle		1				1
Plate metal stock		1				1
Welded hook hinge	1					1
Door hinge furniture	1		1			2
Hand-wrought latch fragment	1					1
Finial				1		1
Handle				1		1
Screw/nut	1	1				2
Iron water pipe segment				1		1
Ceramic drain pipe		3	1			4
Plaster		2				2
Furniture Group						
Escutcheon			1			1
Ceramic figurine fragments	9			1		10
Glass vase fragments	10	1	1	2		14
Press-molded dish			1			1
Stove or door pull/hinge	1	1				2
Oil lamp burner	1	1				2
Oil lamp chimney or shade fragment		1				1
Furniture caster	1	1				2
Drawer pull		2				2
Furniture tack				1		1
Activities Group						
Metal strap with nails			1			1
Hook or snap	2	2				4
Metal file	1					1
Hammer	1					1
Key clasp	1					1
Bolt/nut	1	2			1	4
Metal ring				1		1
Washer				1		1
Chain		1				1
Dry cell battery core			1			1
Staple				2		2

Table 7.20 (concluded).

Artifact Group and Attributes	East Room	West Room	North Room	General Feature 1	Builders Trenches	Total
Activities Group (continued)						
Wire fragments	5					5
Red pigment		1				1
Yellow pigment					1	1
Clothing Group						
Button, Shell	3	2		2		7
Bone	1	1				2
Prosser	2	3	2	2		9
Metal		1	3	1		5
Rivet	1			1		2
Other clothing fastener	1	1		5		7
Footwear/fragments	2	1		2		5
Personal Group						
Ceramic (yellowware) coin bank	4	2		3		9
Marble	4	4	2			10
Coin		1				1
Door key				1		1
Ink bottle		1				1
Eyeglass part		1		1		2
Pocket knife		1				1
Slate or lead writing pencil	2		1			3
Comb/fragment	1		2			3
Powder bottle part	1			1		2
Ceramic doll fragment	1			3		4
Ceramic pipe bowl	1					1
Tea set plate	1					1
Locket					1	1
Medicinal Group						
Prescription medicine bottle	1	1	2	2		6
T.A. Slocum patent medicine bottle, "Psychine"	1					1
Amber medicine(?) bottle with metal screw cap	1					1
Arms Group						
12-guage center-fire shotgun shell base	2	1	1	2		6
Small arms brass shell casing (.22 to .44 caliber)		3	5	5		13
Spencer rifle cartridge (.56 caliber)		1				1
Transportation Group						
Large metal strap buckle	1					1
Horse shoe		3	1			4
Miscellaneous/Unassigned Group						
Metal plate, unidentified function	1	1				2
Slate fragment	1					1
Unidentified metal	2	12	13	32		59
Plastic				1		1
Faunal Group						
Large mammal bone	83	9	7	7	22	128
Small mammal bone	5	2	4			11
Bird bone	37	2	9	4	4	52
TOTAL	590	335	180	477	89	1,671

Finally, though we attempted to retain gross interior room provenience for the artifacts collected opportunistically during Feature 1 cleaning, some loss of provenience was inevitable. A column is provided in Table 7.20 that reflects materials collected from the general vicinity of Feature 1 during mechanical excavation and cleaning of the interior. In addition, the final column shows artifacts collected from three excavated sections of the Feature 1 foundation builder's trenches. These are discussed in more detail below.



Figure 7.25. Red Pigment on Limestone Rock and South Interior Wall in Feature 1 at 15FA290. The view is to the south, and the southwest interior corner of the West Room of Feature 1 is shown.



Figure 7.24. Feature 1 House Foundation at 15FA290 after Removal of Rubble Fill from East and West Rooms (looking north). The rubble fill is still present within the North Room.

FEATURE DESCRIPTIONS

A total of 52 features was identified at 15FA290. These were distributed among different excavation areas that are interpreted as being within the Outer Yard, Inner Yard, and within or directly associated with the Feature 1 residential structure (Figure 7.26). They also represent a variety of forms and functions. This section presents descriptions and functional interpretations of these features, along with discussion of the materials recovered from various feature contexts and temporal assignment of features to various periods of site occupation. Methods of feature excavation were discussed in Chapter 4; excavation methods are discussed here only if they diverged from the usual methods.

Assessment of the date ranges of individual features was based on the artifacts recovered only from feature fill contexts or from sediments that could be confidently inferred to be directly associated with a given feature. Generally speaking the most temporally sensitive artifacts recovered were ceramic sherds that have well-documented date ranges for their manufacture and decorative styles (though use and discard may occur considerably later than initial manufacture). Other important temporal indicators include various nail types, and container glass, which can be dated by its method of manufacture and the type of finish. A final line of evidence used for temporal placement of features was window glass. When window glass was recovered from features the Moir (1987) formula was used as an additional line of evidence for dating the deposits. Specific indicators of early, middle, and late segment occupation were discussed in Chapter 6; a brief synopsis follows (see also Figure 6.49).

The chronology for the historic occupation of 15FA290 is divided into three major segments—early, middle, and late. The Early segment spans the time from the initial construction of the residence at around 1800 to the mid-1830s. The Early segment is characterized by higher proportions of creamware, pearlware, and redware, and an absence or very low incidence of whiteware and ironstone. One decorative technique associated with this period is mocha decoration on pearlware or creamware. Container glass from this period is hand-blown or mold-blown with hand-made or rough applied finishes. Nails from this segment are either hand-wrought or early machine-cut types. Window glass from this segment is less than about 1.46 mm thick.

The Middle segment dates from the mid-1830s through the mid-1870s. This period corresponds to the middle third of the occupation span of the house. The Middle segment is characterized by a predominance of whiteware in the ceramic assemblage and much lower percentages of creamware or ironstone. Pearlware may be present in varying proportions; manufacture of pearlware had largely ceased by the mid-1800s, but the vessels were still in use and were discarded during this segment of site occupation. Additionally during this segment stoneware largely replaces redware for storage vessels. Common decorative techniques associated with the Middle segment include transfer prints on whiteware or pearlware, molded edge-decoration patterns on pearlware or whiteware, and Albany slip and salt glaze on stoneware. Other artifacts diagnostic of this time include late machine-cut nails and container glass with rough applied finishes. Glass thickness for the Middle segment ranges from about 1.46 to 1.93 mm.

The Late segment marks the end of the occupation span of the house. This period begins in the 1870s and ends when the house was razed (estimated at about 1910). The Late segment is characterized by the predominance of ironstone in the ceramic assemblage (particularly molded and undecorated ironstone), manufacture of highly vitrified whiteware as a revival of this ceramic type, and presence of wire nails instead of machine-cut nails. Ceramic decorative techniques from this time include decalcomania on porcelain, ironstone, and whiteware; molded designs on otherwise undecorated whiteware or ironstone; and Bristol glaze or a combination of Bristol glaze and Albany slip on stoneware. Diagnostic container glass attributes include improved tool finishes and semiautomatic bottle manufacture. Fully machine made glass, solarized amethyst glass, and milk glass are (especially canning jar lid liners) also diagnostic of the Late segment of occupation. Late segment window glass is between 1.93 and 2.34 mm thick.

Temporal assessments of individual features were based on the preponderance of materials. Because of the long use life of the house, a thick layer of rubble overlying the subfloor features, presence of numerous

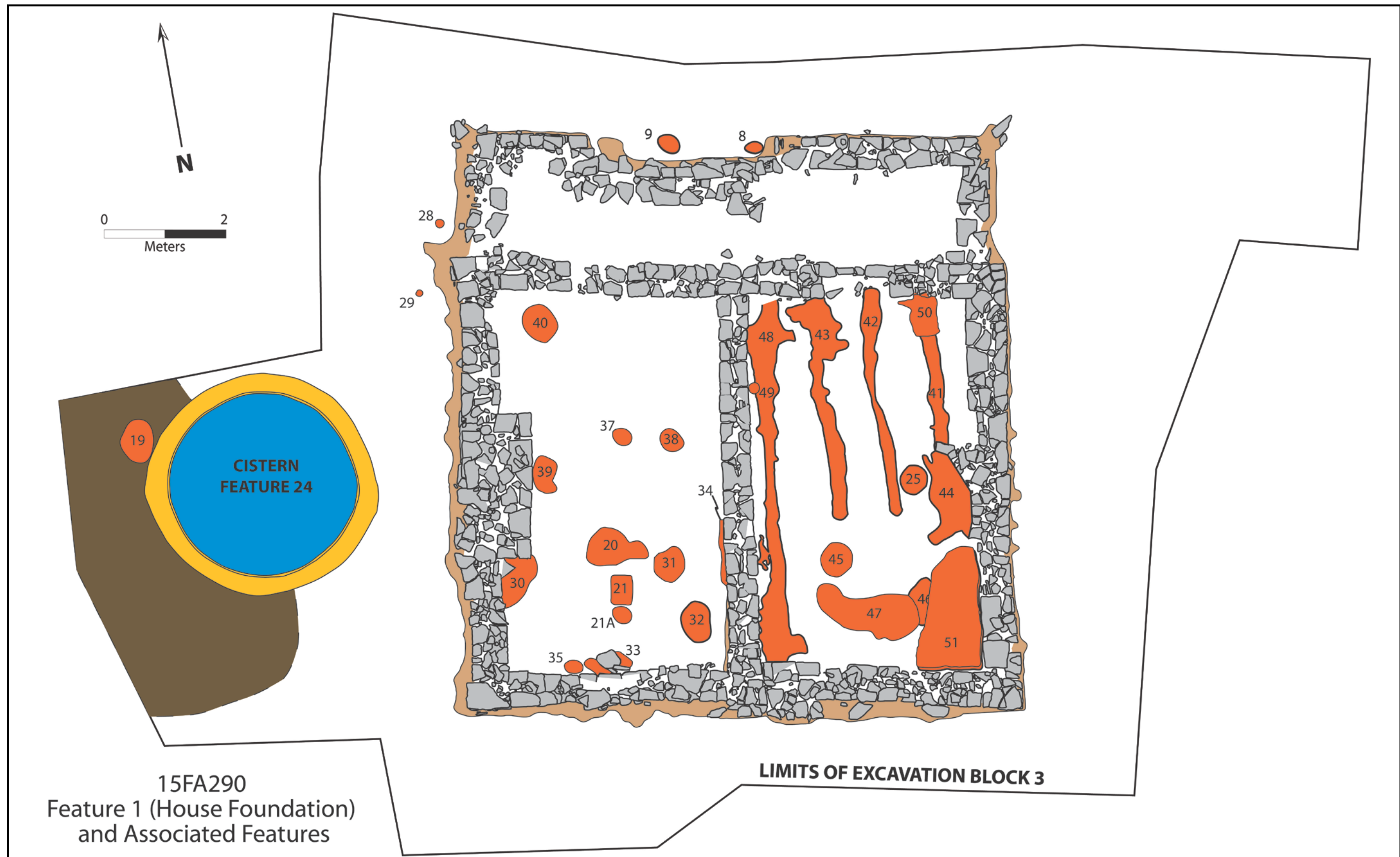


Figure 7.26. Detailed Plan of Feature 1 at 15FA290 with Associated Interior and Exterior Features.

rodent burrows, and the use of heavy machinery to remove overburden, almost all features show some degree of mixing of deposits based on the artifacts recovered. Therefore, the presence of a low proportion of later artifacts in a feature assemblage that is otherwise early (or the converse) was not taken as evidence of severe mixing or of persistent/long-term use of a specific feature. When the large majority of datable artifacts from a feature could be assigned to a specific time range, that was the range assigned to the feature. Extended date ranges were assigned to features that produced assemblages that were more or less equally divided among Early, Middle, or Late temporal segments.

FEATURE 1 HOUSE FOUNDATION

The single largest feature identified at 15FA290 was Feature 1, a foundation and associated builders' trench for a residential structure. An additional 36 features were identified in association with Feature 1, and these are described in following sections.

Feature 1 is a compound feature comprising a dry-laid limestone house foundation and its associated builders' trench (Figure 7.26). This feature was identified during the mechanical stripping of Trench 1/Block 3 at a depth of 20-30 cmbs, at the bottom of the plow zone. The feature measures approximately 10.08 m (33 feet), north-south and 7.62 m (25 feet) east-west, and covers an area of approximately 76.81 sq. m (827 square feet). The foundation is generally composed of 4 to 5 intact courses of dry-laid, shaped limestone rocks set into a builders' trench that is usually only about 10 cm wider than the foundation wall. The exterior walls vary in width from 60 to 65 cm (2.0 to 2.1 feet), and the interior walls are approximately 50 cm (1.5 feet) wide.

The foundation comprises two rectangular rooms whose long axes are oriented roughly north south (East Room and West Room), and an integrated room along the north side of the structure (North Room) with a long east-west axis that adjoins the entire width of the north side of both East and West rooms, but is much narrower than either of the other rooms. The interior dimensions of the West Room are about 3.67 m (12 feet) east-west and 6.5 m (21 feet 4 inches) north-south. The interior dimensions of the East Room are about 3.75 m (12 feet 4 inches) east-west and 6.2 m (20 feet 4 inches) north-south. Differences in the dimensions of the rooms arise from damage incurred to the foundation and displacement of the foundation stones, making it difficult to determine precise dimensions. If the midpoint in each wall is used to calculate dimensions, the East and West rooms both measure about 23 feet, 1 inch by 14 feet, while the North Room is about 7 feet, 5 inches wide and 46 feet, 7 inches long (east-west). These dimensions would be more consistent with the likely use of standard lengths of boards (e.g., 8-foot or 16-foot lengths) for floor construction.

Each room has a chimney base. In the West Room, the chimney base measures about 2.46 m (8 feet) long and intrudes into the room about 0.55 m (1 foot, 10 inches), and it is centered on the interior of the west exterior wall about 1.9 m (6 feet, 2 inches) from both north and south walls (Figure 7.26). A gun flint made from a recycled prehistoric flake of local Boyle chert was recovered during floor cleaning; it was positioned at the level of the interior subsoil deposits and about 32 cm north of the southeast corner of this chimney base. In the East room the chimney base measures approximately 1.6 m (5 feet, 3 inches) long and 0.6 m (2 feet) wide. Based on the scatter of stones, it appears that this chimney base may have partially collapsed while the house was occupied (Figure 7.27). The East Room chimney base is nearly centrally positioned along the interior of the east exterior wall, about 2.25 m (7 feet, 5 inches) from the south wall. No actual hearth stone was found at or near either chimney base; these may have been salvaged when the structure was razed.

Each room has a single entranceway on the north side of the room that gives entry into the North Room. The West room entrance is about 1.08 m (3 feet, 6 inches) across and is located approximately 1.5 m (5 feet) from the central interior wall of the structure, about in the middle of the north wall of the West room. The East room doorway measures approximately 1.12 m (3 feet, 8 inches) across and is situated about 1.3 m (4 feet, 4 inches) from the central interior wall. The East and West rooms are generally symmetrical and mirror images of each other, with the main difference being the condition of the chimney bases (Figure 7.27).



Figure 7.27. View of West and East Rooms of Feature 1 at 15FA290 after Rubble Removal and Cleaning (looking north). Note the partially collapsed condition of the chimney base in the East Room.

Both East and West room entranceways open onto a narrow North Room that spans the entire east-west width of the structure. The North Room, like the remainder of the house, has a foundation of dry-laid, shaped limestone set within a narrow builders' trench. This room measures approximately 14.2 m (46 feet, 7 inches) east-west and 2.2 m (7 feet, 3 inches) in width north-to-south. Near the midpoint of the north wall is an inset section of the wall that measures about 3.05 m (10 feet) in length and is inset about 14 inches to the south of the rest of the wall. This inset area most likely represents the location of an exterior staircase or entry into North Room. The interpretation of a staircase entry is bolstered by the presence of two post holes (Features 9 and 10) within the inset portion of the wall and just outside the Feature 1 builders' trench. The foundation for the North Room is constructed in a similar manner as the foundation of the rest of the house structure, and the builders' trench is contiguous with the builders' trench for the remainder of the house. The foundation stones do not show abutment of the North Room walls with the other walls, but instead show integrated and overlapping stones. The continuity of the builders' trench and wall construction indicates that the North Room was constructed at the same time as the remainder of the house and is not a later addition. However, the North Room foundation is less substantial than the rest of the foundation. From this, we infer that the North Room foundation did not support as heavy a load as the remaining walls of Feature 1. The North Room may have had only a single story above it, while the East and West Rooms may have supported a two-story superstructure. This foundation configuration is consistent with a hall-parlor floor plan.

The entire foundation was set into a builders' trench, which was discernable around the exterior perimeter of the foundation and portions of the interior perimeter of each room. The builder trenches were included on the map (Figure 7.26). On the north and east sides of the foundation, the trench extended only between 2 and 6 cm from the outside edge of the foundation wall. On the west and south sides, the trench was wider, between 10 and 30 cm from the outside wall edges. Two 1-m segments of the builders' trench were excavated to determine its depth, provide additional information about the house foundation, and retrieve artifacts indicative of the initial construction date. One sample near the northeast corner of the North Room was placed at an anomalously wide portion of the builders' trench that extended about 38 cm north of the foundation edge (Figure 7.26). The north sample area showed that the builders' trench was about 35 cm deep in this location, which suggests that the north exterior wall of Feature 1 supported a much lower load than the East and West room walls. The builders' trench fill in the north sample was a brown (7.5YR4/4) silty clay loam. The surrounding subsoil matrix was the same color as the trench fill, but the subsoil was more compact. A moderate number of artifacts was recovered from the north sample area, including a late machine-cut nail, an unidentifiable machine-cut nail, clear container glass with an improved tooled finish,



Figure 7.28. Knife Blade Inserted into Interior Wall of Feature 1. The knife blade was broken, and both halves are shown in Figure 6.26a.

lead-glazed redware, hand-painted pearlware with brown annular lines, undecorated creamware, and undecorated porcelain (Table 7.20). Although there appears to be some mixing of later artifacts, the majority of the north sample builders' trench assemblage is consistent with construction during the Early segment of the house chronology.

The other excavation sample from the builders' trench was on the south wall near the southeast corner of the East room. Here the builders' trench extended about 14 cm from the exterior edge of the south wall. This sample showed that the builders' trench was about 70 cm deep on the south side of the house, and we infer that the builders' trench along the other remaining exterior walls was of similar depth. The south sample revealed 5 to 6 courses of stone below the stripped surface, with the trench floor flat and at most only 1 or 2 cm below the lowest course of stone. The trench fill in the south sample was similar to that documented in the north sample. The south sample of the builders' trench produced a low number of artifacts, including late machine-cut nails, a hand-forged shutter hinge strap, window glass, and whiteware (Table 7.20). The hand-forged shutter strap hinge probably was manufactured in the early 19th century, and it would likely have been part of the original house construction.

At both the northeast and northwest corners of Feature 1 the builders' trench fans out from the corner, and there is some evidence of water erosion. These areas may have been locations of downspouts that distributed rainwater runoff from the roof. Finally, on the east side of the house a series of small bulges were noted along the exterior margin of the builders' trench. These bulges are adjacent to the east room chimney base and likely represent post holes for scaffolding erected to construct or repair the chimney. Similar bulges were not identified on the west side of the house, but the builders' trench is wider here, suggesting that scaffolding used in the initial chimney construction may have been set inside the trench. The partially collapsed nature of the East room chimney base suggests that this part of the structure may have required repair at some time, and the timing and nature of this repair episode is discussed in more detail below.

A third sample of the builders' trench was excavated along the west side of the interior foundation wall separating the East and West rooms (Figure 7.26). This area was initially designated Feature 34, and it was later identified as part of the builders' trench. This sample was located about 2 m from the interior southeast corner of the West room and extended only about 6-8 cm from the west edge of the interior wall. The fill for this portion of the trench was similar in color, texture, and depth to the north sample. No artifacts were recovered from the Feature 34 sediment. However, on the opposite side of the interior wall and close to the southwest corner of the East room, a knife blade was found embedded in the foundation wall (Figure 7.28;

see also Figure 6.26 a). This artifact may have been intentionally left in the wall, but if so, the purpose remains unclear. Even if accidentally deposited in this location, its presence is unusual.

Two other unusual finds were identified during cleaning and exposure of the builders' trench. The first is a yellow powder that may have been used as a pigment, which was found near the south wall of the house in the interior of the East Room. The second is a brass locket that was recovered beneath a rock in the builders' trench/downspout fan outside the foundation, near the northeast corner of the North room (see Figure 6.31). The context in which this locket was recovered is possibly disturbed, as the builders' trench here has a fanlike morphology suggesting that it may have been a downspout for rainwater from the roof. The presence of such a personal artifact in this context may represent something that was accidentally dropped. Alternatively the locket may have been intentionally placed near the corner of the foundation as a form of sympathetic or household magic. These alternatives and interpretations of these and other unusual finds are discussed in greater detail in Chapter 9.

Based on the artifacts recovered from the builders' trench the house was constructed sometime between 1795 and 1806, during the tenure of Samuel Beeler. This date range is consistent with the manufacturing date range of materials collected from the site from other contexts, in particular the assemblage from Test Unit 14 that was below the cistern backdirt clay cap and the lower level of floor accretion deposits sampled in Test Unit 12. For our purposes here, we place the construction date at 1800, with the understanding that the construction date may vary a few years on either side of this interpreted date. However, this date range includes the time that the property was owned by Samuel Beeler (1795 to 1806) and by Richardson Allen (1806-1830), and there is still no clear archaeological evidence to indicate which of these two landowners constructed the house. For that information we must rely on the documentary record.

Overall, the architectural footprint of Feature 1 presented an interpretive problem at a basic level. Without any exterior evidence of a porch or other entryway, we initially interpreted the North room as the front porch of the house. This interpretation was supported by the presence of the inset segment along the north exterior wall and the postholes documented nearby. A front porch along this north side was consistent with the foundation representing a two-pen style of house construction. This building style is a typical of what McAlester and McAlester (1984:82-86) calls the "Midland Tradition," a common building style found west of the Appalachian Mountains in the pre-railroad era. Unfortunately, while the footprint of the foundation corresponded to this architectural style, the orientation that was implied by the footprint and style was difficult to reconcile with the landscape. To the north, the landform sloped down toward what was probably a spring area or other water source in the early years of site occupation. The front part of the house would then overlook an activity area, which would be very unusual for a rural house constructed in the early 1800s. However, this layout would be consistent with a front door entrance on the south face of the structure, facing Lexington and the direction from which most visitors would likely arrive. The North room is then more consistent with an activity-oriented room that overlooks the Outer Yard and associated outbuildings that were likely present. In addition, the basic two-pen interpretation is preserved, as is the overall orientation of the house as having gables on the east and west sides, with chimneys on the gable sides of the structure.

ASSESSMENT OF FEATURE 1 CONSTRUCTION METHODS

Nails can be used make inferences about construction activities as well as the types of structures that were built at an archaeological site. These types of analyses usually rely on the length or pennyweight of the nails. The majority of the recovered nails (n=932, 66.1 percent) were fragmentary, precluding an assessment of penny weight, but the remaining 477 nails were complete, and pennyweights could be assigned. Of the complete nails, most (n=377, 79 percent) were recovered in contexts associated with Feature 1. The others were recovered from scattered contexts in the surrounding yard, none of which could be associated with a specific structure. The nails associated with Feature 1 were used to assess the construction techniques employed in the building of the Feature 1 structure, as well as to track the nature of construction activities and repairs through time.

Table 7.21. Complete Nails Associated with Feature 1 by Pennyweight and Construction Usage.

Pennyweight	n	Percent	Construction Usage	Percent by Usage
2d	26	6.9	Roofing	37.2
3d	53	14.1		
4d	47	12.5		
5d	14	3.7		
6d	38	10.1	Siding	40.9
7d	32	8.5		
8d	84	22.3		
9d	33	8.8	Flooring	18.6
10d	37	9.8		
11d	1	0.3	Framing	3.5
12d	2	0.5		
16d	2	0.5		
20d	7	1.9		
60d	1	0.3		
Grand Total	377	100.0		

Young (1991, 1994) has suggested that analyses of nail pennyweights can be used to identify the method of construction for historic structures (but see Ball 1999 for a critique). Underpinning this idea is the notion that different sized of nails will be used for different construction activities. Young (1991) divides structural nails into four functional categories based on pennyweight—roofing (2d-5d), siding (6d-8d), flooring (9d-10d), and framing (>10d). This subdivision by pennyweight assumes that nails of a particular size will always be used for a specific function. Ball (1999) argues that this correlation of nail length and function is an ideal situation and does not match the reality of human behavior. Stottman and Watts-Roy (2000:88) also note that nails in a structure were also used for activities other than the four outlined above, including lathing and light framing of doors and windows. However, these authors also indicate that despite this possibility, specific ranges of nail sizes are functionally best suited for certain building activities and were most likely used for those purposes. Thus, the correlation of specific size ranges of nails to specific construction activities is appropriate, unless some divergence from this expectation can be demonstrated (see McBride and Sharp 1991 for such an example).

The 377 complete nails associated with the Feature 1 structure at 15FA290 were typed by method of manufacture and pennyweight (Table 7.21). When classified by Young's use category, the majority (78.0 percent) are classified as roofing or siding nails, and few of the nails are consistent with heavy framing (only 3.5 percent). Using these distributions, we can make some inferences regarding the method of construction at the house. There are three primary styles of house construction that would have been in use at the time the house at 15FA290 would have been built—log, timber frame, and balloon. Because these styles of construction use different techniques, the prevalence of one size category of nail or another can indicate the overall style of building construction. Log structures used corner notching, and timber frame structures typically employed mortise and tenon joints or wooden pegs, so low densities of longer framing nails would be expected for either of these construction styles. Conversely balloon structures required use of these larger nails in joints, so higher densities of framing nails would be expected in these balloon-style structures. Comparing the nail distribution data from 15FA290 with these expectations indicates that the structure was probably a log or timber frame structure. However, the nail pennyweight data alone do not permit us to distinguish between these two construction styles. Additionally, we take the low frequency of framing nails at the site as an indication that following the initial construction, there were no major structural additions made to the house. This conclusion is consistent with the apparently continuous nature of the foundation, as well as the absence of footers outside the main foundation that would indicate additions to the original structure. Additional information about construction sequences may be obtained by examining the distribution of pennyweight by nail type, which provides some broad temporal control.

Table 7.22. Nail Types Grouped by Construction Usage.

	Hand-Wrought and Early Machine-Cut		Late Machine-Cut		Wire	
Construction Usage	n	Percent	n	Percent	n	Percent
Roofing (2d-5d)	36	31.6	63	43.8	29	29.0
Siding (6d-8d)	49	43.0	58	40.3	43	43.0
Flooring (9d-10d)	28	24.6	18	12.5	21	21.0
Framing (>10d)	1	0.9	5	3.5	7	7.0
Total	114	100.0	144	100.0	100	

A total of 114 complete hand-wrought (n=77) and complete early machine-cut nails (n=37) were identified (Table 7.22). Together, these nail types were manufactured prior to about 1840, and thus represent construction undertaken mainly during the Early segment of the house occupation. The pennyweight distribution of these nails reflects focus on siding and roofing construction, and to a lesser extent flooring. There is some evidence that hand-wrought and early machine cut nails were used for different construction activities. The majority of hand wrought nails (n=41, 53.3 percent) were classified as siding nails, while only 8 early machine-cut nails (21.6 percent) are siding-size nails. In contrast the preponderance of early machine cut nails (70.3 percent, n=26) were classified as roofing nails, and only 3 (8.1 percent) of these are flooring nails. Considering the hand wrought and early machine cut nails together, we suggest that both nail types were used in the initial construction of the house, with siding attached mainly using hand-wrought nails. The dominance of early machine-cut nails in roofing construction may be related to expense or perhaps to replacement of the roof later, after the main construction was completed.

By about 1840 early machine-cut nails were replaced by late style machine-cut nails; These continue to be made into the 1880s, when machine-cut nails were largely replaced by wire nails. Thus late machine-cut nails generally represent the Middle segment of the Feature 1 occupational history. A total of 144 late machine-cut nails was recovered from Feature 1 (Table 7.22). The frequencies of these artifacts largely reflects the same pattern as the hand-wrought and early machine-cut nails, as the majority were attributable to siding and roofing with a minor percentage used for flooring, and a very low proportion of framing-size nails. We suggest that this patterning is reflective of maintenance of the house that included repair or replacement of siding and roofing, with some evidence of replacement or maintenance of flooring.

Wire nail usage generally corresponds to the Late segment of Feature 1 occupation, after the 1880s. Proportions of wire nails (Table 7.22) also reflect greater use in siding and roofing construction activities, with flooring types of construction comprising a minor set of activities. We take these frequencies to represent continued repair and maintenance of the house, and the low incidence of framing nails suggests no major additions to the structure.

This same set of inferences can be made for all types of nails, representing all segments of the Feature 1 occupational history. The nails and individual nail types consistently indicate repair and maintenance of an existing structure. Only the relatively high proportion of wire flooring nails suggests any major structural repairs. The nail data are consistent with the interpretation of the foundation remains, which shows that the original footprint of the house remained constant throughout its occupational history, with no evidence of additions to the main structure.

The high density of siding-size nails suggests that the structure was likely covered in clapboard or weather boarding, which would have been common for either log or timber frame structures (Stottman and Watts-Roy 2000:88). The high percentage of roofing nails is not unexpected. At the time of initial construction of Feature 1, wood shingle would have been the predominant roof type. This type of roof requires lots of nails, as shingles are generally small and each shingle must be nailed. The high percentage of roofing nails recovered is consistent with a wood shingle roof. The roof was probably repaired several times, based on the high proportions of roofing-size nails for all temporally sensitive nail types. Finally the presence

of flooring nails suggests that this structure had a wooden floor. No remains of actual flooring were identified in the house, but the height of the chimney bases above the base of the interior floor (about 10 courses of stone, between 70 and 100 cm in height) indicates wooden floors in both East and West rooms supported by joists, with a cellar crawlspace under each room. Access to the crawl spaces may have been through trapdoors set into the flooring of both rooms.

Finally, the effects of not saving, counting, or weighing brick are seen when providing interpretations of the Feature 1 construction. Brick was common in the rubble fill of Feature 1, and it is very likely that the chimneys of the structure were made of brick. It is also possible that the overall wall construction was brick, which would be consistent with the low incidence of framing-size nails in the Feature 1 assemblage. However, this latter possibility is not very likely, given that brick is not abundant in any of the overall views of Feature 1 (see Figures 7.9 and 7.23), and it is also not abundant in any of the profile images of Test Units 12 or 13, placed in the Feature 1 interior (see Figures 7.12, 7.13, and 7.14). It is most common in Test Unit 13, and this unit was placed in close proximity to the East Room chimney, where brick from chimney construction would be concentrated. Though not quantifiable, these observations in general support our interpretation of log or timber frame construction for the overall Feature 1 superstructure.

WEST ROOM FEATURES

Mechanical removal of rubble fill from the West Room and hand-cleaning of remaining deposits revealed 11 smaller features intruding into the sterile subsoil of the prepared West Room cellar floor (Figure 7.26). In addition, three features had been identified during excavation of Test Unit 13. These 14 features are described in this section, and associated artifacts are briefly characterized. As with other excavations, brick fragments were not saved, counted or weighed, which may affect our interpretations of the associated artifact assemblage. However, because the brick was not temporally sensitive in terms of the segments of Feature 1 occupation employed here, there are probably minimal effects on our interpretation of not analyzing the brick.

Feature 20 and Feature 31

These two features likely represent overlapping and intersecting pit features that were identified by dark stains in the southern portion of the West Room (see Figure 7.26). Initially only Feature 20 was identified at the base of Level 8 in Test Unit 13, but the Feature 20 area identified at that time included what was later recognized as a separate, intersecting feature, designated Feature 31, that extended north and east of Feature 20 to intersect the east wall of the test unit (see Figure 7.13). Mechanical stripping and subsequent hand excavation showed that these two features are separate, but potentially functionally and temporally associated.

Even with the separation of Feature 31 as a separate entity, Feature 20 proved to be composed of two intersecting pits that were identified along the north wall of Test Unit 13. These pits were not distinguished separately during excavation, and were recognized only after excavation was complete. The feature as a whole measures a maximum of about 1.08 m north-south and 1.2 m east-west. The feature contained approximately 22 cm of fill, which consisted of a dark yellowish brown (10YR4/4) silty clay loam. Additionally a pocket of ash and charcoal was identified within the feature fill (Figure 7.29). Feature 20 apparently post-dates accumulation of Stratum 5, as this stratum appears to be truncated by the west edge of the feature (Figure 7.29). Thirty artifacts and six faunal remains were recovered from the feature. Diagnostic artifacts include blue shell-edge pearlware, blue transfer-printed pearlware, undecorated pearlware, undecorated creamware, shell-edge hand-painted whiteware, undecorated whiteware, and redware (Table 7.23). The shell-edge, hand-painted whiteware sherd has a backmark stamped “Adam 9”, but this mark could not be attributed to a specific maker or date of manufacture, aside from the general interpretation of an 1830s date range. These artifacts are consistent with an Early segment date for use of Feature 20, which indicates that Stratum 5 was also deposited in the Early segment of house use, but prior to use of Feature 20.

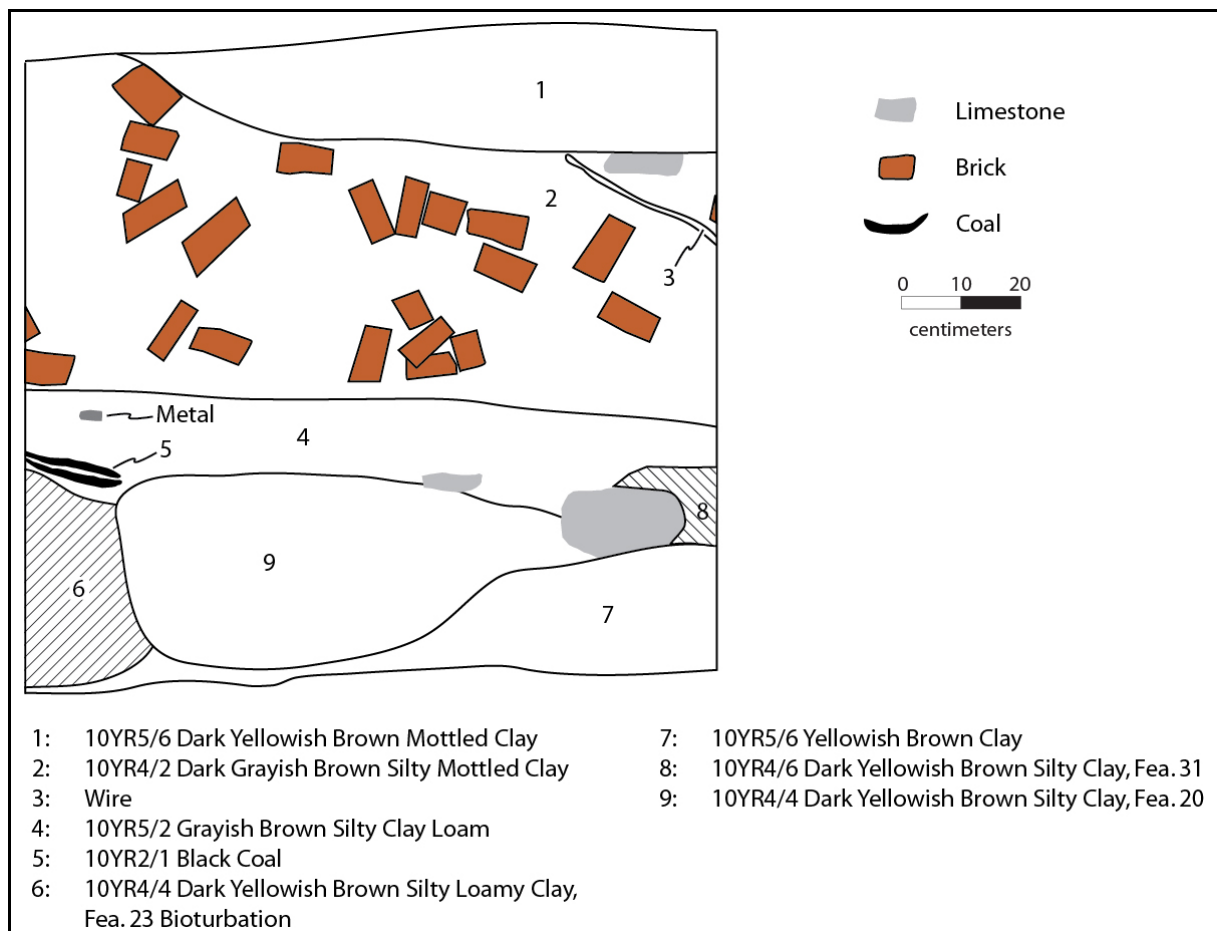


Figure 7.29. Segment of the North Wall Profile of Test Unit 13 Showing Feature 20 and Feature 31 Profiles. Part of Feature 23, a noncultural bioturbation, is also shown at the right side of the profile.

Feature 31 is a small pit that was grouped with Feature 20 during excavation of Test Unit 13/Level 8 and recognized as a separate feature after mechanical stripping of the West Room. Based on the stratigraphic profile of the north wall of TU 13 (Figure 7.29), Feature 31 could be grouped with the adjacent Feature 20, but it appears to have a slightly higher point of origin, indicating that the features are separate and that Feature 31 intrudes into Feature 20. However, interpretation is complicated by the presence of a large limestone rock at the common boundary of these features (Figure 7.29). Feature 31 has a roughly oval shape and measures about 81 cm east-west and 60 cm north-south. The portion of the feature outside Test Unit 13 that was excavated as a separate feature was bisected along its north-south axis. The feature fill was approximately 16 cm thick and consisted of a dark yellowish brown (10YR4/6) silty clay loam. A lens of ash and charcoal was documented at base of Feature 31, but it was not excavated separately. The surrounding matrix was a strong brown (7.5YR5/6 to 10YR5/6) clay. Temporally sensitive artifacts from Feature 31 include blue transfer-printed pearlware and redware (Table 7.23). Some of the artifacts from this feature were commingled with those from Feature 20 prior to recognition of Feature 31 as a separate entity. However, the artifacts that are definitively from Feature 31 suggest an Early segment assignment for use and filling of this feature.

Feature 21

Feature 21 is a lens of darker sediment that was identified in Level 9 of Test Unit 13 (Figure 7.26). The center point of the feature is about 30 cm from the south wall and 67 cm from the east wall of the test unit, and it does not intersect any of the unit walls. This feature is roughly rectangular in shape and measures about 53 cm north-south and 33 cm east-west. The feature fill was at most 10 cm thick and consisted of a homogenous yellowish brown (10YR4/6) silty clay intermingled with white (10YR8/1) mortar and black (10YR2/1) wood charcoal. No artifacts were recovered from Feature 21 except for fuel and mortar fragments,

Table 7.23. Historic Artifacts Recovered from Features in the West Room of Feature 1 at 15FA290.

Artifact Group and Attributes		F20	F21	F21A	F30	F31	F32	F33	F35	F37	F38	F39	F40	Total
Kitchen Group														
Coarse Earthenware														
	Redware, Lead glazed	2				2	3							7
	Stoneware, Albany slip exterior										1		2	3
	Bristol glaze exterior/Albany slip interior						1							1
Refined Earthenware														
	Creamware, Undecorated	1												1
	Hand-painted							1						1
	Pearlware, Undecorated	2												2
	Green or blue edge-decorated with impressed patterns	1												1
	Blue transfer-printed	1				1								2
	Whiteware, Undecorated	3					1						2	6
	Hand-painted/polychrome												1	1
	Hand-painted polychrome with molded rim	1												1
	Blue transfer-printed					1								1
	Molded rim/base												1	1
	Ironstone, Undecorated												1	1
	Porcelain, Undecorated												1	1
	Molded and hand-painted												1	1
Container glass														
	Body fragment, various colors, unidentified manufacture type				3		9			1	5		6	24
	Finish, Improved tool										1			1
	Improved tool with ground lip and threads (fruit jar)						1							1
	Rough applied				1									1
	Unidentified finish type												1	1
	Mold-blown with pontil scar				1									1
	Unknown manufacture									1				1
	Table glass								1					1
Architecture Group														
	Nails, Hand-wrought (6d to 11d range)													0
	Early machine-cut (2d to 10d range)													0
	Late machine-cut (2d to 20d range)							1					9	10
	Unidentified machine-cut	3		2	1	3						1	1	11
	Wire (8d to 20d range)							2	1					3
	Window Glass	5			1		7	1	2		11		10	37
	Hand-wrought hinge strap											1		1

Table 7.23 (concluded).

Artifact Group and Attributes		F20	F21	F21A	F30	F31	F32	F33	F35	F37	F38	F39	F40	Total
Furniture Group														
	Furniture tack	1												1
Activities Group														
	Bucket or large can fragments						18							18
	Staple												1	1
Clothing Group														
	Button, Bone												1	1
	Prosser									1				1
Personal Group														0
Medicinal Group														0
Arms Group														
	12-guage center-fire shotgun shell base							1						1
Transportation Group														
	Stirrup	1												1
Miscellaneous/Unassigned Group														
	Metal plate, unidentified function													
	Unidentified metal	9					2				1			12
	Wood												1	1
	Charcoal						10							10
Faunal Group														
	Large mammal bone	4					2	29					17	52
	Small mammal bone							7			1			8
	Unidentified mammal bone	2				3								5
	Bird bone						2						1	3
TOTAL		36	0	2	7	9	60	42	3	2	20	2	61	244

so no date could be assigned. Based on the morphology of the deposits, Feature 21 is interpreted as a discard episode associated with hearth cleaning. Because of the shallowness of the deposits, no profile was recorded.

Feature 21A

Feature 21A was associated with and adjacent to Feature 21. This feature was identified by a roughly circular stain that extended south from Feature 21 into the south wall of Test Unit 13 (Figure 7.13). Like Feature 21, Feature 21A was first identified in Level 9 of TU 13. The part of Feature 21A that was visible in the test unit measures approximately 12 cm north-south and 19 cm east-west; it is about 30 cm deep. The feature fill was a dark yellowish brown (10YR3/4) silt loam (Figure 7.13). This soil contrasted with the surrounding matrix which consisted of a yellowish red (7.5YR4/6) silty clay on the east side of the feature and a yellowish brown (10YR5/6) clay on the west side of the feature. Two unidentifiable machine-cut nails were the only artifacts recovered from the feature (Table 7.23). Unfortunately, this assemblage is only useful for assigning Feature 21A generally to the 19th century, most likely prior to the 1880s. Based on its shape and fill, this feature likely represents a small pit used for refuse disposal, perhaps mainly for organic remains that have since deteriorated, which would be consistent with the low artifact density.

Feature 30

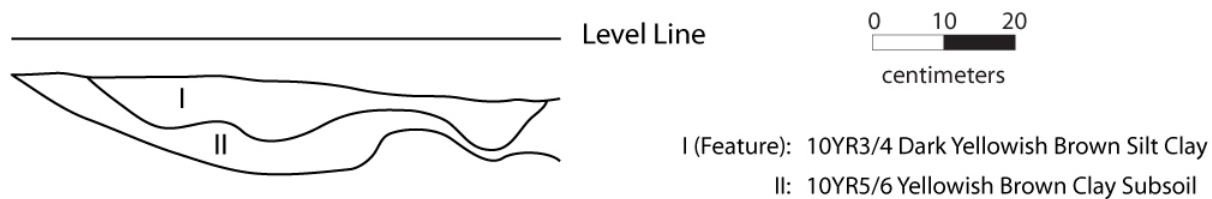
Feature 30 was identified as a roughly circular stain in the West Room floor after mechanical removal of rubble fill sediment from Feature 1. It is located just south of the western chimney base and adjacent to the west wall of Feature 1. This feature measures about 78 cm north-south and 48 cm east-west. The feature was bisected along its north-south axis, and the eastern half was excavated. The fill was only about 8 cm deep and consisted of a dark yellowish brown (10YR3/4) silty clay with abundant coal fragments, surrounded by a yellowish brown (10YR5/6) clay matrix (Figure 7.30). A low number of artifacts was recovered from this the east half of the feature (Table 7.23). A large disturbance caused by a burrowing rodent was noted during excavation, and this bioturbation may account for the irregular shape of the feature. Material from this rodent burrow was considered to be associated with Feature 30. The west half was removed as a flotation sample, but coal was the primary artifact class recovered. This feature most likely represents a small pit that was used as a dump for hearth cleaning activities. The feature has been heavily disturbed by rodent activities. The only temporally diagnostic artifact recovered from this feature was one mold-made bottle fragment with a rough applied finish. This artifact suggests an Early or Middle segment date range for Feature 30.

The corresponding base of this bottle was later recovered beneath the west room chimney base from bioturbated contexts associated with Feature 30. This context suggested that the bottle had been curated or repurposed, perhaps for use in protective magic. So-called “witch-bottles” have been documented near hearths as early as the 1500s in Europe, and the practice carried over as Europeans settled North America. These bottles were usually filled with pins, screws or nails, and bodily fluids, and were thought to protect the thresholds of houses from malevolent spirits. Chimneys were considered particularly vulnerable, so witch-bottles were often placed near the chimney base or hearth (Leone and Fry 1999). While it is possible that the Feature 30 bottle served a similar function, no other items usually associated with witch bottles were recovered from Feature 30 or associated sediment. A more mundane explanation for the presence of this bottle, such as discard of trash, is a more parsimonious explanation for its presence in this location, especially given that multiple features near the West Room chimney base apparently served as refuse disposal pits. Separation of the different portions of the bottle is most likely due to rodent bioturbation activities.

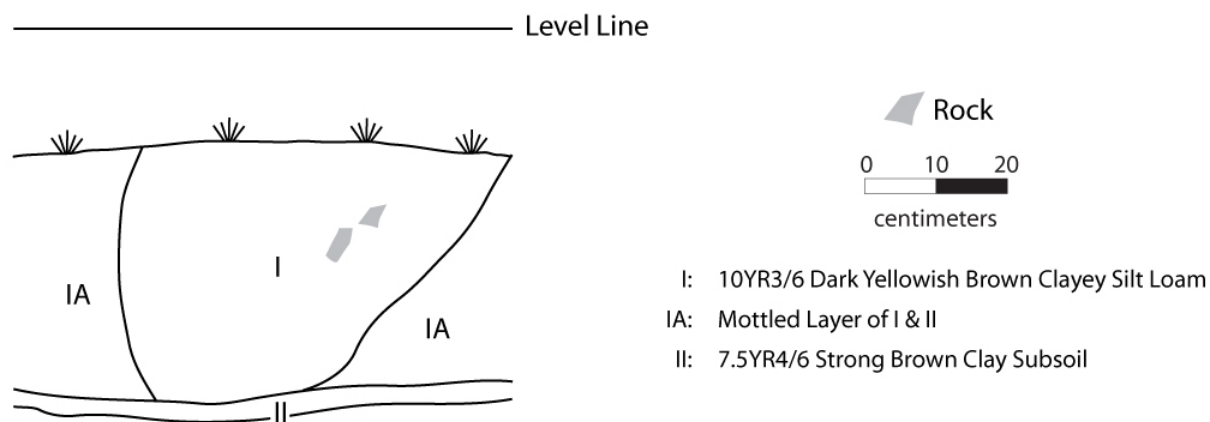
Feature 32

Feature 32 was a roughly oval-shaped stain located in the southern portion of Feature 1, about 90 cm from the southeast corner of the West Room (Figure 7.26). This feature was identified after the mechanical stripping removal of rubble fill sediment from the interior of Feature 1. Feature 32 measures about 70 cm north-south and 47 cm east-west. The feature is approximately 36 cm deep and consists of a dark yellowish

Feature 30 West Profile



Feature 32 East Profile



Feature 33 South Profile

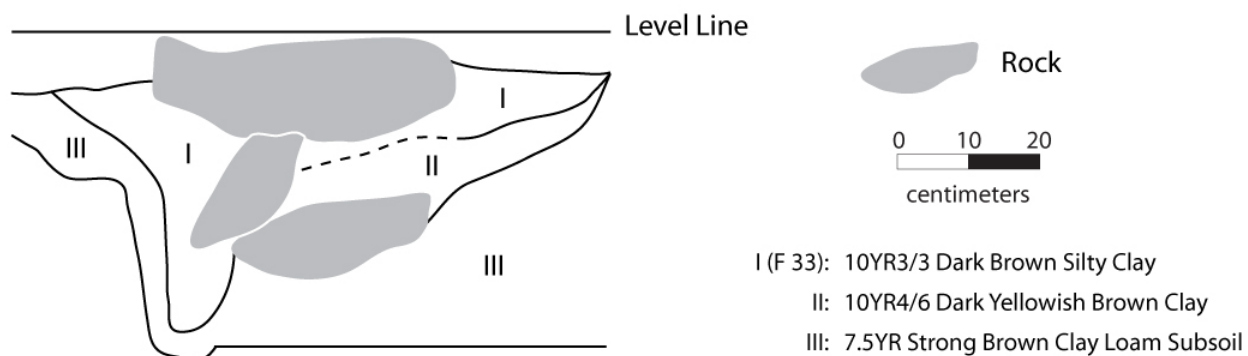


Figure 7.30. Profiles of Features 30, 32, and 33 in the West Room of Feature 1 at 15FA290.

brown (10YR3/6) silty clay loam. The surrounding matrix is a strong brown (7.5YR4/6) silty clay (Figure 7.30). A low number of historic artifacts was recovered from the feature. Additionally the feature fill had high concentrations of coal. Based on its fill and morphology, Feature 32 probably represents a small pit that may have been used as a dump for hearth cleaning activities. Temporally diagnostic artifacts from Feature 32 include lead-glazed redware, stoneware with a combination of Albany slip and Bristol glaze, blue transfer-printed whiteware, and undecorated whiteware (Table 7.23). These artifacts suggest that Feature 32 dates from the 1830s to the 1870s, and it is assigned to the Middle segment of the site chronology. This assessment is supported by a Moir regression formula date of 1856 for seven window glass fragments. However, two wire nail fragments were also recovered, suggesting some temporal mixing. However, the majority of artifacts are consistent with use of the feature during the Middle segment of site occupation.

Feature 33

Feature 33 was an oblong stain identified along the south wall of the West Room, roughly at the midpoint, after mechanical removal of interior rubble from Feature 1 (Figure 7.26). Feature 33 was about 31 cm north-south and 80 cm east-west. The center of the feature was capped by a large stone, and two smaller stones were found in the feature fill. The feature was bisected along its east-west axis and the northern half was excavated first. The west half of Feature 33 was about 30 cm deep, while in the east half the deposits extended an additional 15 cm into the subsoil, most likely because of bioturbation. The profile (Figure 7.30) shows a narrow zone of fill extending downward in the east half, and this zone is similar in size and shape to rodent burrows identified in nearby contexts. The feature fill was a dark brown (10YR3/3) silt loam. Deposits of coal and ash were found under the capstone. A large number of faunal remains was also recovered from this feature. In the western portion of the feature the fill was underlain by a dark yellowish brown (10YR4/6) silt loam. The feature intruded into a strong brown (7.5YR hue) clay loam subsoil. Temporally diagnostic artifacts include a late machine-cut nail, a wire nail, light green painted creamware, and a 12 gauge center-fire shotgun cartridge (Table 7.23). These materials date to both the Early and Late segments of the house chronology, suggesting that the feature represents a refuse pit that was used multiple times. A filling or dumping episode might be represented by the dark yellowish brown deposit in the western half of the feature (Zone II on Figure 7.30), and a later fill episode (Zone I on Figure 7.30) might be represented by the overlying dark brown sediment. Unfortunately, due to the axis on which the feature was bisected, the artifacts could not be separated by fill zone during initial excavation, so it is unclear if Zone II actually dates to an earlier period of house use than the overlying Zone I. The profile also suggests that mixing of artifacts may be the result of bioturbation. A possible rodent burrow in the western half of the pit may have brought later materials into earlier deposits.

Feature 35

Feature 35 was an oval stain identified adjacent to the south wall of the West Room of Feature 1, just west of Feature 33 (Figure 7.26). This feature was identified after the mechanical removal of rubble fill from the interior of Feature 1. Feature 35 measures about 20 cm north-south and 31 cm east-west, and contained approximately 9 cm of dark yellowish brown (10YR3/4) silty clay loam fill. The feature intrudes into subsoil matrix of a yellowish brown (10YR5/6) clay. Charcoal flecking and some mortar were noted in the fill, but only three artifacts were recovered from the feature—two fragments of window glass and one body fragment of container glass (Table 7.23). None of these artifacts are temporally diagnostic, but the window glass thickness correlates to a date of 1891 (the Late segment of house chronology). This feature most likely is a posthole. No profile is shown due to the small size of the feature and its probable function as a posthole.

Feature 37

Feature 37 is a circular stain that was identified in the West Room of Feature 1 after the mechanical removal of rubble fill (Figure 7.26). The center of the feature is about 2.4 m from the north wall and 1.7 m from the east wall of the West Room. Feature 37 has a diameter of about 30 cm and contained only about 5

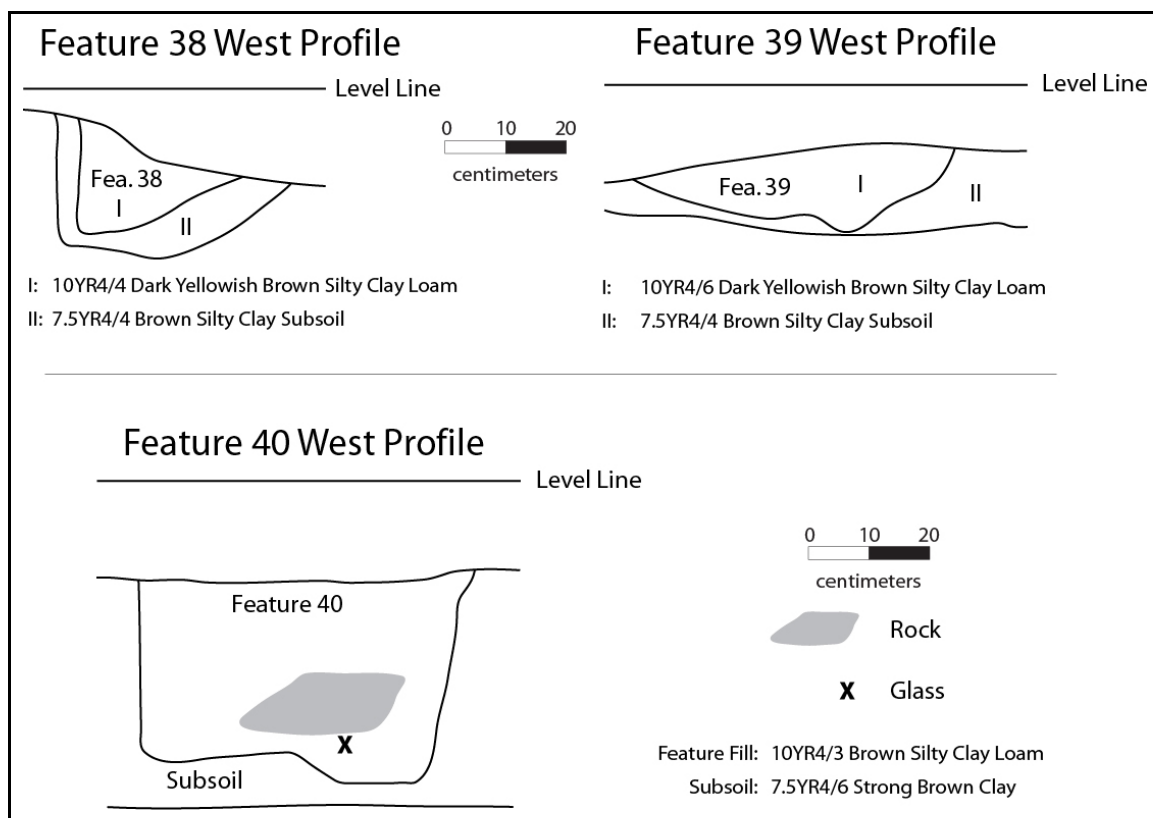


Figure 7.31. Profiles of Features 38, 39, and 40 in the West Room of Feature 1 at 15FA290.

cm of dark yellowish brown (10YR3/4) silty clay loam fill intruding into a brown (7.5YR4/4) silty clay subsoil. Coal was noted in the feature fill, but was not collected. Artifacts recovered include a button and container glass (Table 7.23), both of which are temporally nondiagnostic. Based on the size of this feature, its location within Feature 1, and the depth of the feature deposits, Feature 37 is most likely a posthole or floor support. No profile is illustrated due to the small size of the feature and its probable function as a posthole.

Feature 38

Feature 38 is a roughly circular stain identified after mechanical removal of rubble fill (Figure 7.26); its center is about 80 cm east of Feature 37. Feature 38 measures about 35 cm north-south and 38 cm east-west. The feature was bisected along its north-south axis and the east half was excavated first, revealing about 19 cm of dark yellowish brown (10YR4/6) silty clay loam fill. The surrounding subsoil matrix was a brown (7.5YR4/4) silty clay (Figure 7.31). The artifact density for this feature was relatively high. Temporally diagnostic artifacts include window glass and one sherd of Albany slipped stoneware (Table 7.23), suggesting use during the Late segment of house occupation. Based on its size, shape, and profile, Feature 38 most likely represents a posthole for a floor support post.

Feature 39

Feature 39 was identified as a roughly kidney-shaped stain in the west room of Feature 1 after rubble fill was removed (Figure 7.26). This feature is positioned just west of the West Room chimney base and measures about 60 cm north-south and 40 cm east-west. This feature was bisected along its north-south axis, and the east half was excavated first. At its deepest point Feature 39 contains about 14 cm of dark yellowish brown (10YR4/6) silty clay loam fill; the feature intrudes into a subsoil matrix of brown (7.5YR4/4) silty clay (Figure 7.31). Numerous root intrusions were noted, and these may account for the irregular feature shape.

The only artifacts recovered were unidentifiable machine-cut nails and a strap hinge (Table 7.23). The feature cannot be assigned to any specific segment of the Feature 1 occupation range. Feature 39 is interpreted as a shallow pit of unknown function that has been extensively disturbed by roots.

Feature 40

Feature 40 is a large circular stain identified after mechanical removal of sediment from the West Room of Feature 1 (Figure 7.26); its center is about 60 cm from the north wall and 82 cm from the west wall of the West Room. It measures about 56 cm north-south and 48 cm east-west. The feature was bisected along its north-south axis, and the east half was excavated first. It contained approximately 30 cm of brown (10YR4/3) silty clay loam with some rocks, and the pit intrudes into surrounding subsoil matrix of strong brown (7.5YR5/6) clay (Figure 7.31). The feature contained abundant artifacts. Temporally diagnostic artifacts include late machine-cut nails, unidentifiable machine-cut nails, window glass, hand-painted molded porcelain, undecorated porcelain, hand-painted whiteware, molded whiteware, undecorated whiteware, undecorated ironstone, and Albany slipped stoneware (Table 7.23). These artifacts suggest a Middle to Late segment date for use of Feature 40. The Moir regression formula yielded a mean date of 1848 on the 10 fragments of window glass (1858 if the two thinnest fragments are excluded). The regression formula date is consistent with the other artifacts in the assemblage and together favor a Middle segment date for feature use. Brick and mortar were also noted in the feature fill but were not collected. Based on the feature morphology and artifact density, Feature 40 is interpreted as a trash pit.

West Room Bioturbation Disturbances—Features 22, 23, and 36

Almost all features identified in the interior of Feature 1 had some degree of bioturbation, usually in the form of multiple rodent burrows. However, three soil stains in the West Room were assigned feature numbers, but proved upon excavation to be entirely bioturbation disturbances. Because they are interpreted as being entirely the result of bioturbation, the features are not listed in Table 7.23.

Feature 22 was a large amorphous stain in the southwest corner of Test Unit 13 at the base of Level 9 (Figure 7.13), extending into both the south and west walls of the unit (Figure 7.26). Based on the profiles, the feature measures about 84 cm north-south and 74 cm east-west. The fill was a dark brown (10YR3/3) to dark yellowish brown (10YR4/6) silty clay loam. The south wall profile (Figure 7.13) shows that the feature has a maximum depth of about 30 cm. No artifacts were recovered from the fill, which was initially removed during excavation of Test Unit 13. Multiple rodent burrows were identified in both the west and south profiles of the test unit near and within the feature boundary, indicating that the numbered feature is the result of bioturbation. This interpretation was confirmed when the Feature 1 fill was mechanically removed, and the Feature 22 area was found to consist of be a series of overlapping rodent burrows.

Feature 23 was also identified as a large amorphous stain at the bottom of Level 9 in Test Unit 13, extending north and west outside the test unit (Figure 7.26). The portion within the test unit measured about 50 cm north-south and 41 cm east-west. The fill was a dark yellowish brown (10YR3/4 to 10YR4/4) silty clay loam. Based on the profile, the feature was up to 40 cm deep. The west wall of Test Unit 13 (see Figure 7.14) shows a large rodent burrow at the right of the image (northwest corner of unit), indicating that Feature 23 results primarily or entirely from bioturbation. This interpretation was confirmed when the Feature 1 fill was mechanically removed, revealing multiple rodent burrows north and west of Test Unit 13 in the Feature 23 area. Only three artifacts were recovered from Feature 23—a fragment of window glass, one sherd of whiteware, and one sherd of lead glazed redware. These materials indicate that the rodent burrows may have been active during the Early or Middle segments of Feature 1 occupation.

Feature 36 was identified as a large amorphous stain in the center of the West Room following mechanical removal of rubble fill (Figure 7.26). The center of this feature was about 1.7 m from the east wall and 2.9 m from the south wall. The feature was bisected along its north-south axis, and the excavations and

profile indicated that the feature was the result of multiple rodent bioturbation events. Artifacts recovered during the initial phases of excavation were not saved.

EAST ROOM FEATURES

As noted above, mechanical removal of rubble fill from the East Room and hand-cleaning of residual rubble deposits revealed 11 additional features intruding into the sterile subsoil of the East Room cellar floor. In addition, three features had been identified during excavation of Test Unit 12. These 14 features are described in this section, and associated artifacts are characterized (Table 7.24).

Feature 25

Feature 25 was a circular ashy area encountered within Level 5 of Test Unit 12 (Figure 7.26), nearly centered in the east half of the unit, and excavated as Level 5/Zone 2 (see Table 7.12). This feature measured about 57 cm north-south and 54 cm east-west and contained up to 17 cm of light grey (10YR7/1) ashy fill at its deepest point. No profile drawing is illustrated, but the feature had a smooth lens shape in cross-section, and the profile is described in notes as a shallow basin shape. The surrounding matrix was a yellowish red (5YR hue) burned subsoil. A large amount of bone was recovered from this feature, but few artifacts were associated (see Table 7.12). Temporally sensitive artifacts include a blue transfer-printed whiteware sherd, and a copper alloy button, suggesting use during the Middle segment of Feature 1 occupation. Based on the profile and fill, Feature 25 is interpreted as a small pit used as an ash and refuse dump from hearth or kitchen cleaning. This feature is just west of the East Room chimney base and is probably associated with Feature 44, a large burned area partially underneath the collapsed chimney base. However, Feature 25 is probably intrusive to the western portion of Feature 44.

Features 26 and 27

Features 26 and 27 were both identified as linear stains at the bottom of Level 5 in Test Unit 12 (Figures 7.12 and 7.26). Feature 26 was oriented slightly east of north and traversed the width of Test Unit 12, continuing beyond the unit walls. This feature was at least a meter long (north-south) and varied between 12 and 14 cm wide (east-west). Feature 27 was oriented more directly north-south across the test unit, and it also traversed the width of Test Unit 12 and continued north and south outside the unit boundaries. Feature 27 varied between 17 cm and 21 cm in width. The center line of Feature 27 was about 90 cm from the centerline of Feature 26. Both Features contained a dark yellowish brown (10YR4/4) silty clay loam fill.

Because these features were located in the bottom of Test Unit 12, and because both ran completely across the test unit, the decision was made to postpone their excavation until after the mechanical removal of rubble fill from the East Room so that more of the features could be mapped and excavated. Unfortunately, during mechanical stripping, the trackhoe machine cut too deeply and obliterated both features. Despite the inadvertent destruction of Features 26 and 27, their location, orientation, distance between their center lines, and the depth at which they were identified indicate that they are related to two other linear features (Feature 42 and 43) identified in the East Room after removal of rubble fill. The mapped locations and orientations of Feature 26 and 27 suggest that they represent southward continuations of Features 43 and 42, respectively. Based on the profiles of Features 42 and 43 both features are interpreted as trenches where posts or poles were set into the subsoil, possibly during East Room floor rebuilding or maintenance. The posts/poles either rotted or were removed, and the depressions they left were subsequently filled with midden.

Feature 41

Feature 41 is a long, narrow stain that was identified after the mechanical removal of rubble fill (Figure 7.26). The feature ran from the north wall of the East Room to the chimney base in the middle of the

Table 7.24. Historic Artifacts Recovered from Features in the East Room of Feature 1 at 15FA290.

Artifact Group and Attributes		F25	F26	F27	F41	F42	F43	F44	F45	F46	F47	F48	F49	F50	F51	Chimney Base Cleaning	Total
Kitchen Group																	
Coarse Earthenware																	
	Redware, Lead glazed										1					4	5
	Stoneware, Salt glaze															1	1
	Albany slip exterior															3	3
	Yellowware, Engine-turned bands															1	
Refined Earthenware																	
	Creamware, Undecorated						1	1			4	1			6	1	13
	Pearlware, Undecorated						1	1			1					4	7
	Green or blue edge-decorated with impressed patterns					1	1							1			3
	Hand-painted					3	1							1		2	7
	Blue transfer-printed										1	1				1	3
	Mocha or cable decorated									1	2				1		4
	Whiteware, Undecorated				2	1	2	1				1		3	2	6	18
	Hand-painted/polychrome						1										1
	Blue transfer-printed						2										2
	Purple or brown transfer-printed						1								1		2
	Transfer-printed and molded					1											1
	Ironstone, Undecorated				2											20	22
	Molded and decal decorated															1	1
	Decal decorated															1	1
	Unidentifiable maker's mark (base)															1	1
	Burned refined earthenware (not porcelain)										2	1					3
	Porcelain, Undecorated				2		1				1	4				5	13
	Gilt															1	1
	Molded															3	3
	Overglaze painted														1		1
	Decal-decorated											2			1		3
	Purple luster-glazed				1												1
	Chinese export, decal-decorated and overglaze painted															1	1
Container glass																	
	Body fragment, various colors, unidentified manufacture type				5	2	2	1			5	22	1	2	20	161	221
	Body fragment, embossed lettering or design													1		4	4
	Finish, Improved tool																1
	Double ring, improved tool															2	2
	Improved tool finish with threads															1	1
	Applied tool											1				1	2
	Internal threads											1					1
	Machine-made with threads															2	2
	Unidentified finish type														1	1	2

Table 7.24 (continued).

Artifact Group and Attributes		F25	F26	F27	F41	F42	F43	F44	F45	F46	F47	F48	F49	F50	F51	Chimney Base Cleaning	Total
Kitchen Group Container Glass (continued)																	
Base, Unknown manufacture type												1			1	4	6
Pontil mark															1		1
Solarized amethyst glass, all vessel parts																1	1
Wine glass fragment, clear																1	1
Press-molded fragments, probable drinking glass															1	13	14
Carnival glass fragment, red																1	1
Bone, wood, or metal kitchen utensil handle fragments											4					3	7
Metal utensil knife blade fragment																1	1
Metal sanitary can fragments, stamped/flanged end																7	7
Architecture Group																	
Nails, Hand-wrought (6d to 11d range)																	0
Early machine-cut (2d to 10d range)								1					1				2
Late machine-cut (2d to 20d range)							9	2	2	6	3					14	34
Unidentified machine-cut					6	6	3	43	2	4	6	8		3	9	50	140
Wire (8d to 20d range)											1	1		1		3	5
Window Glass					6					1	2	7	1	3	2	52	74
Plate glass																3	3
Water pipe section															1		1
Fireplace hardware/door																2	2
Screw																1	1
Mortar															2		2
Brick										2							2
Furniture Group																	
Escutcheon										1							1
Glass candle holder						1											1
Mirror glass						1											1
Bolt/nut														1		1	1
Washer																2	2
Chaining pin												1				1	1
Dry cell battery core																1	1
Spring																2	2
Wire fragments												2				86	88
Clothing Group																	
Button, Shell																2	2
Bone						1								1		2	2
Prosser														1		5	6
Copper alloy						1										1	3
Glass with enameled metal rind and shank back																1	1
Hard rubber																1	1

Table 7.24 (concluded).

Artifact Group and Attributes	F25	F26	F27	F41	F42	F43	F44	F45	F46	F47	F48	F49	F50	F51	Chimney Base Cleaning	Total
Clothing Group (continued)																
Shoe rivet				2												2
Hook-and-eye															2	2
Footwear/fragments															1	1
Belt or suspender buckle															1	1
Personal Group																
Ceramic (yellowware) coin bank																
Marble														1	2	3
Coin, 1838 Large Cent					1											1
Comb/fragment						1									2	3
Stoneware pipe or jug fragment															1	1
Redware molded effigy pipe bowl fragment								1								1
Glazed redware molded effigy pipe bowl														1		1
Hair pin													1			1
Medicinal Group																
Syringe plunger															1	1
Arms Group																
Small arms brass shell casing (.22 to .44 caliber)					1						1				3	5
Gun flint											1					1
Transportation Group																
Miscellaneous/Unassigned Group																
Unidentified metal				2						1	8		2	7	11	31
Wood/charred wood									1						4	5
Charcoal				1						3	2					6
Faunal Group																
Mussel shell				1	1											2
Large mammal bone				37	23	41	8	4	22	11	39	1	14	118	85	403
Small mammal bone				18	4	17	4		1		2		11	4	203	264
Reptile bone															6	6
Bird bone				13	3	2	12	1		1	19		6	1	56	114
Fish bone													1	1	14	16
Egg shell													4			4
TOTAL	0	0	0	102	47	77	80	8	36	51	129	5	54	185	883	1657

east wall. The northern 60 cm of the feature has been intruded upon by Feature 50, a small pit. Feature 41 measures about 242 cm north-south and a maximum of 52 cm east-west; it contains approximately 8 cm of fill at its deepest point. The feature fill is a brown (10YR4/3) silty clay loam surrounded by a matrix of strong brown (7.5YR4/6) clay (Figure 7.32). To test the integrity of the feature a section measuring about 60 cm north-south was hand-excavated. The feature fill was found to contain high concentrations of artifacts including ceramics, nails, and bone. The function of this feature is unclear. The profile and plan views suggest that Feature 41 was the impression of a log or post that was set horizontally into the subsoil under the floor of the house. Temporally diagnostic artifacts recovered from Feature 41 include hand-painted purple luster porcelain, undecorated porcelain, undecorated whiteware, and undecorated ironstone (Table 7.24). The Moir regression formula yields a date of 1873 for the window glass assemblage (n=6). These artifacts indicate that the feature dates to the Middle or Late segments of house use, but the end date is unclear. Consequently, the feature is assigned to the broader Middle-Late range of the house chronology. The excavated sample from Feature 41 was taken near Feature 50, so the artifacts may represent some admixture of materials from both features. This may also account for the extended time range for the artifact assemblage. If Feature 50 is intrusive into Feature 41, then the earlier materials (Middle segment of house use) may be related to Feature 41, and the later material (Late segment of house use) derive from Feature 50.

Feature 42

Feature 42 is another long, linear stain identified after mechanical removal of rubble fill (Figure 7.26). This feature is recognized in the northern portion of the East Room and is about 90 cm west of Features 41 and 50. Feature 42 measures approximately 79 cm north-south and 33 cm east-west, and contains approximately 15 cm of fill at its deepest point. Feature 42 likely represents a northward continuation of Feature 27, which was inadvertently removed by the trackhoe. The fill is a dark yellowish brown (10YR3/3) silty clay loam surrounded intruding into a strong brown (7.5YR4/6) silty clay subsoil matrix (Figure 7.32), and the profile of this section shows a rectangular shape. A section of the feature measuring 40 cm north-south and 30 cm east-west was excavated. A low number of artifacts was recovered from the feature fill. Temporally diagnostic artifacts include hand-painted creamware, blue hand-painted pearlware, green molded pearlware, purple transfer-printed and molded whiteware, undecorated whiteware, and an 1838 Matron Head Large Cent (Table 7.24; see also Figure 6.30b). These artifacts suggest that the feature dates from the Early to Middle segments of the house chronology. Feature 42 is morphologically similar to Feature 41, and it probably also represents a log or post set horizontally under the East Room floor. The function of this feature is unclear, but it may be related to repair or maintenance of the floor.

Feature 43

Feature 43 is another linear stain identified after mechanical removal of rubble fill (Figure 7.26). The center line of this feature is about 90 cm west of and roughly parallel to the center line of Feature 42. Feature 43 measured about 160 cm north-south and 84 cm east-west. It is probably an extension of Feature 26, which was removed by the trackhoe. It contained approximately 6 cm of fill, consisting of a very dark grayish brown (10YR3/2) silty clay loam intruding into strong brown (7.5YR4/6) silty clay subsoil (Figure 7.32). A section of the feature measuring 32 cm north-south and 44 cm east-west was hand-excavated, revealing a basin-shaped profile. This profile morphology and the linear nature of the feature suggest that Feature 43 may be the impression of a log set into the subsoil floor of the Feature 1 house during the construction, repair, or maintenance of the East Room. It is unclear if the log rotted or was intentionally removed, but the depression filled with artifact-bearing sediments comprising the feature fill. The fill contained a low to moderate number of artifacts, with artifact density slightly higher in the northern part of the feature. Temporally diagnostic artifacts from Feature 43 include undecorated porcelain, undecorated creamware, molded blue shell-edge pearlware, blue hand-painted pearlware, undecorated pearlware, blue transfer-printed whiteware, purple transfer-printed whiteware, and polychrome hand-painted whiteware (Table 7.24). These artifacts date from the Early to Middle segments of the house chronology, indicating an age similar to Feature 42. Rodent burrows were noted inside the feature indicating that the feature has been somewhat disturbed.

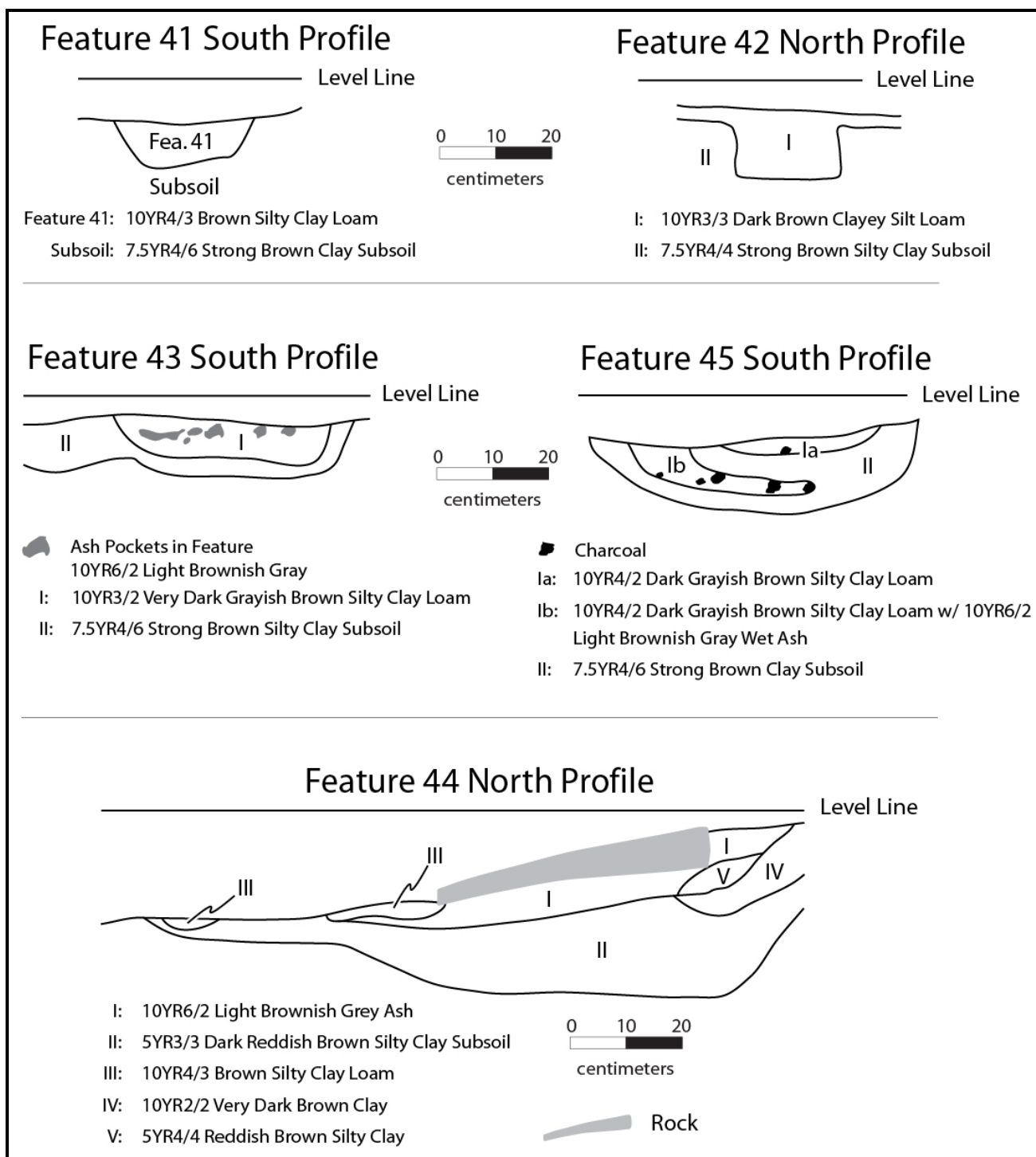


Figure 7.32. Profiles of Features 41, 42, 43, 44, and 45 in the East Room of Feature 1 at 15FA290.

Feature 44

Feature 44 was a large oval burned area partially below the chimney base in the East Room (Figures 7.26 and 7.33). This feature was identified after the mechanical removal of rubble fill and hand-cleaning of residual rubble. At first, the ashy fill near the east chimney base was thought to be a remnant of Feature 25, which had been excavated when it was encountered during excavation of Test Unit 12. However, the newly



Figure 7.33. Plan View of Feature 44 in the East Room of Feature 1 at 15FA290. The overlying portions of the East Room chimney base have been removed to expose the entire feature. Note the multiple overlapping ash and fired sediment lenses and numerous rodent burrows.

exposed ash was much more extensive than the small basin-shaped Feature 25 pit, and the ash apparently extended east under the chimney base. The feature was identified by a large area of burned soil commingled with multiple ash lenses (Figures 7.32 and 7.33). After the partially collapsed east chimney base was removed, Feature 44 was fully exposed. It measured approximately 138 cm north-south and 125 cm east-west, and contained approximately 30 cm of ashy and fired sediment deposits at its deepest point. Feature 44 was bisected along its east-west axis, and the south half of the feature was hand-excavated first. The resulting profile (Figure 7.32) reveals a complex stratigraphic sequence of fired sediment and ash lenses. A large piece of burned limestone was positioned roughly in the center of the fired area. Below and east of this stone was a 7-cm lens of light brownish grey (10YR6/2) ash. Immediately west of the stone and extending for about 40 cm to the west were two thin lenses of brown silty clay loam (10YR4/3). The westernmost lens was about 9 cm across and only about 2 cm thick. The lens nearest the stone was about 20 cm across and 4 cm thick. On the east side of the feature the ash was underlain by a small shallow lens of reddish brown (5YR4/4) oxidized silty clay. This lens was about 17 cm across and 5 cm thick. Below this lens was a very dark brown (10YR2/2) oxidized clay. On the extreme eastern side of the feature this stratum also interfingers with the ash stratum. At its thickest point the very dark brown lens was approximately 10 cm thick, and extended from the east edge of the feature for about 22 cm. All of these strata were underlain by dark reddish brown (5YR3/3) oxidized silty clay. At the deepest point of the feature this stratum was about 13 cm thick. A relatively low number of artifacts was recovered, including early machine-cut nails, late machine-cut nails, undecorated pearlware, and undecorated whiteware (Table 7.24). These artifacts suggest that the feature dates from the Early or possibly Middle segment of the house chronology. Flotation samples were taken of the feature fill from both the northern and southern halves. This feature is clearly associated with burning from the fireplace. The oxidation of the soils was the result of contact burning around the chimney base and most likely represents several intense burning episodes.

Feature 45

Feature 45 was an amorphous stain identified in the south part of the East Room after the mechanical removal of rubble (Figure 7.26). The center point of the feature was located about 142 cm from the west wall of the East Room and 130 cm from the south wall. The southern edge of this feature intersects Feature 47. Feature 45 measured about 92 cm north-south and 48 cm east-west, and the fill included two separate ashy lenses. Lens A (Stratum Ia on Figure 7.32) measured about 26 cm across and consisted of a dark grayish brown (10YR4/2) silty clay loam mixed with light brownish gray (10YR6/2) ashy deposits; it was only about 2 cm thick. Lens A was separated from Lens B by 5 cm of strong brown (7.5YR4/6) silty clay similar to the subsoil matrix (Figure 7.32). Lens B (Stratum Ib on Figure 7.32) underlay this zone of sterile sediment and was approximately 5 cm thick, with a texture and color similar to Lens A but with a higher density of wood charcoal inclusions. Feature 45 was bisected along its east-west axis, and the south half was excavated first. A low number of artifacts was recovered from this feature including late machine-cut nails and unidentifiable machine-cut nails (Table 7.24). These artifacts date from the 19th century, but a more narrow temporal range could not be determined. Recovered materials also include some bone. Based on the profile, Feature 45 represents two distinct ash dumping episodes (Lens A and Lens B), separated by sterile soil that may have been intentionally placed within the pit to cover the ash lens.

Feature 46

Feature 46 was identified as a roughly circular stain after mechanical removal of rubble fill from the interior of Feature 1 (Figure 7.26). This feature intrudes on Feature 51 which is located immediately east of Feature 46 in the southeast corner of the East Room. The eastern edge of Feature 47 is just west of Feature 46, and there may be some intermixing of Feature 46 and Feature 47 deposits. Feature 46 measures 57 cm north-south and 54 cm east-west; and it contained approximately 20 cm of fill. This feature was bisected on its east-west axis, and the southern half of the feature was removed first. The upper 6 cm of feature fill was a light grayish brown (10YR6/2) ashy clay loam with wood charcoal inclusions (Stratum I on Figure 7.34). Stratum I was underlain by 5 cm of dark yellowish brown (10YR3/6) silty clay loam (Stratum II). Stratum III was a 10-cm layer of very dark grayish brown (10YR3/2) silt loam with wood charcoal flecking. The subsoil underlying the feature was a strong brown (7.5YR4/6) clay. A moderate number of artifacts was recovered from Feature 46, including a molded redware anthropomorphic pipe bowl (see Figure 6.36b) and mocha decorated pearlware (Table 7.24). These artifacts suggest that the feature dates from the Early to Middle segments of the house's chronology. Based on the morphology and fill, Feature 46 is interpreted as a pit used as an ash dump after hearth cleaning.

Feature 47

Feature 47 was identified as an east-west linear deposit in the southern part of the East Room after mechanical removal of rubble fill (Figure 7.26). This feature is located immediately west of Feature 46, with the center point about a meter north of the south wall. Feature 47 measured about 56 cm north-south and 150 cm east-west, and it contained approximately 16 cm of fill at its deepest point. The fill was a dark brown (10YR3/3) silt loam (Figure 7.34). In the east half of the feature this dark brown fill is underlain by lenses of white (10YR8/1) and black (10YR2/1) ashy silt loam. These lenses range in thickness from 2 to 10 cm. A low number of artifacts was recovered, but temporally diagnostic artifacts include late machine-cut nails, mocha-decorated pearlware, undecorated porcelain, blue transfer-printed pearlware, undecorated pearlware, undecorated creamware, and redware (Table 7.12). These artifacts suggest that the feature dates to the Early segment of the house's chronology, but its use may extend into the Middle segment. Brick was noted in the feature fill, but it was not collected. Based on the morphology and feature fill zones, Feature 47 most likely represents multiple depositional episodes. The earliest use was as an ash dump from hearth cleaning. The overlying dark brown feature fill is most likely a midden deposit that collected beneath the house floor.

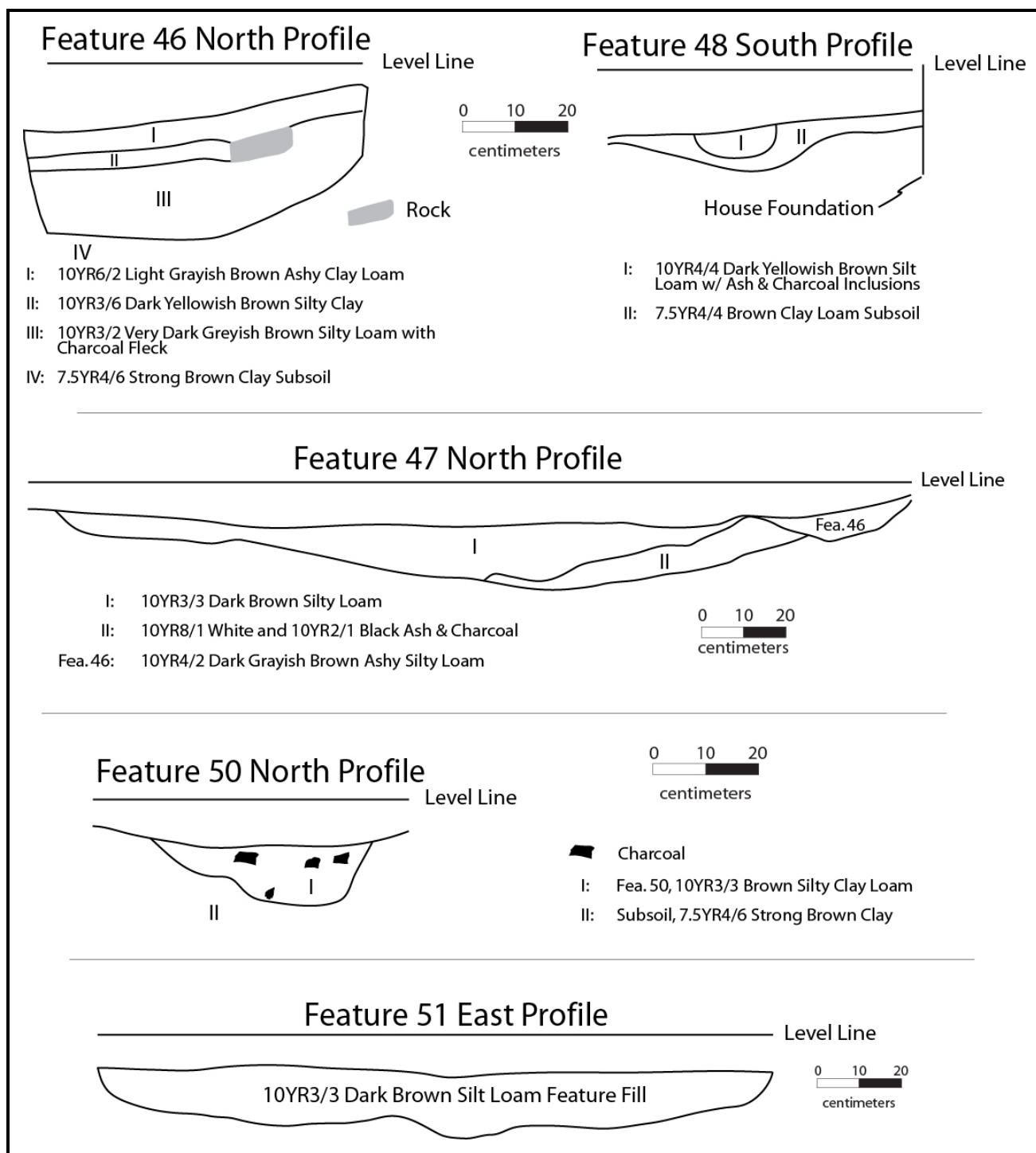


Figure 7.34. Profiles of Features 46, 47, 48, 50, and 51 in the East Room of Feature 1 at 15FA290.

Feature 48

Feature 48 was identified as another long, linear stain in the East Room of Feature 1 after the mechanical removal of rubble fill (Figure 7.26). This feature runs the entire length of the East Room, and is positioned about 30 cm from the west wall of the room. Feature 48 measures about 6.16 m in length and varies in width between 14 and 80 cm. A one-meter wide section of this feature, located about 1.6 m from the East Room north wall, was excavated first to test the integrity of the deposits. The profile of this section

(Figure 7.34) indicates that the feature contains only about 10 cm of fill, which consisted of a dark yellowish brown (10YR4/4) silt loam and a thin lens of white ash. The surrounding subsoil matrix was a brown (subsoil 7.5YR4/4) clay loam. A moderate number of artifacts was recovered from the feature; coal, charcoal, and mortar were noted in the feature fill but were not collected. Temporally diagnostic artifacts include late machine-cut nails, a wire nail, unidentifiable machine-cut nails, container glass with an improved tool finish, undecorated creamware, blue transfer-printed pearlware, decal-decorated porcelain, and undecorated porcelain (Table 7.24). The Moir regression formula yielded a date of 1856 for the small window glass assemblage (n=7). The artifact assemblage includes materials dating from all parts of the house chronology. This wide date range precludes a firm conclusion on when Feature 48 was in use. The morphology and profile of Feature 48 are similar to Features 41, 42, and 43, and all of these features appear to represent posts or poles that were laid horizontally into the subsoil, possibly as part of a rebuilding or maintenance episode. This post either rotted or was removed, and the resulting depression filled with midden. Though Feature 48 could not be precisely dated, the other features in this set can be assigned mainly to the Early to Middle segments of the house chronology, and it is logical to infer that Feature 48 was in use during this same time span. However, there may have been multiple floor repair or maintenance episodes in the East Room that employed the same techniques, so a precise date range cannot be firmly established for Feature 48

Feature 49

Feature 49 was identified as a circular stain within Feature 48 (Figure 7.26). The feature was located immediately adjacent to the west wall of the East Room approximately 1.6 m from the north wall. The feature measured 18 cm in diameter and contained about 8 cm of fill. The south half of this feature was excavated as part of the excavated sample of Feature 48. The fill of Feature 49 was a dark brown (10YR3/3) silt loam. The underlying subsoil matrix consisted of a brown (7.5YR4/4) clay loam. A low number of artifacts was recovered. The only comparatively diagnostic artifact recovered was one fragment of white milk glass (Table 7.24). This artifact suggests that the feature dates to the Late segment of the house chronology. However, based on its morphology, Feature 49 represents a posthole, possibly used as a support for the pole or post that was set into Feature 48 and should be contemporary with Feature 48. No profile is illustrated.

Feature 50

Feature 50 was defined as an amorphous stain following the mechanical removal of rubble fill and hand-excavation of remnant fill areas within Feature 1 (Figure 7.26). The feature is located adjacent to the north wall of the East Room and about 70 cm from the east wall. Feature 50 apparently intrudes into the north end of Feature 41, which has created some mixing of deposits and artifacts. Feature 50 measured about 70 cm north-south and 44 cm east-west; it contained approximately 11 cm of fill at its deepest point. The fill was a brown (10YR3/3) silty clay loam with wood charcoal inclusions. The surrounding subsoil matrix was a strong brown (7.5YR4/6) clay (Figure 7.34). A large number of artifacts was recovered from the feature. Diagnostic artifacts include unidentifiable machine-cut nails, wire nails, a 2-hole prosser button, amber container glass with a rough applied finish, and undecorated whiteware (Table 7.24). These artifacts suggest use of Feature 50 during the Middle to Late segments of the house chronology. Based on the profile and feature fill, Feature 50 represents a refuse pit that was excavated through the north end of Feature 41. Because of the intrusive nature of Feature 50, there would be some mixing of artifacts with the original Feature 41 assemblage. The earlier materials may actually be from Feature 41, making Feature 50 an intrusive pit dating to the Late segment of the house.

Feature 51

Feature 51 was defined as a large area of dark sediment in the southeast corner of the East Room following mechanical removal of rubble fill (Figure 7.26). The feature runs from the south side of the chimney base along the east wall to the southeast corner of the room and extends about 1.08 m west along the south wall of the East Room; maximum dimensions were about 2.0 m north-south and 1.08 m east-west.

Feature 46 intrudes the western margin of Feature 51. Feature 51 was bisected along its north-south axis and the west half was excavated first. The profile indicates that there was approximately 15 cm of fill at the feature's deepest point, which formed a wedge of deposits that thickened to the east and south. The feature fill was a dark brown (10YR3/3) silt loam, while the underlying subsoil matrix was a strong brown (7.5YR hue) clay (Figure 7.34). Artifact density was relatively high in the feature, with bone particularly prevalent. Temporally diagnostic artifacts include unidentifiable machine-cut nails, a lead-glazed anthropomorphic redware pipe bowl (Figure 6.36c), hand-painted blue porcelain, hand-painted brown pearlware, edge-decorated pearlware, undecorated creamware, a container glass base with a pontil scar, and clear container glass with a possibly improved tool finish (Table 7.24). These artifacts suggest an Early to Middle segment date for the accumulation of these feature deposits. Based on the profile and fill, Feature 51 most likely represents a midden deposit that accumulated under the floor of the East Room. It is morphologically, depositionally, and temporally similar to the accretional floor deposits sampled in Levels 7 and 8 in Test Unit 13 in the West Room.

REMOVAL OF EAST ROOM CHIMNEY BASE

One of the final activities associated with Feature 1 excavation was the removal of the East Room chimney base (Figure 7.26). After mechanical removal of rubble from Feature 1, it was evident that the east chimney base had less integrity than its counterpart in the West Room, apparently having collapsed while the house was still in use. Consequently, the stones that comprised the east chimney base were removed by hand to reveal any underlying deposits. A large number of artifacts was recovered from the fill of the chimney base, and these were collected systematically (but without screening) during dismantling of the chimney base. These materials included a battery part, a fireplace door, late machine-cut nails, unidentified machine-cut nails, wire nails, buttons, a shoe fragment, bone, redware, stoneware, yellowware, creamware pearlware, whiteware, ironstone, porcelain, container glass, a syringe plunger, comb fragments, a possible pipe bowl fragment, and marbles (see Table 7.24). These materials date to all segments of the house chronology. The earlier materials may be associated with Feature 44, which was located partially below the east chimney base and which dates to the Early and possibly the Middle segments of the house chronology. The later materials may have entered the chimney base fill during a repair episode or when the house was razed.

INNER HOUSE LOT FEATURES

In addition to the features identified in the interior of Feature 1, a series of features was identified outside, but in close proximity to the house foundation (see Figure 7.26). These features (Features 8, 9, 10, 19, 24, 28, and 29) are interpreted as being functionally related to the house or activities conducted near the house. They are described and interpreted below.

Posthole Features 8, 9 and 10

Features 8, 9, and 10 were identified as three roughly square stains located on the exterior of the north side of Feature 1 after mechanical stripping of Block 3 (Figures 7.6 and 7.26). All three features shared the same orientation, approximately 45 degrees from the orientation of the house foundation. The effect of this orientation is that the corners, rather than the sides, of the features aligned to grid directions. Feature 8 was located near the south end of Trench 1 near its intersection with Block 3 and about 1.2 m north of the exterior north wall of Feature 1. Feature 8 measured about 25 cm by 25 cm, and it contained approximately 22 cm of fill at its deepest point. Two distinct zones were identified in the feature fill (Figure 7.35). In the center of the feature the fill was a very dark brown (10YR2/2) silt loam with a large wood chunk included (Zone I). Zone I was surrounded by a dark brown (10YR3/3) silt loam (Zone II). The matrix surrounding Feature 8 was brown (7.5YR4/4) clay subsoil (Zone III). The profile is interpreted as representing a post mold (Zone I) and associated posthole (Zone II). Only a few artifacts were recovered from this feature; these include window

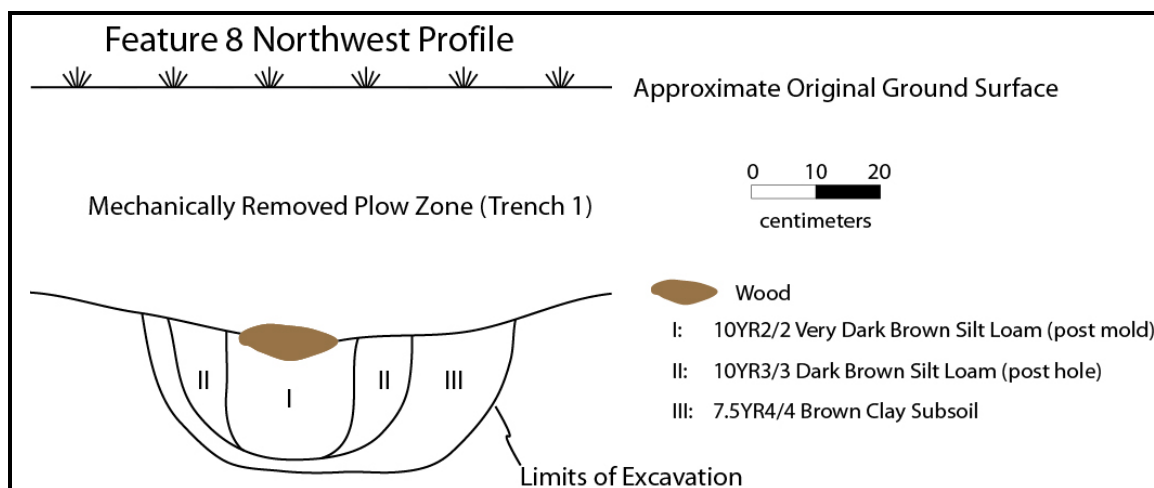


Figure 7.35. Profile of Feature 8 at 15FA290. This feature is a postmold and associated posthole.

glass and bone (Table 7.25). The artifacts were not separated by fill zone. The window glass thickness suggests that the feature dates to the Middle segment of the house chronology.

Features 9 and 10 were located within the inset section of the north wall of Feature 1, at either side of the inset section (Figure 7.26). The center points of these features are approximately 130 cm (4 feet, 3 inches) apart. Feature 9 was situated on the west side of the recessed area about 21 cm from the north wall of Feature 1. Initially square in appearance, Feature 9 was revealed to be more nearly circular in shape after excavation; it measured about 29 cm north-south and 30 cm east-west. The Feature 9 fill was a dark grayish brown (10YR3/2) silty clay surrounded by brown (7.5YR4/4) clay subsoil. The feature contained approximately 60 cm of fill. Two notable inclusions in the fill were a rock found at a depth of 30 cm and a charcoal lens identified at a depth of about 40 cm. A relatively large number of artifacts was recovered from the feature, given its relatively small volume. Temporally diagnostic artifacts include late machine-cut nails, unidentifiable machine-cut nails, solarized amethyst container glass, undecorated creamware, undecorated ironstone, and lead-glazed redware (Table 7.25). These artifacts include materials associated with all periods of the house chronology, so only a general 19th century time range is assigned to Feature 9.

Feature 10 was located on the east side of the recessed portion of the north wall of Feature 1 about 22 cm north of the wall (Figure 7.26). Feature 10 measured about 11 cm north-south and 17 cm east-west, and was about 29 cm deep. The feature fill was a dark grayish brown (10YR3/2) silty clay loam, and the surrounding subsoil matrix was a brown (7.5YR4/4) clay. No artifacts were recovered from Feature 10.

Based on their size and morphology Features 9 and 10 also represent postholes. Their locations suggest that Features 8, 9, and 10 all likely served as supports for a staircase that served as a secondary, north-side entrance to the North Room of Feature 1. This room and the stairway may have been the primary access to the active farmyard in back of the house.

Feature 19

Feature 19 was identified as a roughly square area of dark sediment at the base of Level 1 in Test Unit 14 (Figures 7.6 and 7.26). The feature is in the northeast corner of the test unit, extending about 66 cm along the north wall and 52 cm along the east wall, and continuing north and east outside the unit. Only the portion of Feature 19 within Test Unit 14 was excavated. At its deepest point the feature contains about 13 cm of fill, which is a dark brown silty clay loam with gray ash and wood charcoal inclusions. The surrounding matrix is a dark yellowish brown (10YR3/3) silty clay loam that represents the original A horizon remnant that was once present in the inner house lot (see Figure 7.15). Feature 19 was capped by a thin layer (2-10 cm thick)

Table 7.25. Historic Artifacts Recovered from Features in the Inner Yard at 15FA290.

Artifact Group and Attributes		F8	F9	F10	F19	F24	F28	F29	Total
Kitchen Group									
	Coarse Earthenware								
	Redware, Lead glazed		2		3				5
	Refined Earthenware								
	Creamware, Undecorated		1		1				2
	Pearlware, Blue transfer-printed				1				1
	Whiteware								0
	Ironstone, Undecorated		1						1
	Porcelain, Undecorated					1			1
	Container Glass								
	Body fragment, various colors, unidentified manufacture type		3			1			4
	Solarized amethyst glass, all vessel parts		1						1
	Rickett's bottle fragment				2				2
Architecture Group									
	Nails, Hand-wrought (6d to 11d range)					1			1
	Early machine-cut (2d to 10d range)				4	1			5
	Late machine-cut (2d to 20d range)		1		5	7			13
	Unidentified machine-cut		4		1	2		1	8
	Wire (8d to 20d range)								0
	Window Glass	2	9		3			3	17
	Brick		9			1			10
Activities Group									
	Funnel?					1			1
Clothing Group									
	Shoe fragments		2+						2+
Arms Group									
	Lead round shot					1			1
Miscellaneous/Unassigned Group									
	Coal		1						1
	Wood/Charred wood				5				5
	Charcoal					2			2
Faunal Group									
	Large mammal bone	2	13		4	5			24
	Small mammal bone		9						9
	Bird bone		1						1
TOTAL		4	57	0	30	22	0	4	117

of yellowish brown clay (10YR5/6) which was backdirt from placement of the adjacent Feature 24 cistern. Excavation of the exposed portion of Feature 19 produced a low to moderate number of artifacts. Temporally diagnostic artifacts include early machine-cut nails, late machine-cut nails, unidentifiable machine-cut nails, fragments from a green glass Rickett's Company bottle, blue transfer-printed pearlware, undecorated creamware, and lead glazed redware (Table 7.25). These materials indicate that the feature deposits date to the Early segment of the house chronology. Because the size and morphology of this feature could be inferred from the profiles of the north and east walls of Test Unit 14, and because the sample of artifacts recovered from the excavated portion was sufficient to date the feature, the portion of Feature 19 outside Test Unit 14 was not excavated. We estimate that approximately 30 percent of Feature 19 was excavated. Based on its morphology and fill, Feature 19 represents a shallow pit that was used as an ash and refuse dump. After the pit was filled, it was covered with a thin layer of clay when the cistern (Feature 24) was built. Based on its proximity to the cistern, feature 19 may be related to its construction or installation.



Figure 7.36. Outline of Feature 24 Cistern after Removal of Plow Zone from Block 3 at 15FA290 (looking southwest). Excavation Unit 14 (foreground) exposed the upper curved side of the cistern.

Feature 24

Feature 24 is a compound feature comprising a historic cistern and associated builders' trench. This feature was initially identified during mechanical removal of plow zone from the east side of Block 3 (Figures 7.26 and 7.36). The mechanical excavation revealed that the builders' trench completely encircled the cistern and measured about 3.9 m in diameter. Excavation of Test Units 14 and 15 exposed some of the upper brick vault of the cistern and provided a small sample of sediment from the builders' trench (see Figures 7.15 and 7.16). The builders' trench spanned the entire length of Test Unit 14 from north to south and varied in width from 19 to 60 cm. The builders' trench fill was a dark brown (10YR3/3) silty clay loam with rocky rubble inclusions (see profile in Figure 7.15). A low number of artifacts was recovered from the builders' trench fill including bone and brick fragments (Table 7.25). Only a small portion of the cistern builder's trench was exposed in Test Unit 15, and no artifacts were derived from it. The remainder of the builders' trench outside Test Units 14 and 15 was not excavated.

The center point of the cistern was about 3.4 m west of the exterior west wall of Feature 1, to the side of the house if the front entrance was on the south side, facing toward Lexington and oncoming traffic on Newtown Pike. The cistern outline was about 3.4 m in diameter, and the top of the cistern had been truncated by razing of the feature and subsequent plowing of the site area. Consequently, the original diameter of the cistern orifice is unknown. A trench was cut through the north-south axis of the cistern with heavy machinery to expose a cross-section of the cistern; the east half was removed during mechanical excavation (Figure 7.37), and the exposed cross-section (Figures 7.37 and 7.38) shows that the cistern extended 1.85 m (6 feet, 1 inch) below the bottom of the plow zone. As the upper portion of the cistern vault had been truncated, the cistern was likely 7 to 8 feet deep. The cistern was cylindrical in shape with a hemispherical brick vault comprising the upper 60 cm; at least 11 courses of brick remained in place. The interior surface of the bricks



Figure 7.37. Cross-section of Feature 24 Cistern at 15FA290 (looking southwest).

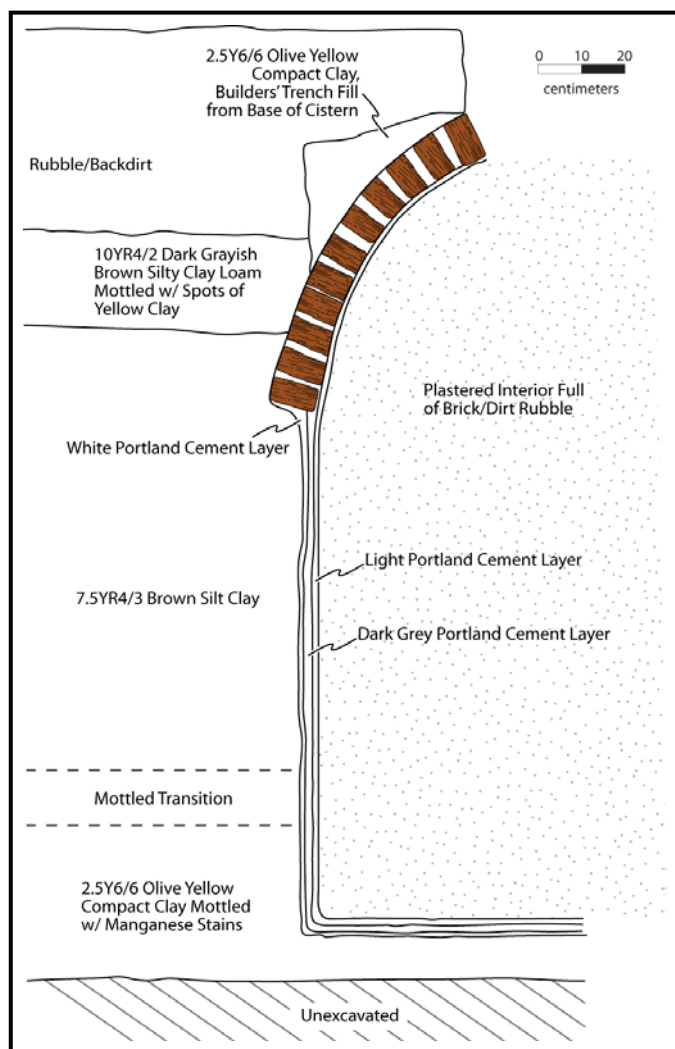


Figure 7.38. Drawing and Description of South Portion of Feature 24 Cistern Profile at 15FA290.

was covered with plaster or more likely with Portland cement. The lower, vertical portion of the cistern wall was composed of between three and five thin layers of Portland-style cement. The cement had been placed directly against the compact clay and silty clay subsoil zones (see Figure 7.38) below the curved brick cistern cap and smoothed to create the cylindrical shape. The various layers of Portland cement likely represent both initial construction and possible repair episodes. The interior of the feature had been filled with brick rubble, probably derived from the house chimneys and the upper part of the cistern vault. Backdirt from excavation of the cistern and cistern builders' trench, an olive yellow (2.5Y6/6) compact clay, was distributed around the cistern and formed a distinct stratigraphic layer that sealed part of the underlying original A horizon as well as Feature 19. Based on the stratigraphic relationship between Features 24 and 19 and the artifacts recovered from these features, Feature 24 was most likely constructed during the Middle segment of the house chronology. Middle-segment artifacts are absent from Feature 19, which is capped by the cistern backdirt. Installation of the cistern was a major improvement to the residence, and we speculate that it was installed during the ownership of the house by John and Mary Estill, between 1830 and 1854.

Posthole Features 28 and 29

Feature 28 was a circular stain on the west side Feature 1, exposed during mechanical removal of plow zone from Block 3 (Figure 7.26). The feature is about 15 cm west of Feature 1, just outside the house builders' trench and about 1.3 m south of the northwest corner of Feature 1. Feature 28 was about 25 cm in diameter and 15 cm deep. The fill was a dark brown (10YR3/3) silty clay loam intruding into the dark yellowish brown (10YR3/6) silty clay loam subsoil. No artifacts were recovered. This feature may simply be a stain of darker soil and not a feature. Alternatively, the circular shape suggests that this feature is the remnant of a posthole that has been truncated during the mechanical stripping of Block 3.

Feature 29 was a circular stain west of Feature 1, exposed after mechanical removal of sediments from Block 3 (Figure 7.26). The center point of the feature is about 66 cm from outside edge of the west wall of Feature 1 and about 1.25 m southwest of Feature 28. Feature 29 was about 19 cm in diameter and 16 cm deep. The fill was dark brown (10YR3/3) silty clay loam that contrasted well with the dark yellowish brown (10YR3/6) clay loam subsoil. One artifact, an unidentifiable machine-cut nail, was recovered from Feature 29, which suggests that it dates to the 19th century, probably to the Early or Middle segments of house use-life. Based on its shape, Feature 29 represents a small posthole. No profile is shown for either Feature 28 or Feature 29 due to the simple geometry of these features.

OUTER HOUSE LOT FEATURES

Fourteen additional features were documented in the outer house lot after mechanical removal of plow zone from Trench 1 South, Trench 2, Trench 4, and Blocks 1 and 2 (Figure 7.6). Due to the layout of the site, which is interpreted as having an east-to-west orientation of residence, cistern, detached kitchen, and outbuildings, the archaeological investigations along Newtown Pike provided only a limited, north-south oriented, sample of the site. This sampled area includes the residence, cistern and yard areas located north and south of the residence, but the detached kitchen and yard area west of the house was outside the project boundaries and could not be investigated. Many activity areas and outbuildings were probably located west of the house, and they are probably still present as archaeological features. Due to this sampling necessity, the features documented in the outer house lot are probably not representative of the entire range of features, activity areas, and outbuildings that were associated with the 15FA290 residence. Most of these features documented in the outer house lot are interpreted as postholes, and they are discussed together, based on spatial proximity and location relative to the Feature 1 residence. Profiles are not usually provided for posthole features because they exhibited very simple geometric shapes and had uniform fill. Descriptions of the fill and shape are sufficient for the current needs.

Posthole Features 2, 3, 4, 5, and 6 (south of Feature 1)

Features 2, 3, 4, 5, and 6 are all located south of the Feature 1 residence and are potentially functionally related. Feature 2 was found in Trench 1 South, while Features 3, 4, 5, and 6 are clustered near each other in Trench 4 (Figure 7.6). All five features are interpreted as postholes on the basis of their size, shape, and profiles.

Feature 2 was a circular stain located about 12.5 m south of Feature 1. Feature 2 is about 19 cm in diameter and 6 cm deep; the fill was a dark brown (10YR3/3) silty clay loam. Two late machine-cut nails and one hand-wrought nail were recovered from Feature 2 (Table 7.26). These artifacts suggest that Feature 2 may have been in use in the Early segment of the site history. Feature 2 may have been part of a fence line on the south side of Feature 1, perhaps marking the edge of the inner yard.

Feature 3 was defined as a roughly square stain located about 10 meters south of the north end of Trench 4 (Figure 7.6). Feature 3 was about 50 cm north-south and 48 cm east-west and was about 22 cm deep. The feature fill was compact dark yellowish brown (10YR3/4) silty clay loam that contrasted sharply against the strong brown (7.5YR4/6) clay subsoil. The feature was bisected along its east-west axis, and the northern half was excavated first. Three nails were recovered from Feature 3—two early machine-cut nails and one hand-wrought nail (Table 7.26), indicating that Feature 3 dates to the Early segment of site use.

Feature 4 was identified as a roughly square stain located about 7 meters south of the north end of Trench 4 (Figure 7.6). Feature 4 measured about 24 cm north-south and 25 cm east-west; it was 10 cm deep. The Feature 4 was bisected along its east-west axis, and the north half was removed first. Though the plan shape is square, the profile showed a smoothly rounded bottom. The feature fill was a dark yellowish brown (10YR3/4) silty clay loam, and screening of the fill produced one late machine-cut nail (Table 7.26), which is only indicative of use in the Early or Middle segments of site history.

Feature 5 was a roughly square stain located about 7 meters south of the north end of Trench 4 (Figure 7.6). Feature 5 measured about 43 cm north-south and 40 cm east-west, and was a maximum of 22.5 cm deep. The feature was bisected along its east-west axis and the north half was excavated first. The feature fill was a dark yellowish brown (10YR3/4) silty clay loam. Temporally diagnostic artifacts include undecorated pearlware and lead-glazed redware (Table 7.26), which suggest that the feature was in use during the Early segment of the site history. Presence of Kitchen group artifacts suggests that the post may have been removed and the hole filled with household refuse.

Feature 6 was initially identified as a rectangular stain in the north part of Trench 4 (Figure 7.6). After the surface was cleaned, Feature 6 proved to be two overlapping rectangular stains (Figure 7.39), designated Features 6A (north part) and 6B (south part). Feature 6A apparently intrudes into Feature 6B. Feature 6A measured about 30 cm north-south and 44 cm east-west. Feature 6B measured about 32 cm north-south and 35 cm east-west. The entire feature was bisected along its north-south axis and the west half was removed first. Feature 6A was about 21 cm deep and showed a flat bottom; Feature 6B was also flat-bottomed but was only about 15 cm deep. The fill of both parts was a dark brown (10YR3/3) clay loam, though the fill of Feature 6A is less compact. No artifacts were recovered from either Feature 6A or 6B. Feature 6B was the original posthole, which was either removed and replaced by Feature 6A, or was shored by placement of an adjacent post, creating Feature 6A.

The locations of Features 2 through 6 on the south side of Feature 1 suggest that an east-west fence line was once positioned south of the residence. This interpretation is supported by recovery of artifacts from most of these posthole features that indicate broadly contemporary use during the Early segment of the site history. Features 2, 3, and 5 are all similar in size and artifact content. A line connecting these features is oriented almost exactly parallel to the south wall of Feature 1, which further supports the interpretation that some or all of this set of postholes represent the remains of a fence line.

Table 7.26. Historic Artifacts Recovered from Features in the Outer Yard at 15FA290.

Artifact Group and Attributes	F2	F3	F4	F5	F6	F7B	F11	F12	F13	F14	F15	F16	F17	F18	Total
Kitchen Group															
Coarse Earthenware															
Redware, Lead glazed				1											1
Stoneware, Salt-glazed														2	2
Albany interior/Bristol exterior														2	2
Refined Earthenware															
Creamware, Undecorated											28				28
Pearlware, Undecorated				1							5				6
Hand-painted annular bands									1						1
Blue edge decorated with impressed lines											2				2
Green edge decorated with impressed lines											1				1
Whiteware															0
Ironstone, Undecorated						1			1		7			4	13
Container Glass															
Body fragment, various colors, unidentified manufacture						1	1				5			4	11
Finish, Double ring applied tool											1				1
Balse, clear, unknown manufacture														1	1
Metal, spine and tang of knife														1	1
Metal container fragments														3	3
Architecture Group															
Nails, Hand-wrought (6d to 11d range)	1										2			1	4
Early machine-cut (2d to 10d range)		2									1				3
Late machine-cut (2d to 20d range)	2		1			1			1		11		1	4	21
Unidentified machine-cut		1							1		2			1	5
Wire (8d to 20d range)										1				1	2
Window Glass				1		1					7			2	11
Metal strap, possible hinge part														1	1
Personal Group															
Metal eye, possible button shank or jewelry part?											1				1
Clothing Group															
Button, metal alloy				1							1				2
Buckle														1	1
Activities Group															
Bolt														1	1
Large metal ring														1	1
Wire														1	1
Transportation Group															
Horseshoe nail														2	2
Miscellaneous/Unassigned Group															
Unidentified metal fragments											3			5	8
Coal				1											1
Wood													1		1
Faunal Group															
Large mammal bone				5							2			2	9
Small mammal bone											1				1
Bird bone											4				4
TOTAL	3	3	1	10	0	4	1	0	4	1	84	0	2	41	154

Posthole Feature 7 (north of Feature 1)

Feature 7 was identified as an amorphous stain following removal of plow zone from Trench 1 (Figure 7.6), about 10 meters north of Feature 1. After additional cleaning, two distinct square stains were evident, similar to those that comprise Feature 6. They were designated Feature 7A (north part) and 7B (south part). Feature 7A was about 46 cm north-south by 49 cm east-west, and was only 6 cm deep. The feature fill was dark brown (10YR3/3) silty clay loam, and no artifacts were recovered from this fill. The center of Feature 7B was about 75 cm south of the center of Feature 7A. Feature 7B measured about 51 cm north-south by 39 cm east-west; it was 12 cm deep at its deepest point, and there was some evidence of disturbance at the base of the feature. Feature 7B fill was the same as that of Feature 7A. Artifacts from Feature 7B include a late machine-cut nail and undecorated ironstone (Table 7.26), suggesting that the feature deposits date from the Middle to Late segments of the site chronology. It is unclear whether Features 7A and 7B are coeval or if they represent sequential repair/replacement episodes.



Figure 7.39. Plan View of Feature 6 at 15FA290. Feature 6A to the north (foreground) intrudes into Feature 6B to the south (near menu board).

Posthole Features 11, 12, 13, and 14 (Block 1, north of Feature 1)

Features 11, 12, 13, and 14 are all interpreted as postholes on the basis of their size, shape, and profile characteristics. All were documented within Block 1, and they collectively form a roughly east-west oriented line positioned about 18 m (60 feet) north of the north edge of the Feature 1 house. Their position and collective orientation suggests that they may all have been part of a single fence line. This line marks the boundary between what we are interpreting as the Inner Yard and Outer Yard at 15FA290.

Feature 11 was a roughly oval stain located about 1.25 m from the west wall and 1.75 m from the north wall of Block 1 (Figure 7.6). Feature 11 measured 19 cm north-south and 32 cm east-west, and it contained a maximum of 23 cm of fill. The feature fill was dark yellowish brown (10YR3/6) silty clay loam, while the surrounding subsoil matrix was brown (7.5YR4/4) silty clay. The only artifact recovered from this feature was a fragment of green container glass found at the surface (Table 7.26); this artifact is not temporally diagnostic. During excavation, numerous small roots were noted suggesting that the feature might be noncultural, but the profile and plan shape are consistent with a small posthole. The location of Feature 11 relative to Features 12 and 14 suggests that Feature 11 is a posthole that is part of a fence line.

Feature 12 was initially identified as a small rock concentration, but further cleaning revealed the feature as a small oval stain with limestone inclusions. The feature is located about 1 m from the north wall and 8.5 m from the east wall of Block 1 (Figure 7.6). Feature 12 measured 35 cm north-south and 28 cm east-west, with a maximum depth of 26 cm. Feature 12 was bisected along its north-south axis and the west half was excavated first. The fill was dark yellowish brown (10YR3/4) silty clay loam with burned and unburned limestone inclusions. No artifacts were recovered from this feature. The limestone in the posthole may be chinking for the post, or the stone may have been placed in the hole to fill it after the post was removed.

Feature 13 was identified as a narrow, rectangular stain in Block 1, located about 4.75 m from the west wall and 1.75 m from the north wall the block (Figure 7.6). Feature 13 measured 17 cm north-south and 38 cm east-west, and it was 22 cm deep at its deepest point. The feature was bisected along its east-west axis, and the south half was removed first. The feature fill was dark yellowish brown (10YR3/6) silty clay loam. Only a few artifacts were recovered, including a late machine-cut nail, an unidentifiable machine-cut nail, pearlware with annular polychrome bands, and undecorated ironstone (Table 7.26). Brick fragments were also noted in the fill but were not collected. These artifacts are most consistent with the Early to Middle segments of site use, but a narrower chronological placement is not possible.

Feature 14 was a roughly circular stain located beneath Feature 15 in Block 1 (Figure 7.6), about 4.25 m from the west wall and 1.25 m from the north wall of the block. Feature 14 measured 21 cm north-south and 23 cm east-west, and it contained about 24 cm of fill at its deepest point. The feature fill was a dark yellowish brown (10YR3/6) silty clay loam. The only artifact recovered from Feature 14 was a wire nail, which dates the feature to the Late segment of the house chronology (Table 7.26). The location of Feature 14 relative to Features 11 and 13 suggests that these three features may have all been part of the same fence line. If so, the temporally diagnostic artifacts from Feature 14 suggest that it was part of the Late segment use of the site. Features 11 and 13 may also be part of this or a similar fence line, but it appears to date earlier. The fence line could have been a long-established facility that was used over a long period of time.

Feature 15 (Block 1)

Feature 15 was initially identified as a concentration of limestone rocks along the north edge of Block 1 (Figure 7.6). The feature extended north beyond the block boundaries, and only that part exposed in Block 1 was excavated. The exposed part of Feature 15 measured 140 cm north-south and 92 cm east-west; it had a maximum depth of about 20 cm. The feature fill was a dark brown (10YR3/3) silty clay loam. The upper portion of the feature contained abundant limestone rock, along with a lower density of artifacts; the lower portion was less rocky (Figure 7.40). Based on its size, shape, and profile, Feature 15 represents a shallow basin or pit that was used initially for refuse disposal, and was later covered by limestone gravel and rubble. Temporally diagnostic artifacts from Feature 15 include late machine-cut nails, an L-head nail, hand-wrought nails, unidentifiable machine-cut nails, clear container glass with improved tool applied finish, undecorated creamware, blue and green edge-decorated pearlware, undecorated pearlware, and undecorated ironstone (Table 7.26). The majority of these artifacts date prior to the mid-1830s indicating that the feature was used for trash disposal in the Early segment of the house chronology. Other artifacts including the ironstone and improved tool finish container glass lip date to the Late segment of the house chronology. Field notes indicate that these artifacts were recovered from the upper part of the feature fill in the gravel and rubble zone. Considering the artifacts and the profile together, it is likely that Feature 15 was in use during the Early segment of the house chronology and was covered by a layer of gravel and rubble during the Late segment of the site chronology, after the 1870s. This interpretation implies that the Feature 14 posthole (described above) intrudes through Feature 15, as Feature 14 is apparently associated with the Late segment of the site chronology.

Posthole Features 16 and 17 (Block 2)

Feature 16 was identified as a circular stain during mechanical removal of plow zone from Block 2. The feature was located about 4.38 m from the east wall and 6.12 m from the south wall of Block 2 (Figures 7.6 and 7.7). Feature 16 measured 15 cm in diameter and contained 21 cm of fill at its deepest point. The feature was bisected along its east-west axis, and the south half was excavated first. The fill was dark yellowish brown (10YR3/6) silty clay loam, while the surrounding subsoil was brown (7.5YR4/4) clay (Figure 7.41). No artifacts were recovered from Feature 16. Based on its size, shape, and profile, Feature 16 represents a historic posthole. Feature 16 was about 183 cm north of Feature 17, another historic post, and both posts were positioned to either side of Feature 18, which is interpreted as a driveway. These postholes may represent the remains of gateposts associated with the driveway entrance.

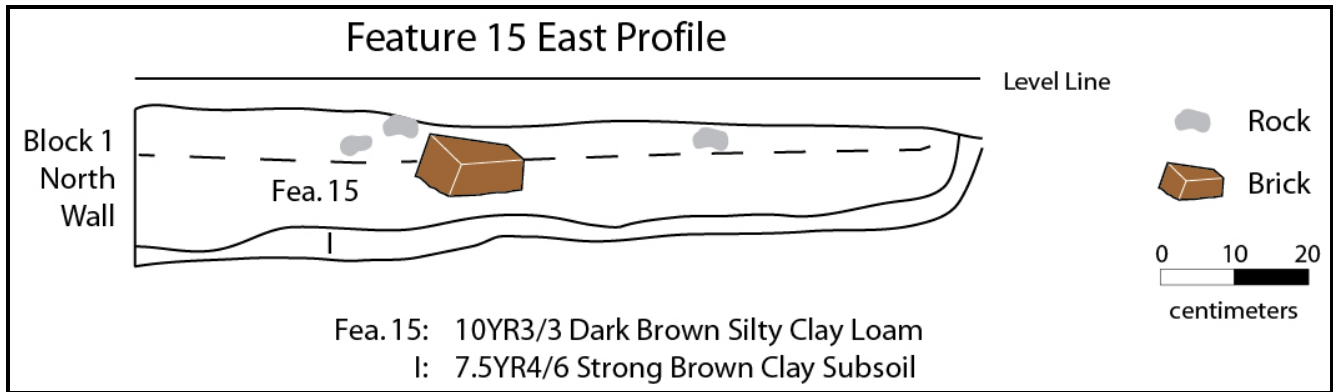


Figure 7.40. Profile of Feature 15 at 15FA290.

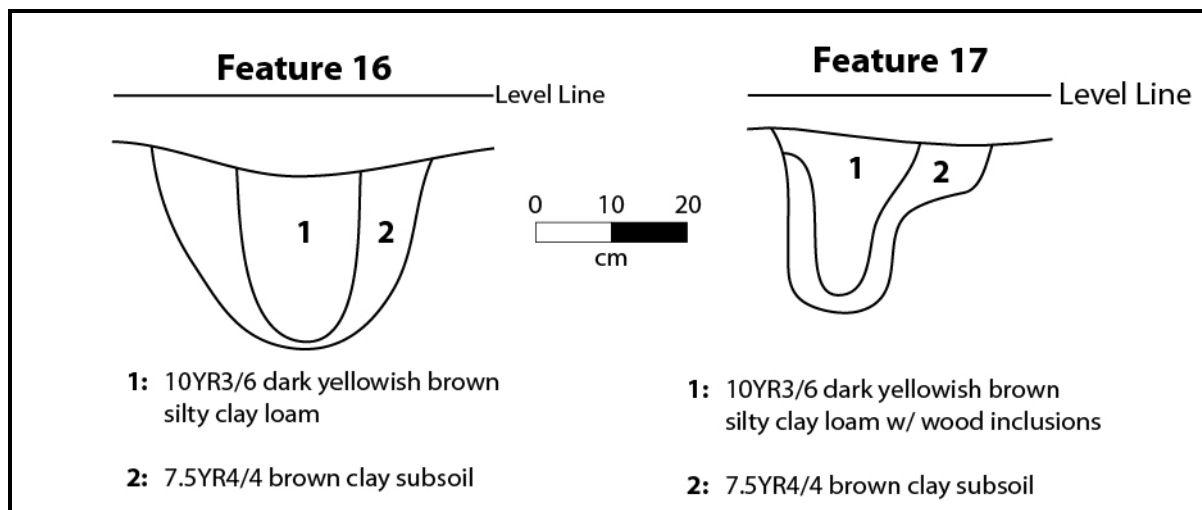


Figure 7.41. Profiles of Posthole Features 16 and 17 at 15FA290.

Feature 17 was also defined as a circular stain within Block 2, but it was positioned just within the boundaries of Feature 18 (Figures 7.6, 7.7, and 7.42). The feature is about 4.5 m from the east wall and 4.1 m from the south wall of Block 2. Feature 17 measured 21 cm in diameter and was a maximum of 22 cm deep. The feature fill was a dark yellowish brown (10YR3/6) silty clay loam, and the surrounding Feature 18 matrix was also a brown (10YR3/6) silty clay loam, but more compact than the Feature 17 fill (Figure 7.42). One late machine-cut nail was recovered from Feature 17, and a chunk of wood was found at the surface of the feature (Table 7.26); the wood may be a remnant of a post. These artifacts preclude a confident temporal placement of the feature, but it was likely contemporary with the Feature 16 post and the surrounding Feature 18 entryway/driveway.

Feature 18 (Block 2)

Feature 18 was a wide, linear area of dark sediment identified during mechanical removal of plow zone from Block 2 (Figures 7.6, 7.7 and 7.42). This feature extends 9.2 m from the east wall of Block 2 and is oriented generally east-west on its the long axis; it was a maximum of 3.35 m wide (north-south) at the east end and narrowed to the west, forming a roughly triangular or trapezoidal shape (see Figures 7.6 and 7.42). About 3 m from the east end of the feature, a 1-m wide section was excavated to provide a sample of artifacts from the feature fill. The fill in this excavated section was a maximum of 14 cm deep and consisted of dark yellowish brown (10YR3/6) silty clay loam (Figure 7.43). A total of 28 historic artifacts was recovered from this excavation including ironstone, stoneware, late machine-cut nails, wire nails, and solarized amethyst

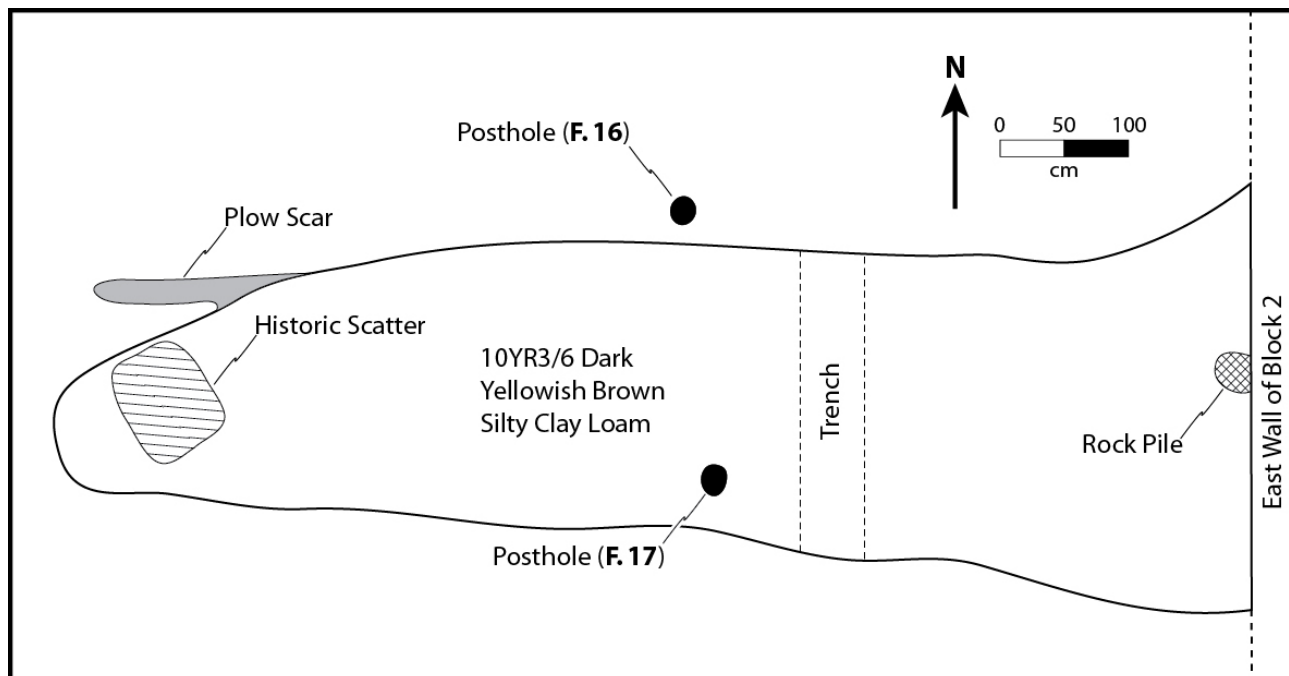


Figure 7.42. Plan View of Features 16, 17, and 18 in Block 2 at 15FA290.

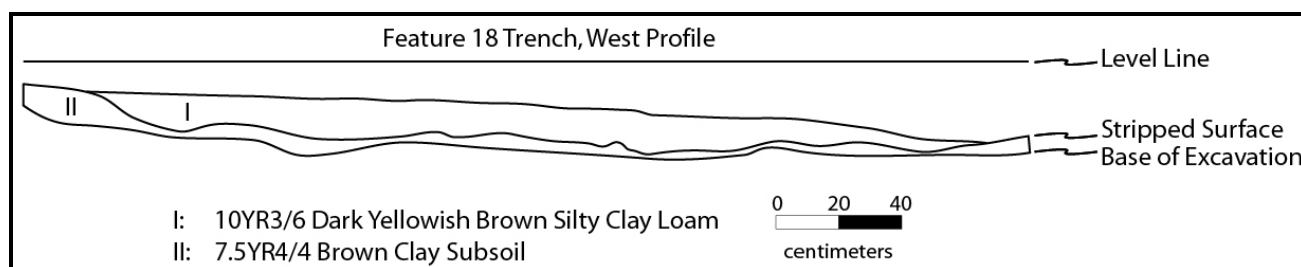


Figure 7.43. West Profile of Excavated Section of Feature 18 at 15FA290.

container glass. These artifacts date throughout the 19th century to the early 20th century. The mixing of early and late artifacts suggests that this was a mixed fill that was deposited primarily during the Late segment of the house chronology. A small concentration of artifacts was located near the west edge of the feature. Surface collection of this concentration yielded 13 artifacts including a wire nail, horseshoe nails, a metal ring, and ironstone. Based on its location, size, and associated artifacts, Feature 18 is interpreted as an entryway that would have permitted access to the rear of the house and associated outbuildings from Newtown Pike. It is likely associated with the posthole Features 16 and 17, which probably represent the remains of a gate across the entrance.

TEMPORAL ASSIGNMENT OF FEATURES AND EXCAVATION CONTEXTS TO SITE OCCUPATION SEGMENTS

In Chapter 6, criteria were developed for assigning discrete contexts to specific segments of the occupational span of the residence (Feature 1) at 15FA290. Based on the assemblages recovered from less disturbed excavation levels in test units and from relatively intact features identified after removal of rubble fill from Feature 1, specific contexts can now be assigned to various temporal segments (Table 7.27). Based on these assignments, this section discusses patterns evident in the sequence of house occupation and presents

Table 7.27. Synopsis of Temporal Assignments for Discrete and Intact Excavation Contexts at 15FA290. Contexts dominated by rubble fill of mixed temporal assignment have been omitted.

Contexts dominated by Table III or mixed temporal assignment have been omitted.																		
Context	Temporally Sensitive Attributes																	
	Flat glass <1.46 mm	Creamware dominant	Pearlware dominant	Wrought or Early cut nails	Redware dominant	Hand-applied finishes	Flat glass 1.47-1.93 mm	Whiteware Dominant	Late cut nails	Stoneware dominant	Applied finishes	Flat glass >1.93 mm	Ironstone dominant	Wire nails	Improved tool finishes	Machine-made bottles	Solarized amethyst glass	Other indicator
West Room Contexts																		
TU13/L8			X		X			X										
TU13/L9		X	X					X										
F20	X	X	X		X		X	X										
F21																		
F21A																		
F30											1							
F31			X		X													
F32					X		X	X							X			
F33		X							X			X						
F35												X						
F37																		
F38												X						
F39																		
F40							X	X	X	X								
East Room Contexts																		
TU12/L5			X					X							X			
F25								X										
F26																		
F27																		
F41								X				X	X					
F42			X					X										X*
F43			X					X										
F44			X						X									
F45									X									
F46	X		X															
F47	X	X	X						X									
F48		X	X				X	X	X									
F49				X														
F50	X							X										
F51		X	X															
Chimney base		X	X		X		X	X	X	X			X					
Inner Yard Features																		
TU14/L2				X														
F8							X											
F9	X	X			X													
F10																		
F19	X	X	X	X	X				X									X†
F24									X									
F28																		
F29									X									
Outer Yard Features																		
F2				X					X									
F3				X														
F4									X									
F5			X		X		X											
F6																		
F7	X												X					
F11																		
F12																		

Table 7.27 (concluded).

Context	Flat glass <1.46 mm	Creamware dominant	Pearlware dominant	Wrought or Early cut nails	Redware dominant	Hand-applied finishes	Flat glass 1.47-1.93 mm	Whiteware Dominant	Late cut nails	Stoneware dominant	Applied finishes	Flat glass >1.93 mm	Ironstone dominant	Wire nails	Improved tool finishes	Machine- made	Solarized amethyst glass	Other indicator
Outer Yard Features (CONTINUED)																		
F13			X						X				X					
F14														X				
F15		X	X	X			X		X			X	X					
F16																		
F17									X									
F18									X	X		X	X	X				

* 1838 Large cent, Middle segment

† Rickett's bottle fragments, Early segment

summary interpretations of the features that are associated with the various occupational segments. We emphasize that the assignment of a feature or other excavation context to a specific occupation segment is based on the *preponderance* of temporally sensitive artifacts recovered from that context. This practice is followed because the abundant rodent disturbances present in nearly every feature and excavation level created temporally mixed deposits, and because a small number of heirloom or curated materials may be included within contexts are associated with later segments of site occupation.

TEMPORALLY UNASSIGNED CONTEXTS

Due to low numbers of temporally sensitive artifacts or to high degrees of disturbance, several features could not be assigned to any specific temporal segment of the Feature 1 house occupation. In the West Room, these include Features 21, 21A, 37, and 39, all of which were heavily disturbed by rodent burrows. In the East Room, temporally unassigned contexts include Features 26, 27, and 45. However, Feature 26 is a southward extension of Feature 43, and Feature 27 is likewise a southward extension of Feature 42, both of which can be assigned to the a narrower span of house occupation (see below). Of the remaining unassigned features, all are postholes in either the Inner Yard (Features 9, 10, and 28) or Outer Yard (Features 6, 11, 12, 16, and 17). It is not surprising that postholes produced few artifacts. When possible, temporal assignments are made below on the basis of association with other postholes or features that could be more definitively dated.

EARLY SEGMENT CONTEXTS

When these ceramic, container glass, nail, and window glass attributes are considered together, five individual features (Features 20, 31, 44, 46, and 47), along with the initial construction of the Feature 1 residence at 15FA290 and the associated builders' trench (Feature 34), can be assigned to the Early segment of occupation based on the preponderance of associated artifacts. These are depicted in red on Figure 7.44. In addition, two features (Feature 33 within Feature 1 and Feature 15 in the Outer Yard) apparently have two distinct fill zones that represent use of each feature during both the Early and Late segments of the site occupation. In addition to artifacts consistent with the initial occupation of the site, a few artifacts characteristic of later periods were occasionally recovered from all of these Early contexts, including ironstone (1840 to 1900), improved tool bottle finishes (1870s to 1910), carnival glass (1905-1931), and a Bennington marble (1890 to about 1914). Recovery of occasional later-dated artifacts is not surprising, given that the residence was actively and continuously occupied from about 1800 for its initial construction until about 1910. Such active use of a restricted space will almost inevitably result in some mixing of assemblages.

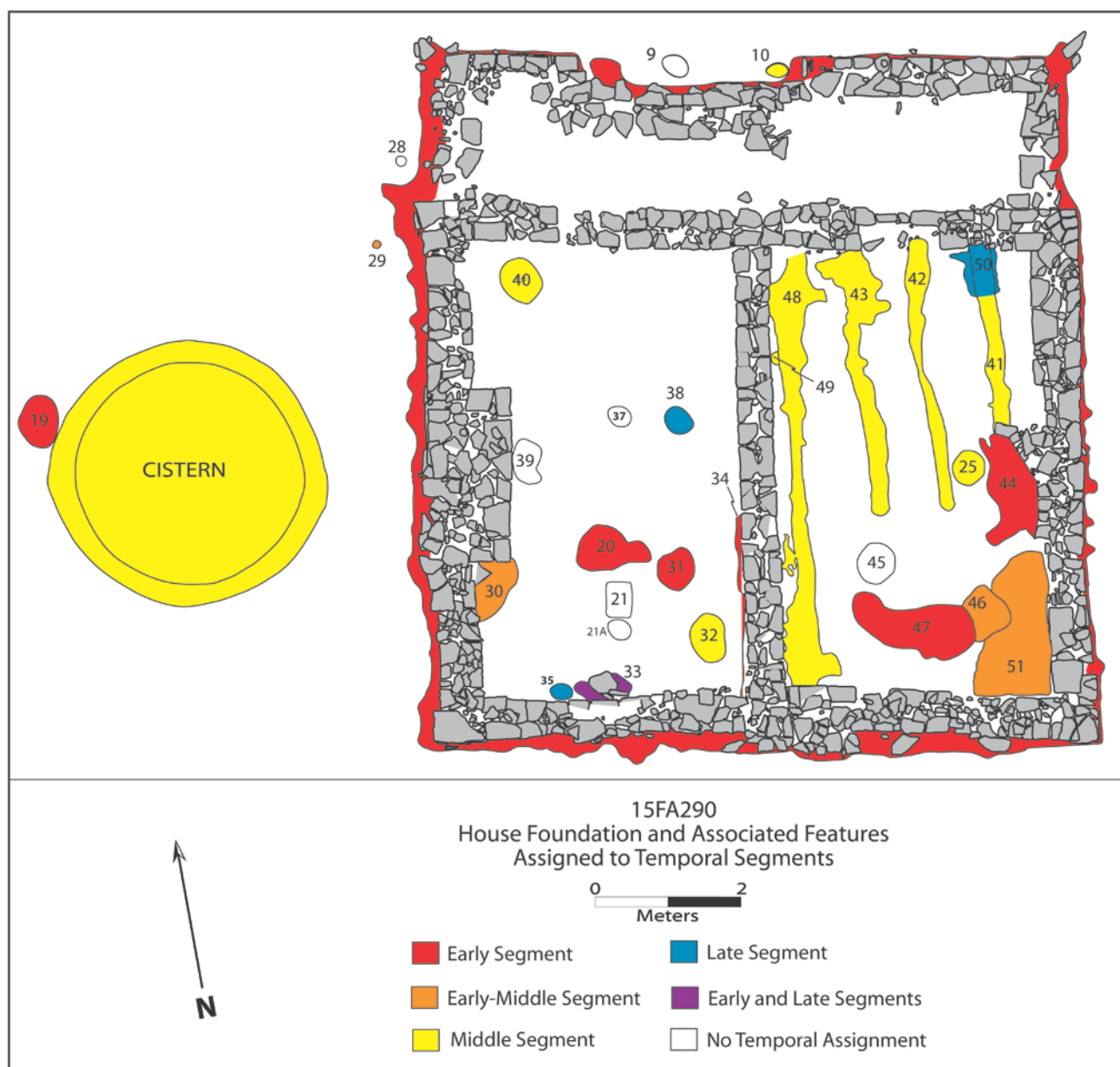


Figure 7.44. Features at 15FA290 Assigned to Temporal Segments of the Feature 1 House Occupation. Outer Yard features are not shown.

Even so, the materials derived from these features provide support for an initial occupation of the site by about 1803, as indicated in from historical documents relating to the site. Unfortunately, there is no specific artifact signature that can pinpoint the exact year of construction of the Feature 1 residence. Likewise, the artifacts recovered from the best early 19th century contexts cannot easily discriminate between an 1803 construction date (if the house was constructed by Samuel Beeler) and an 1818 construction date (if the house was constructed in the middle of the Early segment time span, during Richardson Allen's ownership). However, if the house was not constructed until 1818, it is likely that the proportion of creamware in the assemblage would be lower. As it is, creamware accounts for 27.2 percent (44 of 162) of refined earthenwares (exclusive of porcelain) recovered from discrete features at 15FA290.

Other observations can be made regarding the distribution and use of Early segment features. Early segment features are present in similar proportions in both the East and West rooms of Feature 1. In addition,

those in the West Room are short-term refuse-disposal facilities, such as ash pits, while those in the East Room are accumulations of subfloor debris, similar to the lower strata observed in the West Room in Test Unit 12. It appears that much subfloor refuse was swept against the walls or into the corners of the East Room during the Early Segment of house occupation. Outside Feature 1, Early segment features include Features 15 and 19, both of which appear to be refuse disposal facilities.

MIXED EARLY-MIDDLE CONTEXTS

Five specific feature contexts could be assigned to a mixed Early-Middle segment temporal span. These include Feature 30 in the West Room, Feature 51 in the East Room, Feature 29 exterior to the house in the Inner Yard, and Features 4 and 13 in the Outer Yard. These features produced a mixture of artifacts diagnostic of both the Early and Middle segments, primarily mixtures of pearlware and whiteware. Additionally, a ceramic mold-made human effigy pipe was recovered from Feature 51; this style of pipe was popular during the first half of the 19th century (Bradley 2000). The artifact assemblages from these features indicate that the contexts were used or deposited sometime in the early to middle parts of the 19th century, but the date range could not be narrowed to either the Early segment or Middle segment of site use at 15FA290.

The function and distribution of the mixed Early-Middle segment features is similar to the patterns represented by the Early segment features. Early-Middle segment features appear to represent contexts that represent accumulation of subfloor debris as sheet midden (Features 30 and 51). In addition, midden dating to this time span accumulated on the cellar floor and was sampled in the lowest levels of Test Units 12 and 13. Features 4, 13, and 29 are all postholes. Feature 29 may be associated with the initial construction of the house or a repair episode relating to the West Room chimney. Features 4 and 13 are individual postholes that produced definitively Early to Middle segment artifacts. These are part of sets of postholes that might represent fence lines (Features 2-6 south of the house and Features 11-14 north of the house). All of the postholes in these fence lines are tentatively assigned to the Early-Middle segments of house occupation based on association with Features 4 or 13. Fence lines demarcating the boundaries of the Inner Yard would likely be temporally persistent, and repair or re-use of posthole Features 6 and 7 supports this interpretation.

MIDDLE SEGMENT CONTEXTS

Ten features can be assigned primarily to the Middle Segment of house occupation at 15FA290. These include Feature 32 and 40 in the West Room, Features 25, 26/43, 27/42, 41, 48, and 49 in the East Room, and Features 10 and 24 in the Inner Yard. These feature assemblages are all dominated by whiteware, and many also produced late machine-cut nails and the other temporally sensitive artifact class.

Middle segment features that are apparently discrete refuse-disposal features include Features 25, 32, and 40. Refuse disposal below the house floor, especially ash and charcoal from hearth-cleaning episodes, apparently continued as a common practice into the Middle Segment of house occupation, during the period of ownership by Estill or Alexander Brand (roughly 1830 to 1867). However, additional feature classes and inferred activities are unique to the Middle Segment. This includes the installation of the Feature 24 cistern in the Inner Yard, which probably took place during the ownership of the house by John Estill, between 1830 and 1854, but most likely toward the beginning of that era of site ownership. A posthole in the Inner Yard, Feature 10, was also apparently placed during this time span, and the associated posthole (Feature 9) is inferred to have the same age range, though no artifacts were recovered from it. However, both of these posts may represent repair episodes to an external stairway that was not preserved in the foundational architecture of the house, and this stairway was likely a temporally persistent feature that was present throughout the use-life of the house.

Features 26/43 and 27/42 have artifact assemblages that are consistent with mixed Early and Middle

segment use. However, because they are morphologically similar to Features 41 and 48, which are interpreted as exclusively Middle Segment features, the former two feature sets were also assigned to the Middle Segment alone, rather than the mixed temporal range. Collectively, five features in the East Room appear to be functionally and temporally related. Features 41, 26/43, 27/42, and 48 are all horizontal trenches that are interpreted as imprints of logs or beams that were laid horizontally below the East Room floor. Feature 49 is a posthole for a vertical support that is apparently associated with Feature 48. Together, these features are interpreted as the remains of structural supports that were placed in the East Room, most probably associated with a floor repair event in that part of the house. When considered in conjunction with the partial collapse of the East Room chimney base and the partial burial of Feature 44 as a result of this collapse, it appears that there was a major structural repair event in the East Room during the Middle Segment of the house life. This repair episode likely required installation of structural shoring below the house floor. The reason for a major repair is not certain, but it may have involved a fire that affected the structural integrity of this part of the house.

LATE SEGMENT CONTEXTS

Only three specific feature contexts could be assigned exclusively to the Late segment, which dates from 1867 to 1910. This segment includes the time span that the site was owned by Stephenson, Cromwell, Huguely, and Young, during which time the site was most likely a rental property rather than being occupied by the owners. These contexts include Features 35 and 38 in the West Room and Feature 50 in the East Room. In addition, Feature 33 in the West Room and Feature 15 in the Outer Yard both had fill zones that were assigned to the Late Segment. All of these features are discrete pit features that were likely used for subfloor refuse disposal, or in the case of Feature 15, outside refuse disposal. It is unclear whether the floor repair features assigned to the Middle Segment remained in place as structural elements or had been installed and then removed by the Late Segment. The fact that the Late Segment Feature 50 intrudes into the north part of the Middle Segment Feature 41 suggests that the floor repair structural supports were installed and then removed when they were no longer needed. However, they may also have been repaired, resulting in Feature 50 intruding into the Middle segment trench of Feature 41. In addition to these pit features, Features 14, 16, 17, and 18 are also assigned to the Late segment. All are positioned in the Outer Yard area. Features 14, 16, and 17 are postholes, and Feature 18 is interpreted as fill in an old driveway. The presence of these posthole features and the driveway suggest that the property still functioned as a farmstead with exterior features, even though it was likely a rental property at this time.

These assignments of features to temporal segments of house occupation at 15FA290 form the basis of our subsequent interpretations of house use, and changes in site function and economic standing through time. These topics are summarized and discussed in the following chapters.

CHAPTER 8

SPATIAL, FUNCTIONAL, AND TEMPORAL CONSIDERATIONS

The preceding chapters have provided descriptions and discussions of the various historic cultural contexts that were identified during Phase II/III investigation of 15FA290 along Newtown Pike. Included in these discussions are descriptions of feature locations, evaluation of the temporal range for features based on associated artifacts, and interpretations of the function of individual features. This chapter pulls the spatial, temporal, and functional data together to extract patterns of systematic changes within these sets of data. These patterns are then linked to the documentary data available for the site and its owners and occupants to provide a more thorough interpretation of the use history of the site than either the documentary data or the archaeological evidence alone could provide. This interpretation sets the stage for explicit investigation of the research topics identified for 15FA290, which are addressed in Chapter 9.

However, interpretations of variation in space, time, and function, as well as the investigation of the research topics, are constrained by the integrity of the excavation contexts, the quantity of artifacts available for analysis, and the kinds of documentary information available. Perhaps most importantly for the present discussion, interpretations of spatial, temporal, and functional change within 15FA290 are limited by the portion of the site that could be investigated. The Phase II/III field investigations were strictly confined to the portion of 15FA290 that lay within the new right-of-way and adjacent construction easement along the west side of Newtown Pike. This constituted a north-south corridor that was at most about 42 meters wide. More importantly, this corridor included only the easternmost portion of the site. Fortunately, the residential structure (Feature 1) and cistern (Feature 24), plus numerous features internal to the residential structure were located within the project area. Given these reminders of the limitations of the available data, we begin with an interpretation of the Feature 1 residence at 15FA290.

DIACHRONIC AND FUNCTIONAL INTERPRETATIONS OF THE HOUSE AT 15FA290

Based on the footprint of the foundation (Feature 1), we interpret the house at 15FA290 as representing a hall-parlor construction. Such structures consist of two rooms aligned side by side, with a single entryway. Typically these rooms would have been of unequal size. However, at 15FA290, the rooms appear to be roughly the same size. The room that functioned as the hall was typically the larger of the two rooms, and it served multiple purposes. The parlor was usually smaller than the hall, but it usually had a higher level of finish. This room would have been used for entertainment or sleeping, and often a family's finer possessions would have been on display here. The hall and parlor rooms would have communicated via a doorway set into the interior partition wall. The precise placement of such a doorway in the house at 15FA290 is unknown, and it probably would not have left a signature on the foundation. Fireplaces would have been located at one or both gable ends (Lanier and Herman 1997), and this is the case at 15FA290, with chimney bases at opposite ends of the long axis of the house in both the East and West rooms. The hall-parlor plan was a common house plan during the early 19th century. However, Lanier and Herman (1997:16) note that after the 1830s, this building style lost its prestige and became associated with lower levels of affluence or social stature.

The architectural characteristics of the East and West rooms, as well as the artifacts recovered from features and intact deposits within them, provide clues about which room was the hall and which was the parlor. Because the hall was used for multiple purposes, the fireplaces in these rooms were usually larger than in parlors. The larger chimney base was located in the West Room, suggesting that this was the hall. Parlors were used for entertaining and typically had higher levels of finish. Thus we would expect to find greater numbers of artifacts associated with entertaining, such as table glass and teawares, or decorative architectural embellishments in the parlor room. A review of the ceramics with identified vessel forms from both the East and West rooms does not suggest functional differentiation between the two rooms. Rather, the assemblages were virtually the same (Table 8.1). When the other artifacts from these contexts are considered

Table 8.1. Vessel Types from Features and Intact Deposits within East and West Rooms at 15FA290.

West Room		East Room	
Vessel type	n	Vessel Type	n
Flatware	3	Flatware	4
Hollowware	1	Hollowware	2
Teaware	3	Teaware	2
Storage	11	Storage	10
Chamber pot	0	Chamber pot	1
Total	18	Total	19

Table 8.2. East and West Room Artifact Types.

West Room		East Room	
Artifact	n	Artifact	n
Figurine fragment	1	Figurine fragment	2
Piggy bank	2	Piggy bank	4
Pocket knife	1	Doll Fragment	1
Ink well	1	Redware pipe bowl	3
Table glass	5	Table glass	14
		Wine glass	1
Caster	1	Caster	1
Lamp burner	1	Lamp burner	1
Drawer pull	2	Escutcheon	1
Lamp shade arm	1	Candlestick base	1
		Mirror glass	1
		Vase	2
Chamber pot	1	Chamber pot	1

(Table 8.2), the East Room assemblage is more consistent with expectations of its use as a parlor. This assemblage includes a majority of the table glass as well as fragments of a wine glass, redware pipe bowls, mirror glass, and a candlestick fragment—all artifacts that would reflect an entertaining function for the room. While not conclusive, we suggest that the East Room's smaller fireplace and its associated artifact assemblage make it the more likely candidate for the parlor. The West Room, then, is most likely the hall.

While the house may have been a single story, it is more likely that it had at least a loft that would have been used for sleeping and storage (Brother 2009), and it is common to have a full second story on hall-parlor houses that contained bedrooms. However, the height of any second story at 15FA290 could not be determined. This loft or upper story would have been accessed via a winder stair probably located in the corner of the partition wall or against the chimney stack (Brother 2009). No remnant of this stair survived the razing of the structure, so its location is unknown.

Additionally, the height of the chimney bases above the sterile cellar floor deposits in the foundation interior leads us to infer that the house had a wooden floor with a crawlspace or cellar below. These chimney bases rise 70 to 100 cm above the level of the culturally sterile soil, but the actual hearthstone is missing from both chimney bases. Assuming that the level of the hearth would have been roughly the same as the first story floor, then the house almost certainly had wooden floors with a crawlspace or cellar at least one meter in height beneath. Access to this crawlspace was likely through trap doors set into the flooring of both the East and West rooms; there was no indication in the foundation remains of an exterior entrance into a below-floor cellar or crawlspace. The presence of numerous pit features in the interior of the house foundation supports this notion of a cellar, which was apparently used for disposal of hearth debris, among other activities.

Based on the less substantial foundation on the north side of the house, the North Room likely served as a rear porch or shed addition. The latter is more probable, as a shed addition is more likely to have a continuous foundation like that recorded at 15FA290, and porches are more apt to have pier foundation

supports. Porches also are more likely to evolve to reflect new architectural trends (Brother 2009). Moreover, the location of this room along the north side of the house indicates that the front façade of the house would have faced to the south, where it would have the advantage of the southern exposure, and it would also be the first view of the house seen by traffic departing from Lexington.

ASSESSMENT OF FEATURE 1 CONSTRUCTION METHODS

Other inferences about the house's appearance and construction can be drawn from other artifact classes, particularly nails. Researchers have suggested that analyses of nail sizes, or pennyweights, can be used to identify the method of construction for historic structures (Young 1991, 1994; see Ball 1999 for a critique). Underpinning this idea is the notion that different pennyweight nails will be used for different types of construction activities. Structural nails are typically broken into four functional categories—roofing (2d-5d), siding (6d-8d), flooring (9d-10d), and framing (>10d) (Young 1991). This hypothesis assumes that nails of a particular size will always be used for a specific function. Ball (1999) argues that this correlation of nail length and function is the ideal and does not match the reality of human behavior. Stottman and Watts-Roy (2000:88) also note that nails in a structure were also used for activities other than these four types of structural construction, such as lathing and light framing of doors and windows. However, these authors also indicate that despite this possibility, specific sized nails are the best for certain building activities and were most likely used for those purposes. Thus, the correlation of specific size ranges of nails to specific construction activities is appropriate, unless some divergence from this expectation can be demonstrated (see McBride and Sharp 1991 for such an example).

The majority of the recovered nails (n=932, 66.1 percent) were fragmentary, precluding an assessment of pennyweight, but the remaining 477 nails were complete, and pennyweights could be assigned. Of the complete nails, most (n=377, 79 percent) were recovered in contexts associated with Feature 1. The others were recovered from scattered contexts in the surrounding yard, none of which could be associated with a specific structure. The nails associated with Feature 1 were used to assess the construction techniques employed in the building of the Feature 1 structure, as well as to track the nature of construction activities and repairs through time.

The 377 complete nails associated with the Feature 1 structure at 15FA290 were typed by method of manufacture and pennyweight (Table 8.3). When classified by Young's use categories, the majority (78.0 percent) are classified as roofing or siding nails, and few of the nails are consistent with heavy framing (only 3.5 percent). Using these distributions, we can make some inferences regarding the method of construction at the residence. There are three primary styles of house construction that would have been in use at the time the house at 15FA290 was built—log, timber frame, and balloon. Because these styles of construction use different techniques, the prevalence of one size category of nail or another can point to the overall style of building construction. Log structures used corner notching, and timber frame structures typically employed mortise and tenon joints or wooden pegs, so low densities of longer framing nails would be expected for either of these construction styles. Conversely balloon structures required use of these larger nails in joints, so higher proportions of framing nails would be expected in balloon-style structures. Comparing the nail distribution data from 15FA290 with these expectations suggests that the structure was probably a log or timber frame structure, but the nail pennyweight data alone do not permit us to distinguish between these two construction styles. Additionally, we take the low frequency of framing nails at the site as an indication that following the initial construction, there were no major structural additions made to the house. This conclusion is consistent with the apparently continuous nature of the foundation, as well as the absence of footers outside the main foundation that would indicate additions to the original structure. Additional information about construction sequences may be obtained by examining the distribution of pennyweight by nail type, which provides some broad temporal control.

A total of 114 complete hand-wrought (n=77) and complete early machine-cut nails (n=37) were identified (Table 8.4). Together, these nail types were manufactured prior to about 1840, and thus represent

Table 8.3. Complete Nails Associated with Feature 1 by Pennyweight and Construction Usage. The total includes complete nails of unidentified manufacture (n=19).

Pennyweight	N	Percent	Construction Usage	Percent by Usage
2d	26	6.9	Roofing	37.2
3d	53	14.1		
4d	47	12.5		
5d	14	3.7		
6d	38	10.1	Siding	40.9
7d	32	8.5		
8d	84	22.3		
9d	33	8.8	Flooring	18.6
10d	37	9.8		
11d	1	0.3	Framing	3.5
12d	2	0.5		
16d	2	0.5		
20d	7	1.9		
60d	1	0.3		
Grand Total	377	100.0		

Table 8.4. Nail Types Grouped by Construction Usage.

	Hand-Wrought and Early Machine-Cut		Late Machine-Cut		Wire	
Construction Usage	n	Percent	n	Percent	n	Percent
Roofing (2d-5d)	36	31.6	63	43.8	29	29.0
Siding (6d-8d)	49	43.0	58	40.3	43	43.0
Flooring (9d-10d)	28	24.6	18	12.5	21	21.0
Framing (>10d)	1	0.9	5	3.5	7	7.0
Total	114	100.0	144	100.0	100	100.0

construction undertaken mainly during the Early segment of the house occupation. The pennyweight distribution of these nails reflects focus on siding and roofing construction, and to a lesser extent flooring. There is some evidence that hand-wrought and early machine cut nails were used for different construction activities. The majority of hand wrought nails (n=41, 53.3 percent) were classified as siding nails (Figure 8.1), while only 8 early machine-cut nails (21.6 percent) are siding-size nails. In contrast the preponderance of early machine-cut nails (70.3 percent, n=26) were classified as roofing nails, and only 3 (8.1 percent) of these are flooring nails (Figure 8.2). Considering the hand wrought and early machine-cut nails together, we suggest that both nail types were used in the initial construction of the house, with siding attached mainly using hand-wrought nails. The dominance of early machine-cut nails in roofing construction may be related to expense or perhaps to replacement of the roof later, after the main construction was completed.

By 1840 early machine-cut nails were replaced by late style machine-cut nails; these continue to be made into the 1880s, when machine-cut nails were largely replaced by wire nails. Thus late machine-cut nails generally represent the Middle segment of the Feature 1 occupational history, but their use also extends into the Late segment of the house life. A total of 144 late machine-cut nails was recovered from Feature 1 (Table 8.4). The frequencies of these artifacts largely reflect the same pattern as the hand-wrought and early machine-cut nails, as the majority were attributable to siding and roofing with a minor percentage used for flooring, and a very low proportion of framing-size nails. We suggest that this patterning is reflective of maintenance of the house that included repair or replacement of siding and roofing, with limited evidence of replacement or maintenance of flooring. However, the linear features documented in the East Room (Features 41, 26/43, 27/42, and 48; see Chapter 7) suggest that at least one major floor repair episode took place during the Middle segment of the site occupation. Perhaps flooring was repaired using salvaged nails, or installation

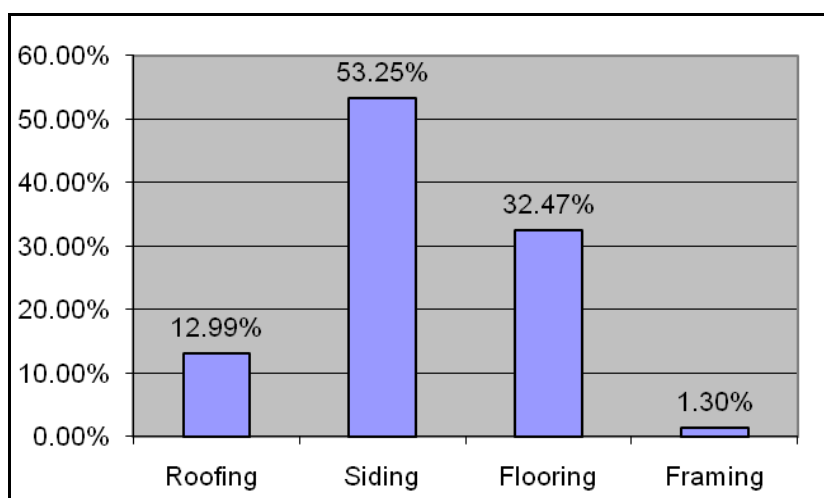


Figure 8.1. Hand Wrought Nail Percentages by Functional Category from Feature 1 at 15FA290.

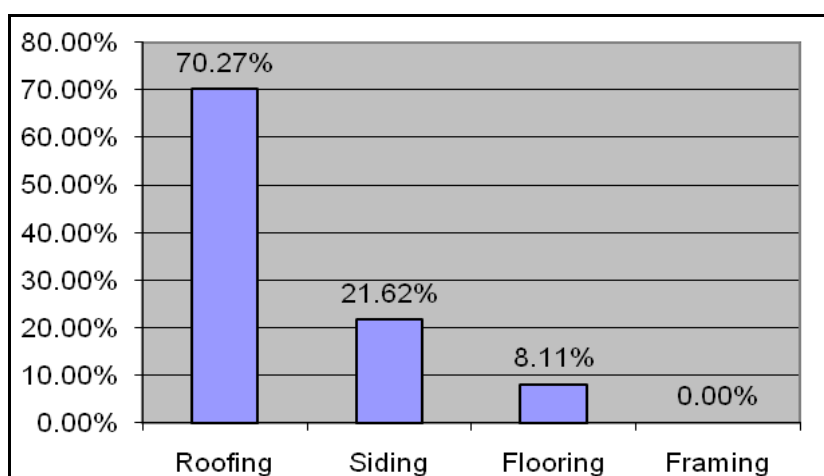


Figure 8.2. Early Machine-Cut Nail Percentages by Functional Category from Feature 1 at 15FA290.

of the floor shoring required few nails. Though the numbers are small and not statistically significant, more flooring-size nails were recovered from the East Room (n=5) than from the West Room (n=0), which would support this argument.

Wire nail usage corresponds to the Late segment of Feature 1 occupation, after the 1880s, though machine-cut nails are still in use during this time. Proportions of wire nails (Table 8.4) also reflect greater use in siding and roofing construction activities, with flooring types of construction comprising less extensive activities. We take these frequencies to represent continued repair and maintenance of the house, and the low incidence of framing nails suggests no major additions to the structure.

This same set of inferences can be made for all types of nails, representing all segments of the Feature 1 occupational history. The later-dated nail types consistently indicate repair and maintenance of an existing structure. Only the relatively high proportion of wire flooring nails suggests any major structural repairs, and these are still relatively minor compared to the continued use of siding- and roofing-size nails. The nail data are consistent with the interpretation of the foundation remains, which shows that the original footprint of the house remained constant throughout its occupational history, and no additions were made to this structure.

The high density of siding-size nails suggests that the structure was likely covered in clapboard or weather boarding, which would have been common for either log or timber frame structures of this period (Stottman and Watts-Roy 2000:88). The high percentage of roofing nails is not unexpected. At the time of initial construction of Feature 1, wood shingle would have been the predominant roof type. This type of roof

requires lots of nails, as shingles are generally small and each shingle must be nailed. The high percentage of roofing nails recovered is consistent with a wood shingle roof. The roof was probably repaired several times, based on the high proportions of roofing-size nails for all temporally sensitive nail types. Finally the presence of moderate proportions of flooring nails suggests that this structure had a wooden floor. No remains of actual flooring were identified, but the height of the chimney bases above the base of the interior cellar floor (about 10 courses of stone, between 70 and 100 cm in height) indicates wooden floors in both East and West rooms supported by joists, with a cellar/crawlspace under both East and West rooms.

Finally, the effects of not saving, counting, or weighing brick are seen when providing interpretations of the Feature 1 construction. Brick was common in the rubble fill of Feature 1, and it is very likely that the chimneys of the structure were made of brick. It is also possible that the overall wall construction was brick, which would be consistent with the low incidence of framing-size nails in the Feature 1 assemblage. However, this latter possibility is not very likely, given that brick is not abundant in any of the overall views of Feature 1 (see Figures 7.9 and 7.23), and it is also not abundant in any of the profile images of Test Units 12 or 13, placed in the Feature 1 interior (see Figures 7.12, 7.13, and 7.14). It is most common in Test Unit 13, and this unit was placed in close proximity to the East Room chimney, where brick from chimney construction would be concentrated. Though not quantifiable, these observations in general support our interpretation of log or timber frame construction for the overall Feature 1 superstructure.

Because of the location of the right-of-way boundary, remains of outbuildings and a detached kitchen could not be investigated during this project. These are structural features that would be expected at any rural farm/residence that was constructed initially in the early 19th century. They would most likely be located west of the residence, just outside the project area, and visual inspection of the agricultural field just west of the right-of-way showed evidence of a large brick scatter that would be expected as the remains of a detached kitchen. Based on this reconstruction of the probable layout of 15FA290, at least half of the site area lies outside the project area. Our investigations revealed the remains of the “commodius dwelling house” that Richardson Allen advertised for sale in 1810, but we did not recover evidence of the various outbuildings, such as the “still-house, barn, and stable, and other requisite outbuildings,” that were also listed in the advertisement (*Kentucky Gazette*: Volume XXIV, Number 1273, Tuesday June 5, 1810).

While our current interpretations of the internal layout and organization of the site as a whole are limited by data obtained from within the construction corridor, the evidence available from the investigated project area permits some inferences and extrapolations to be made. Our current interpretation of the house orientation is that the front of the house faced south, toward Lexington, and the primary entrance to the house was on the south side of the house, probably into the East Room, which more likely served as the parlor in the hall-parlor house plan documented for Feature 1. The cistern is located to the west side of the house, and it is positioned precisely in the middle of the north-south dimension of the West Room and only about four feet distant from the west wall of the Feature 1 residence. This is a convenient location for roof drainage water to fill the cistern. A secondary entrance on the north side of the North Room likely provided access to the north side yard and the back of the house, where a variety of outbuildings may have been located and a variety of activities likely took place. There was archaeological evidence of some of these activities (see below), but no additional structural remains were located that might represent outbuildings. South of the residence is another yard, but again no architectural remains were found there, only remains of fence lines.

Remains of outbuildings and a detached kitchen are obviously missing from the 15FA290 site layout as it is currently documented. They would most likely be located to one side or in back of the residence. For 15FA290 the most likely detached kitchen location is farther west, outside the project area. A dense brick scatter was observed on the surface just outside the project area, only 10 meters or so from the house foundation. A detached kitchen at this location would have had easy access to the cistern, a necessity for food preparation. This likely kitchen location area could not be investigated, but it is still preserved on the University of Kentucky Maine Chance Farm property. Additional outbuildings were probably located on the upland landform farther west residence and proposed kitchen. Based on this reconstruction of the probable

layout of 15FA290, at least half of the site area lies outside the project area. If additional construction should impact these extant portions of 15FA290, additional archaeological investigations may be required.

VARIATION IN ORGANIZATION AND FUNCTION THROUGH TIME AT 15FA290

Given the above considerations of constraints and sampling, attention can be turned to analysis of spatial, temporal, and functional variation within 15FA290 and the intersection of these analytical dimensions. Table 8.5 shows a synopsis and characterization of the cultural features documented at 15FA290 relative to these dimensions of analysis. Temporal assignment of features to Early, Middle and Late segments of the house chronology was made using the assemblage attributes discussed in Chapter 7. Locational data are extracted from the site plan (Figure 7.6) and the detailed plan of the interior of Feature 1 (Figure 7.26), with the assumption that the orientation and general layout of 15FA290 discussed above is correct. Functional assessment of features is extracted from the descriptions and artifact contents discussed in Chapter 7. The focus of this discussion is on features, as these provide the best dated contexts and the least variation in date ranges compared to most of the other excavation contexts, which sampled mainly temporally mixed rubble fill. However, artifact assemblages from these individual features are small (see tables in Chapter 7), which also constrains the temporal and functional interpretations. The only other relatively intact test unit/level contexts that provide narrow date ranges are Levels 7, 8 and 9 in Test Unit 12 and Level 5 in Test Unit 13, which sampled sediment that accumulated as accretional subfloor deposits in the West and East rooms, respectively. These have been added to contexts shown in Table 8.5 and are discussed as appropriate in the sections below.

Selected contexts shown in Table 8.5 require some discussion and explanation. Dashed lines to the left or right of feature numbers indicate a probable extended date range based on the preponderance of the temporally sensitive artifacts recovered from these features. Features 24, 41, 44, and 47 are interpreted as having a fairly precise beginning date, with use continuing after that time; this is indicated by a dashed line continuing to the right of the feature number. Features with a long date range are indicated by the dashed line that extends through all temporal periods. Still others either produced no datable artifacts or contained small numbers of artifacts that could only be assigned to the generic 19th century date range. These features are listed in the far right column of Table 8.5 as undated (or undatable) features. Given these interpretations and feature function data presented in Table 8.5, some patterns emerge regarding variation in space, time, and function.

Changes Relating to the Feature 1 Residence

Several changes in the Feature 1 residence can be inferred from examination of the patterns of feature locations (see Figure 7.26) and interpreted feature functions (Table 8.5). First, it is apparent from Table 8.5 and the visual appearance of the features shown in Figure 7.26 that there is a set of features in the East Room of Feature 1 that is functionally different from the types of features present in the West Room. Though both the East and West rooms have features or excavation contexts that are interpreted as representing hearth cleaning, refuse disposal, vertical support posts, and subfloor midden accumulation, support or shoring trenches are present only in the East Room. Features 41, 26/43, 27/42, and 48 are all long, linear, shallow trenches that are oriented parallel to the long axis of the East Room. These features are all positioned with the center lines of their major axes almost exactly 0.9 m (3 feet) apart. This uniformity in size, shape, and orientation suggests that this set of feature represents a floor repair episode for the East Room. Placement of subfloor shoring or replacement of floor joists would require use of north-south oriented timber or trusses that would provide maximum support to floor boards that spanned the width of the East Room and were oriented east-west. It is reasonable to interpret these features as the archaeological remains of shoring placed under the East Room floor to provide additional support.

Why shoring was needed in the East Room only is a matter of some speculation, but the need for repairs may be linked to the poor condition of the East Room chimney base. The East Room chimney base

Table 8.5. Synopsis of Functional, Temporal, and Spatial Attributes of Features at 15FA290. Feature numbers in parentheses are not directly dated but are inferred by association to date to a particular temporal segment. Features determined to be noncultural in origin (bioturbation Features 22, 23, and 36) have been omitted.

Location and Function	Early Segment	Early-Middle Segment	Middle Segment	Middle-Late Segment	Late Segment	Undated Features
Residence	-----F1-----					
Builder's Trench	F34					
West Room Interior						
Hearth cleaning		F30	F32			F21
Refuse pit	F20, F31 F33		F40		F33	F21A
Internal support post					F35, F38	F37
Unknown Function						F39
Midden accumulation		-----TU12/L8-9-----		TU12/L7-----?		
East Room Interior						
Hearth cleaning	F46		F25			F45
Hearth cleaning/Refuse deposit	F44----- F47-----					
Refuse pit					F50	
Internal support post			F49			
Shoring/support trench			F26/43 F27/42 F48 F41-----			
Midden accumulation		F51 -----TU13/L5-----				
Inner House Lot						
Exterior Structural Posts?			F8			F9,F10
Outside Posts		F29				F28
Cistern			F24-----			
Refuse pit	F19					
South Outer House Lot						
Posthole/Fence line	F2, F3, F5, (F6)	F4				
North Outer House Lot						
Posthole				F7		
Posthole/Fence line		F13 (F11, F12)			F14	
Refuse pit	F15				F15 rubble cap	
Driveway					F18	
Gate posts ?					(F16, F17)	

was not as well constructed as the West Room base, and the location of the Feature 25 and Feature 44 ash deposits partially below the chimney base suggests that the East Room hearth had partially collapsed at one time and had been repaired and restacked. Repair of both the East Room chimney base and installation of subfloor shoring/support under the East Room suggests that there had been major event that damaged the structural integrity of the East Room. The presence of heavy ash deposits and heavily oxidized soil at the base of Feature 44 suggest that there may have been a fire in the East Room, but this interpretation is not supported by any other lines of evidence. It is also possible that a storm or other natural event could have caused damage to the chimney itself, which in turn translated into damage to the East Room floor. Regardless of the cause, there appears to have been at least one major episode of structural repair that took place in the East Room alone, resulting in a suite of unique but functionally related features set into the East Room subfloor.

The timing of this repair episode can be estimated, but not precisely determined. Dismantling of the East Room chimney base produced an abundance of artifacts, but they spanned the entire temporal range of the house chronology, so they are not particularly useful for assessing the time of the repair. However, Feature 44 itself produced a small number of temporally sensitive artifacts that indicate the feature was created in the Early to Middle segment of the house chronology. Features 26/42 and 27/43 are assigned to the Middle segment of house chronology, and Feature 41 was likely in place during the Middle segment as well (though Feature 50 has probably intruded into it and created some mixing of later artifacts). Feature 41 produced artifacts assignable to all segments of the house chronology. From the suite of materials recovered from these functionally related features, we infer that the repair/shoring of the East Room floor took place in the Middle segment of the house chronology, and possibly while John Estill or his wife was the owner (1830 to 1854). The fact that the house sold at auction in 1854 for a very modest amount of money suggests that it had sustained damage by that time.

A second pattern that is evident in the Table 8.5 data is the strong emphasis on small pit features within the East and West Rooms. Of the 13 features in the West Room, nine small pits that are interpreted as either hearth cleaning or refuse disposal features; seven of 14 features in the East Room have similar inferred functions and morphology. This shows a strong emphasis on these activities and indicates a regular pattern of disposal of refuse, especially hearth cleaning debris, below the floor. However, this observation must be tempered by the fact that we have little information about much of the rest of the site, especially the back yard and detached kitchen areas where refuse disposal would presumably be very common. We also lack information about season of use. The hearth cleaning and refuse disposal pits under the East and West room floors may have been used during specific seasons, and external features may have been used for the same purpose during other parts of the year.

However, some comparisons can be made between the feature contents of refuse pits interior to Feature 1 (Features 20, 31, 40, 44, and 47) and refuse pits located in the yard areas, exterior to Feature 1 (Features 15 and 19). The descriptions of these features in Chapter 7 indicate that all of the interior refuse pit features also contain ash and charcoal, usually in the form of distinct lenses. In contrast, of the two exterior refuse pit features, only Feature 19 was described as containing ash and charcoal, and these were in the form of inclusions within the soil matrix rather than distinct lenses within the fill. This difference may be due simply to greater weathering of the fill sediment of exterior features over time. Alternatively, the higher ash and charcoal content of the interior features may derive from the use as receptacles for hearth cleaning activities. There are few other differences discernable in the artifact content of these features. All produced moderate to abundant amounts of artifacts; all produced a relatively wide range of artifact types; and all contained large mammal bone.

A third trend in the use of refuse pits and hearth cleaning features is that these types of features tend to date to the Early or Middle segments of the house chronology. Five of seven dated refuse/hearth cleaning pits in the West Room are assigned to the Early and Middle segments, with only two assigned to the Middle-Late or Late segment (two could not be dated). In the East Room the trend is not so strong, but three of five dated refuse/hearth cleaning pits date to the Early and Early-Middle segments, and only two are associated with the Late segment. These trends are most likely indicative of changing patterns of refuse disposal through the history of the site, but they are also reflective of broader region-wide changes in refuse disposal patterns through the 19th century. After the Civil War, refuse began to be discarded more systematically in dump areas located remote from the residence. This in part reflects the increased amount of material goods available to almost all households in the late Industrial period, but there are also changes in perceptions of health and sanitary conditions that took place over this same period of time. The shift away from subfloor refuse disposal in the Late segment of site occupation at 15FA290 likely reflects changes in general refuse disposal patterns that are reflected in the behavior of specific site occupants. This interpretation is supported by the documentation of a refuse disposal area in a drainage area north of the residence (see discussion of Block 3 and Test Unit 16 in Chapter 7), the re-use of Feature 15 as a refuse disposal feature in the Late segment of site occupation, and presence of a Late segment artifact concentration within Feature 18.

Changes in Site Organization Through Time

Another series of observations derived from Table 8.5 relate to changes in the organization and layout of the site in general. Again, these observations are constrained by the limited spatial sample and the location of the right-of-way relative to the residence and outbuildings. Even so, a few observations can be offered.

First, there is almost no evidence for major additions to the residence for its entire history of occupation. The footprint and orientation of the Feature 1 residence, including the use of the North Room as a side passage entrance and the East and West Rooms as living/sleeping quarters, was established when the house was originally constructed (between 1803 and 1818, by either Beeler or Allen). This layout was never modified by any porch additions or wing additions through the next century of occupation. The only major internal modification was a proposed repair/rebuilding of the East Room floor, discussed above.

Though we cannot address the layout of the entire site, and changes to outbuildings are beyond the scope even of speculation, there is limited evidence of some changes in the organization of the part of 15FA290 that was investigated in this project. The single most important modification is installation of the cistern at some time in the Middle segment of the house chronology, probably near the beginning of this time span but well after the house was initially constructed and occupied. The stratigraphic evidence from Features 19 and 24 in the Inner House Lot are clear—Feature 19 was a trash pit that was used and filled prior to the installation of the cistern (Feature 24), backdirt from which capped Feature 19. The artifacts in Feature 19 date to the Early segment of the house chronology. We can draw circumstantial link between the sale of the property and house to John Estill in 1830 and a major improvement to the house. Access to springs or surface water may have been related to the acquisition of an additional 69 acres of land by Richardson Allen in 1818 that was immediately north of the 15FA290 site location (see discussion in Chapter 3). The cistern may have been installed to provide a consistent and stable source of water for the site occupants.

Aside from this, there is no archaeological evidence for major modifications to the site layout or orientation for the remainder of its use life. Even though other owners acquired the land and associated buildings, and some of these owners were comparatively wealthy, they apparently did not put emphasis on expanding the size of the house or upgrading the associated facilities at 15FA290. From what is known and inferred regarding the ownership and occupants of the residence at 15FA290, a lack of improvements is not unexpected. Beeler, Allen, and Estill (the first three owners of 15FA290 and the associated tract of land) were all apparently of better-than-average means. They all owned slaves, and they all acquired property and made improvements to that property. They also all lived at 15FA290, though continuous occupancy by Allen is open to question. However, by 1854, Estill's heir (wife) was required to sell the property and residence of 15FA290 through public auction, and this sale was relatively low in price. Just prior to this sale, we suspect that the east room was damaged by a fire that required the rebuilding of the chimney base, as well as extensive repairs to the flooring. It is possible that the expense of these repairs may have contributed to the sale of the property by Mary Estill. The new owner of the property, Alexander Brand, was a wealthy landowner, and 15FA290 was one of several properties owned by him along Newtown Pike. He most likely did not live at 15FA290, and he is shown as living on the east side of Newtown Pike on the Beers (1877) *Atlas* map. The residence at 15FA290 may have been occupied by tenants or renters during Brand's ownership. Subsequent owners William Cromwell, Nannie Huguely, and Milton Young are known to have lived elsewhere, and the residence at 15FA290 was rented to a series of tenants. It would not be unusual for landowners to put little effort into upgrading or improving residences in which they did not reside. These observations and inferences regarding the potentially absentee later owners of the property are consistent with the architectural remains and the artifact assemblages recovered from 15FA290.

Though the Feature 1 residence and the associated features in the Inner House Lot remained essentially unchanged from the time of their initial construction (1803 to 1830s), there is some evidence of change in the structure of the Outer House Lot. A set of postholes documented south of the Feature 1 residence appears to be the remains of a fence line that may have been oriented parallel to the south wall of Feature 1. Artifacts recovered from these postholes (Features 2-6) are assigned to the Early segment of the

house chronology when artifacts were present. These findings suggest that the fence line was in use and was also removed or abandoned during the Early segment of the house chronology. North of Feature 1 was another set of postholes (Features 11-14) that are also interpreted as the remains of a fence line. This fence is also oriented parallel to the north wall of Feature 1, but the artifacts recovered from these features date to the Late segment of the house chronology. Apparently there was some shifting and replacement of fence lines in the Outer House Lot over time, with the later fence indicative of a reorientation of activities toward the north side yard of the residence. However, these changes are considered minor and are not necessarily indicative of a major shift in farm layout or orientation.

It also appears that in the Late segment of the house chronology a driveway (Feature 18) and associated gate posts (Features 16 and 17) were created north of the house (and north of the Late segment fence line). This driveway entrance apparently provided access to the north side yard and presumably to outbuildings located farther west, outside the present project boundary. There is little evidence of prior use of this portion of the Outer Yard except for the presence of an Early segment trash pit (Feature 15) that was covered by Late segment rubble, possibly associated with construction and use of the driveway or the northern fence line. The driveway may have been installed when William Cromwell acquired the tract and residence in 1867 or when Milton Young consolidated the property around 15FA290 with other holdings on the west side of Newtown Pike in the late 19th century.

15FA290 IN REGIONAL CONTEXT

Examination of the development of 15FA290 suggests that the changes to the site over the course of the late 18th to early 20th century largely reflect the broader agricultural trends for the Bluegrass region as a whole. The original parcel that included the area where the site would eventually be located was part of a large land grant made to John Bradford by the state of Virginia. Such grants were typical of the Settlement period of the agricultural history of this region of Kentucky.

The sale of the 300-acre parcel containing 15FA290 to Samuel Beeler in 1795 foreshadows the Farmer's Age (Amos 1994) in the Bluegrass region. This period, which spans from approximately 1830 to 1865, was a sort of "golden age" for agriculture in the Bluegrass. At this time, the Bluegrass was the wealthiest region of one of the country's leading agricultural producers. Hemp was an important cash crop, and the region was famous for its livestock. Beginning with Beeler's occupation of the site and continuing through Richardson Allen's and John Estill's tenure at the site, the farm at 15FA290 was exemplary of the middle-size farms of the Farmer's Age. Such farms ranged in size from 100 to 500 acres. Middle sized farms accounted for approximately 30 percent of all of the farms in the Bluegrass at this time.

Middle sized farms would have provided a dependable income for their owners. Incomes from these farms would have allowed these farmers to expand their land and slave holdings, and improve their properties through the construction of wood or brick houses or the renovation of existing homes. The documentary evidence for Samuel Beeler, Richardson Allen and John Estill all indicate that each was involved in such activities at 15FA290. Beeler was able to construct the house at the property. Documentary sources indicate that during his tenure at the site, Richardson Allen likely constructed additional buildings on the land, was able to increase his slave holdings, and was active in buying and selling property in the area. John Estill was able to pay for the installation of the cistern at the site.

Although Beeler's and Allen's respective tenures at the property was just prior to the Farmer's Age, their occupations seem to fit the Farmer's Age pattern better than the Settlement period, which was characterized by much larger landholdings. We suggest that at the turn of the 19th century, the operation of middle-sized farms (between 100 and 500 acres) may have been part of a diversified approach to amassing and maintaining wealth. The farms did not represent the only economic strategy being pursued. Rather the documentary sources indicate that for Beeler and Allen, their farms were only one aspect of their entrepreneurial efforts. The documents indicate that Beeler was active in buying and selling property and

Allen had additional business ventures including the Keene Livery Stable. Because of their other economic pursuits, the maintenance of a larger farm may not have produced a large amount of income. However, the potential earnings from raising crops (possibly hemp) or keeping livestock, even on a smaller scale, may have made farm ownership an attractive though somewhat risky economic venture. Thus the risks were in part mitigated by pursuing other economic ventures. In contrast, the documentary data do not indicate that John Estill was engaged in any additional economic pursuits beyond his farm, a pattern more consistent with the Farmer's Age. Perhaps by the 1830s the economic viability of these middle-sized farms provided sufficient economic stability that other economic pursuits were unnecessary. However, with the focus of economic energy solely on the farm, there was less economic diversity and little to cushion the farm from variations in market prices, or from one episode of bad luck.

Such an episode may have taken place at the 15FA290 residence while it was owned by John and Mary Estill. There is evidence for major repairs in the East Room involving probable replacement of flooring and repair of the east chimney base. Though there are no documentary records of these repairs or of specific damage to the house, the archaeological evidence provides reasonable argument for these occurrences. The cost of major repairs, coupled with the death of John Estill in 1848 and economic fluctuations that plagued the 1840s and 1850s, likely contributed to a lower economic standing for Mary Estill. These and other factors are considered more fully in Chapter 9.

The sale of 15FA290 at auction in 1854 brought important changes to the site. This sale marked the end of the period where the property owners also resided at the site. Documentary evidence indicates that beginning with Alexander Brand, and continuing until the house was razed in the early 20th century, the property containing 15FA90 was owned by a series of economically well-off individuals that owned large tracts of land, but did not live on the property. Rather the census indicates that the property was used for tenants or renters. Two tenant/renter families are indicated as residing at 15FA290; Zachariah Ross and his family in 1870, and Thomas Hanly and his family in 1880. Though there are no specific records of renters at the site between 1854 and 1870, we do know that the owner (Brand) did not live on the property. The residence is likely to have been occupied by a tenant farmer who also worked the associated land, though again, no specific records exist.

The consolidation of the property containing 15FA290 with other small farms in the surrounding area is consistent with the Postbellum period which began after the Civil War. While the Civil War certainly had social and economic repercussions for the residents of the Bluegrass, we have no direct evidence of its specific effects on the residents or owners of 15FA290. Although the national trend economically for the Postbellum period was a shift toward an industrial economy (McBride and McBride 1990), the Bluegrass region's economy remained largely agrarian. However, the nature of this economy began to shift as the demand for hemp plummeted and the cattle industry moved west. Bluegrass farmers responded to these changes by shifting their efforts to the production of burley tobacco. Throughout this period there was a general trend of smaller farms being consolidated into larger farms. Additionally, the reliance on burley tobacco drove the emergence of a class of sharecroppers and tenant farmers that was composed of free blacks as well as whites. These tenant farmers often resided in older dwelling that were already on the land they were working. Both the Ross and Hanly occupations of 15FA290 fit this pattern.

While 15FA290 generally fits the Postbellum pattern, the site probably made the transition earlier than would be expected. We suggest that the early consolidation of 15FA290 into a larger land holding owned by Brand may have been associated with the damage to the East Room chimney and floor. The evidence for chimney collapse, heavy burning, and features related to floor repair indicate that this room was heavily damaged. We suggest that by 1854 the damage had been done, and the house and property was auctioned for about one third of the value listed in the 1850 census. While this transition occurred in the 1850s, during the Middle segment of 15FA290, the outcome of the sale is consistent with the overall trend of consolidation and conversion to tenant occupancy that characterizes the Postbellum period.

SUMMARY

The archaeological and architectural evidence from 15FA290, though limited by the project boundaries and excavation methods, collectively indicate that the owners and occupants of the site made few major changes or improvements to the site structure or layout over the century that it was occupied. The single major improvement made to the house is installation of a cistern in the Early segment of the site's use, presumably to ensure consistent and reliable access to water. One major repair episode of the residence left archaeological evidence in the form of a set of morphologically, temporally, and functionally related features placed below the East Room floor. These features, along with damage documented to the East Room chimney base and the recovery of heavily fired sediment and ash underneath this chimney base, all point to a major repair event that took place during the Middle segment of the house chronology, and most likely during the period of ownership by John Estill and his heir/wife, Mary. We speculate that fire damaged the East Room floor and chimney base, creating the need for subfloor shoring and supports. Aside from these changes, the site of 15FA290 shows little modification through the century that it was occupied, roughly 1803 to 1910. No major additions were made to the Feature 1 residence over this time, and the structure retained its original orientation and footprint. The only evidence of a major addition to the residence area is the cistern, which was likely installed in the early part of John Estill's ownership of the site, around 1830. Though direct evidence is lacking, archaeological remains of a detached kitchen likely still are present below the plow zone just west of the project area, on land still owned and managed by the University of Kentucky Maine Chance Agricultural Farm. Remains of other outbuildings may also still present farther west, outside the current project boundaries.

These inferred interpretations of site layout and structure are consistent with the artifacts recovered and the documentary data that have been obtained about the owners and occupants of 15FA290. Collectively, these data suggest that the owners and occupants of 15FA290 were not in the highest echelon of wealth. Moreover, the lack of improvements to the site suggest that the economic standing of the owners may have declined through time, until eventually the property and residence was acquired by a landowner who did not reside on the property. After this time, the land was consolidated into a larger farm, and the occupants of the site were tenants or renters instead of owners. Renters likely would not make major improvements to the house or major changes in farm layout.

The history of ownership and occupancy of 15FA290 shows a recurrent pattern of relatively short-term ownership. Samuel Beeler probably built the house and occupied it from about 1803 to 1806, when he sold it to Richardson Allen. Allen is the longest owner of record, but his occupancy of the site is apparently erratic. His residence is inferred from documents to have alternated, perhaps several times, between 15FA290 and within Lexington during the time that he owned the land and residence (1806 to 1830). John Estill and his wife/heir Mary collectively owned the property for another 24 years, from 1830 to 1854. It is during their period of ownership that the cistern was installed beside the residence and repairs were made to the East Room floor and chimney. Mary Estill sold the land and residence at auction in 1854, at which time it was acquired by the first of a series of wealthier landowners, none of whom probably lived at 15FA290. The common theme in the 1803-1854 period of owner-occupancy of 15FA290 is that all owners are relatively short-term. One generation of ownership characterizes these individuals. This pattern of sequential short-term occupancy and ownership likely has implications for the materials that are incorporated into the archaeological record. Not only are there few major changes made to the residence, the materials left behind in the archaeological record are those that reflect simple attrition and the gradual accumulation of refuse. These are subtly different from the remains that would accumulate if a single family owned and occupied the residence for this entire 51-year time span. When owners and occupants changed, the former owners would have salvaged everything usable and moved elsewhere. There would probably not be evidence for major periods of site reorganization, refuse disposal related to this reorganization, or any catastrophic or wholesale disposal of entire sets of material goods, as sometimes occurs when a single family owns a residence and periodically "cleans house".

When the site was acquired by Alexander Brand in 1854, this represented the first of several wealthy

owners of the property, none of whom likely resided at 15FA290. Instead, the site was occupied by tenants, farm hands, renters, or even slaves prior to the Civil War. We know little of the site occupants between 1854 and 1867, when it was sold to William Cromwell, and afterwards, between 1870 and 1900, there is incomplete documentation of the site occupants. However, all of the known occupants after 1867 are renters. Their disposal patterns of materials remains would continue, or exacerbate, the pattern inferred for short-term owner-occupants. Archaeological materials would accumulate by gradual attrition of household goods, and there would be almost no evidence of major modifications to the site or residence. These inferences are consistent with spatial, temporal, and functional patterns discussed above.

This discussion of spatial and functional patterns, and their integration with documentary data, sets the stage for more specific analyses designed to address the site-specific research issues that were established for 15FA290. These are presented and discussed in detail in Chapter 9, and the inferences that are drawn are again limited by the spatial sample available from the site and the integrity of the deposits. For this reason, the analyses focus whenever possible on materials recovered from features and contexts that can be assigned to specific temporal segments of the house chronology.

CHAPTER 9

IDENTITY AND ECONOMIC STATUS

The research topics that this data recovery investigation addresses relate to assessment of the archaeological evidence of the racial/ethnic identity and economic standing of the people that constructed and lived at 15FA290. Assessment of these topics as they relate specifically to 15FA290 necessitates some consideration of broader trends of economic change for the region through the 19th century. This provides a context in which to interpret any trends observed in the 15FA290 data. By addressing these topics, our goal is to arrive at a more complete picture of the people that lived at 15FA290 during the approximately 100 years that the house was occupied. This chapter presents a discussion of these research topics. Our interpretations are based on two primary evidentiary lines—the archaeological record of 15FA290 itself (including both features and artifacts) and documentary research on the site and its former owners and residents. Though these two research topics (racial/ethnic affiliation and economic standing) are treated separately here, we recognize that they are in fact intimately intertwined. Some of the interrelationships are discussed as appropriate in the following sections.

RACIAL/ETHNIC AFFILIATION

The best evidence that we have about the racial/ethnic affiliation of the residents of the house comes from the Late segment of the house chronology. Census data indicate that between 1870 and 1900 at least three different tenant families resided at the house. These include the Zachariah Ross family in 1870, the Thomas Hanly family in 1880, and the William Roberson family in 1900. The census data indicate that these tenants were of relatively meager economic means, with occupations listed as laborers or associated with upkeep and maintenance of Newtown Pike. Some data are also available regarding the ethnicity/national background of these families. The Ross and Roberson families are all listed in the census as black, and Thomas Hanly was listed as being an Irish immigrant.

Unfortunately these three episodes of house occupation are virtually indistinguishable in terms of associated artifacts. All three occupations date from the Late segment of the house chronology, and the resolution of this chronological framework is not fine-grained enough to allow for recognition of specific features or excavation contexts that can be associated with particular occupants. Much of this problem is related to overlapping dates of manufacture for the artifacts that distinguish the Late segment. Most of the artifacts diagnostic of the Late segment were produced throughout this period, precluding finer divisions within the temporal framework. Related to this is the scarcity of intact deposits that can be firmly dated to the Late period. In other words, the intact deposits and features lack materials that would provide a *terminus ante quem* or *terminus post quem* sufficient to date them to a particular decade or episode of site occupancy within the larger Late segment.

For the Early and Middle segments of the house chronology, the documentary evidence for the builders and occupants of the house is less explicit. Documentary evidence indicates that the house was likely constructed in the first years of the 19th century, when the parcel on which the house stood was owned by Samuel Beeler. Newspaper notices indicate that Richardson Allen was likely living at 15FA290 between 1806 and 1810. Archaeologically, the evidence clearly indicates that the house was definitely occupied during the late 1810s and perhaps earlier. Unfortunately there is no documentary evidence regarding who actually constructed the house. Three scenarios present themselves concerning the identity of the builders—1) the owner (Beeler or possibly Allen) built the house himself, assisted by his family; 2) the owner's slaves may have constructed the house; or 3) the owners contracted a third party to build the house for them. Unfortunately, given the architectural style of the house, it is difficult if not impossible to distinguish among these possibilities; none of the three scenarios are mutually exclusive of the other two. In other words, any or all of these scenarios may have resulted in house construction at 15FA290.

Archaeologically, issues of ethnicity and racial affiliation are notoriously difficult to assess because they rarely leave unambiguous material signatures. In some cases, however, inferences about the racial or ethnic identities of occupants or builders are possible based on the types and contexts of certain deposits. Often such deposits are caches associated with culturally specific practices that have been ethnographically linked to specific racial or ethnic groups. Usually these practices relate to rituals involving belief, cosmology, or magic. For example, at several sites across the mid-Atlantic and southeastern United States, caches associated with African slaves have been linked to BaKongo beliefs and practices from west Africa (Fennell 2003). One of the best documented of these deposits is from the Levi Jordan Plantation site in Brazoria, Texas (Brown 1994, Brown and Brown 1998, Fennell 2003:21). At this site four caches of items were recovered beneath the floor of a structure interpreted as a slave cabin. These caches, which were located at the cardinal directions, contained materials that included iron wedges, a carved wooden figure, water-worn pebbles, mirror fragments, seashells, porcelain doll fragments, fragments of cast iron kettles, white chalk, and coins, among other objects (Brown 1994:108-114, Brown and Brown 1998:2-3, Fennell 2003:21-22). These materials, and the contexts in which they were recovered, are consistent with ethnographic accounts of BaKongo cosmology and ritual practice. Their location at the Levi Jordan Plantation is interpreted as being associated with conjuring by African American slaves. Based on these materials, the structure in which they were recovered was interpreted as a conjurer's cabin (Fennell 2003:22-23). In addition to these materials associated with BaKongo practice, a deposit was also identified that had associations with similar beliefs and practices of the Yoruba, a distinct culture but also from west Africa (Brown and Brown 1998:3, Fennell 2003:23). Another site where similar caches were recovered is the Carroll House in Annapolis, Maryland, where the caches also included quartz crystals, white bone disks, and a pearlware bowl fragment with an asterisk decoration (Galke 2000:23-24; Fennell 2003:20; Jones 2000:2). In South Carolina, Ferguson (1992) has documented colonoware bowls marked with X's, which Fennell (2003) associates with Bakongo cosmology. At Locust Grove in Kentucky, coins, marbles, and spoons were recovered that had similar X's engraved into their surfaces (Young 1997:22). In all of these cases these materials were found below floors, and were cached together as distinctive sets of artifacts.

Caches of artifacts have also been used to link artifacts and contexts found in the Americas with European immigrants. For example, "witch-bottles" have been reported at some sites in the eastern United States. These artifacts are primarily associated with British folk magic and are more commonly found in archaeological deposits in England that date from the 17th century (Becker 1978; Merrifield 1955:195, 1987:163-175). Originally made using "bellarmine" (earthenware) bottles, witch-bottles were means of countering witchcraft. Usually the bottle was filled with iron pins or nails, and usually some form of bodily fluid (often urine) or hair. Once the contents were placed in the bottle, the bottle was sealed and buried, usually near a threshold. The magical purpose of this item was to protect the house and its occupants from witches, and it was thought that the proximity of the witch-bottle to a threshold (including chimneys) would seal the entryway preventing witches' access to the house. Witch-bottles have been recovered archaeologically beneath hearths and doorways; however, some have also been reported from contexts outside the dwelling (Becker 1978, 1980). While the majority of these bottles have been recovered in England, some have also been identified in the United States. In 1976 Becker identified a witch-bottle outside a domestic structure dating to the mid-16th century at Governor Printz Park in Pennsylvania. While the bottle was made of glass rather than earthenware, the contents and depositional context were consistent with witch-bottles recovered from Europe. More recently, a similar bottle was recovered from Armstrong Farmstead (15FA185), in Fayette County, Kentucky. This find consisted of a glass medicine bottle containing four straight pins that was corked and buried just outside a domestic dwelling that was constructed in the early to mid-19th century (Barber 2006:8-56-8-72, 15-36). Although not specifically identified as a witch-bottle, the description and depositional context are consistent with other witch-bottle descriptions. John Armstrong, the namesake of the site, was an Irish immigrant. The presence of this witch-bottle at the site may represent a holdover of beliefs practiced originally in Ireland and transported into a new context in Kentucky.

Several deposits and artifacts encountered during the Phase II/III investigations at 15FA290 were regarded as possibly representing caches of items associated with sympathetic magic. If indeed they do represent caches, it is possible that their contents or contexts may provide insights into the ethnic or racial

affiliation of those who left them. These specific deposits include red and yellow pigment recovered near the south wall of Feature 1, a bottle recovered beneath the chimney base in the West Room, two iron table knives recovered from the builders' trench along the interior wall of the West Room, a gun flint made from Boyle chert recovered from the base of the chimney in the West Room, and a locket recovered from a builders' trench on the exterior of the northeast corner of the house. With the exception of the pigments all of these deposits date to the Early segment of the house chronology.

The red and yellow pigments identified near the south wall of the structure were both recovered from mixed rubble fill contexts, indicating that they are most likely not caches (see Figure 9.1). X-ray diffraction performed on the two samples indicates that the red pigment was primarily iron oxide, a typical component of red paint (USGS Minerals Information: Iron Oxide Pigments). The yellow pigment was identified as lead sulfate, also a common component of paints (Eastaugh et al. 2004:230-231). This analysis suggests that these samples were probably powdered pigments that were stored in the house until they were mixed with an appropriate medium/vehicle and used as paint. The absence of a cached context, documented use of these materials as common pigments, and the lack of any directional significance to their contexts indicate that they probably had no additional ritual or magical uses.

While the context is better for the other artifacts in terms of their temporal placement, the lack of other associated materials or ethnographic analogs for use of these items makes their interpretation as cached ritual items tenuous. The location of the bottle (Figure 9.2) below the West Room chimney base is consistent with the placement of witch-bottles. However, the lack of a stopper, pins, nails, or other items indicates that this artifact was most likely discarded as refuse in this location rather than being intentionally placed.

Similarly the location of the gun flint at the base of the chimney in the West Room suggests that it may be a special cached object (Figure 9.3). While many sympathetic magic traditions from Europe include items cached around chimneys or hearths, no specific ethnographic analog could be found that identified gun flints. The lack of an ethnographic analog for gun flints in the abundant (and confusing) literature on European household magical items calls into question the notion that it the gun flint from 15FA290 was intentionally cached. It is equally likely that this artifact was simply used and discarded in the aggrading subfloor deposits. The fact that this gun flint is made from local Boyle chert makes it even more likely that this expedient item was simply discarded in this location.

The brass locket (Figure 9.4) that was identified in the builders' trench outside the structure near the northeast corner of the Feature 1 foundation has a similarly questionable context. Personal items such as lockets are known to have been used in sympathetic magic, but such artifacts are usually intentionally placed as caches, typically inside the corners of buildings, and not outside them. Additionally the integrity of the deposit from which the locket came is also questionable. The locket was found in a builders' trench, but at this corner of the house, there is evidence that the builders' trench deposits have been affected by water running off the roof. The trench at this corner of the house has a fanlike morphology, suggesting a downspout may have been located in this area (see Figure 7.26), and the sediments at the structure corner may have been disturbed by erosion from roof runoff. The location of the locket in the trench and downspout area may be an effect of this erosion. We suggest that it is likely that this locket represents something dropped by someone entering or leaving the house, and that its location within builders' trench deposits is attributable redeposition of the item by water runoff from the roof.

Perhaps the best candidate for a cache identified at 15FA290 is the builders' trench along the interior dividing wall between the East and West Rooms. Specifically two iron table knives were recovered from this deposit; one was recovered from the trench in the West Room, and the other was recovered from the wall itself just above the trench in the East Room (Figure 9.5). Knives are often part of many folk magic traditions, and walls and foundations are typical locations for cached items. Fennel (2003:1) notes that "blade-like" fragments are often recovered in caches relating to BaKongo conjuring. In Europe knives also feature prominently in many folk magic beliefs. Merrifield (1987:162) notes that knives were often used as charms to repel witches in England and Scotland. Knives were encased within the walls at the Cade House, a



Figure 9.1. Red Pigment in Rubble Fill Contexts near South Wall of Feature 1 at 15FA290.



Figure 9.2. Glass Bottle Recovered from Chimney Base in West Room of Feature 1 at 15FA290.



Figure 9.3. Gun Flint Made on Local Chert at Chimney Base in West Room of Feature 1.



Figure 9.4. Locket Recovered from Feature 1 at 15FA290. Right is front; left is back



Figure 9.5. Knife Placed in Interior Wall of Feature 1 over Builders' Trench in East Room.

16th to 17th century site in Kent, for example (Merrifield 1987:162). Similar practices are also documented in the Orkney Islands during the late 18th century (Brand 1913:606 (footnote); Merrifield 1987:162). The descriptions of these examples indicate that the knives are completely enclosed within the house walls as a sort of builder's charm (Merrifield 1987:162). The knives recovered from 15fA290, were not identified in such contexts; rather one was found protruding from the wall and the other was within the builder's trench. While we cannot definitively conclude that these objects were intentionally placed and have ritual significance as charms protecting the house from witchcraft, we also cannot rule out this possibility. An alternative explanation is that these knives were broken and discarded possibly while they were being used in the original house construction, or in the case of the knife in the wall, it was placed but then forgotten.

In sum, the artifacts at 15FA290 that were identified as possibly being cached materials appear instead to be related to simple discard of refuse, accidental loss, or storage of mundane items (such as the pigment). Although some of these materials do have some associations with specific cultural practices in other parts of the world, they lack the contexts necessary to confidently attribute them to those cultures or to ritual practices. Thus, these deposits are not considered to reflect the racial or ethnic affiliations of the builders or early residents (Beeler and Allen) of the dwelling at 15FA290.

Turning to the Middle segment owners/occupants, Estill and Brand (collectively 1830 to 1867), our data are very limited. No potential cached materials were identified that date to the Middle segment of the house chronology. The few intact Middle segment deposits that were identified were pits used for hearth cleaning or refuse disposal, were structural supports, or were midden deposits that were mixed with earlier or later materials. Here, as with the Late segment deposits the grain of our chronology was not sufficient to associate specific features with the individual site owners or occupants. Consequently we conclude that the Middle segment deposits do not reveal any information regarding Estill's or Brand's racial or ethnic identity.

In conclusion, the best sources of information about the racial or ethnic identities of the residents of 15FA290 come from documentary sources, primarily census data. These documents indicate that prior to the

Ross' rental occupation of the house in 1870, the house's occupants were white. However, no specific ethnic affiliations could be determined for these Early or Middle segment owners or occupants. Census data indicate that during the Late segment occupations, two sets of residents were African American (Ross and Robeson), while the other known occupant (Hanly family) was of Irish descent. Given the vagaries of the archaeological record here as well as the limitations of the site chronology, no deposits could be confidently attributed to any of these residents of 15FA290. No information regarding the racial or ethnic identities of the house builders could be inferred from the recovered artifacts.

If ethnic or racial identity of builders or occupants is to be identified with any degree of confidence, it is necessary to have good contexts from which specific ethnographically documented artifacts are recovered. Such contexts are lacking generally at 15FA290. In addition, ascription of ethnic or racial affiliation to artifacts requires more than recovery of an occasional artifact or two that can be linked to the vast array of folklore. It requires recovery of a set of functionally related artifacts that collectively and regularly are linked to a set of behaviors that are distinctive of particular ethnic or racial backgrounds. While the investigations at 15FA290 produced the occasional artifact that might be linked through folklore to a particular ethnic or racial group, we did not recover a set of artifacts that can be associated with behaviors that characterize specific ethnic or racial groups. These conditions for linking artifacts to ethnic/racial identity should be applied to all archaeological sites. Development of rigorous qualifications for contexts and suites of artifacts, coupled with critical assessment of these contexts will help ensure that ethnic or racial identity is not casually or spuriously inferred, and it will also help identify artifacts and contexts that do have ethnic/racial significance.

ECONOMIC STATUS

The second major research topic explored during these investigations concerns the economic status of the residents of 15FA290. Specifically we were interested in elucidating the economic status of the individual owners and occupants of 15FA290, as well as tracing the changes in economic status of the residents over the century or so in which the house was occupied. Multiple lines of evidence were used in this economic analysis. Some economic data were derived from historic documents. Other data were derived through analyses of the artifacts recovered from the excavations at 15FA290. Specifically a ceramic consumption analysis and an analysis of the faunal assemblages were applied to specific assemblages to characterize the economic positions of the occupants of the house during particular segments of the house chronology. In both cases the analyses focused on materials derived from more intact deposits and features, as these deposits were more narrowly dated and were considered to provide the best measure of economic standings. In the faunal analyses some other contexts that were outside, but associated with, specific features were also included. Results of these analyses are discussed in separate sections below.

CERAMIC CONSUMPTION ANALYSIS

Archaeological studies of historic sites have long indicated a close connection between a household's economic status or class and the occupants' consumption patterns, particularly their consumption of nonnecessities (Spencer-Wood 1987; Wall 1999). Other factors, such as ethnicity, popular trends, personal taste and product availability, can also affect consumption patterns, but if time and space are controlled, socioeconomic status or class is often the most important factor. People will purchase items of a certain value not simply because they can afford them, but because they symbolize their status and communicate to others the purchaser's membership within a status group or class.

Various types of material culture are suitable for examining consumption patterns at historic sites, but refined ceramics are the most commonly used by archaeologists. The reason for this are multifold, and include variability in decoration, vessel form, and paste not related to subsistence function, known ceramic prices through time, and relative abundance on historic sites. Other artifacts or refuse, including table glass, animal bone, furnishings, and clothing items are sometimes used in consumption and status studies, but since

their purchase prices are not well known and most are not as abundant as ceramics, they are not as commonly used.

The most common method of analyzing ceramic consumption patterns is the ceramic price index method created by archaeologist George Miller (1980, 1991). This method is based on the price difference between plain white earthenware and more elaborately decorated earthenware, ironstone, and porcelain, such as hand-painted wares or transfer-printed wares. Miller based these index values on extensive research of period historical documents, especially merchant records. Plain ware is referred to as “CC” after the designation given it by potters, who used CC to stand for cream-colored. CC ware has an index value of 1.00, and all other ceramic types are indexed relative to this standard, with the index value depending on price. For instance, a decoration type that is twice as expensive as CC ware would have an index value of 2.00, while a ware that was one and a half times as expensive would have a value of 1.5.

Miller (1980, 1991) created price indices for different years from the 18th to the late 19th centuries, based on his research in documentary records. Since absolute and relative prices changed over time, it is important to utilize index values from dates that match as closely as possible to the date of the intact assemblage being studied. In the case of 15FA290, the mean ceramic dates (MCD) of each assemblage were used to select the most appropriate sets of index values.

Another issue relating to the use of Miller’s ceramic scaling is that Miller’s index values are calculated for different vessel forms (plates, tea wares, serving vessels, and bowls), because the relative expense of the different decorative types varied according to the ware forms. Thus it is important to try to identify the vessel forms of the excavated fragments and group them according to the minimum number of vessels (MNV) of each form (plates, bowls, etc.) that the sherds represent. This step was completed for the 15FA290 ceramic assemblage by utilizing rims, bases, and uniquely decorated body sherds. A minimum vessel count was created with the idea that if multiple sherds could have come from the same vessel, then they are counted as one vessel.

Once the MNV was calculated for the ceramic assemblage from 15Fa290, the mean ceramic date for each feature was determined. Using that date, the ceramic index value for each feature was determined. These values were then grouped by temporal context and averaged. The resultant mean for each context was then used as the ceramic index value for that temporal segment. Only those contexts that represented a relatively short time period and could be confidently assigned to a temporal segment were utilized in this analysis. Contexts are divided into Early (Features 5, 15, 19, 20, 31, 33, 46, Builder’s Trench/Feature 34), Early-Middle (Features 4, 13, 29, 30, 44, 47, 51), Middle (Features 8, 25, 32, 40, 42, 43, 48), Middle-Late (Features 7 and 41), and Late (Features 14, 18, 33, 35, 38, and 50) time periods or segments of the house chronology, as discussed in Chapters 7 and 8. While restricting the number of contexts used for this analysis also restricted the number of vessels that could be used, it was deemed necessary to be sure that appropriate mean ceramic dates and mean ceramic index values were assigned, as well as having an accurate representation of the kinds of vessels that were consumed in a given temporal segment. Many of these wares and decorative types were in production for considerable spans of time and their cost would fluctuate. For example, the median date for Early segment contexts is 1815 and the mean ceramic date for Feature 47 within that segment is 1809. A pearlware transfer-printed plate from Feature 47 could be assigned either a ceramic index value of 4.33 from its feature date (1809) or a value of 2.86 from the temporal segment median date (1815). The difference between these values is significant and presents very different information regarding cost at the time of purchase and the economic choices they reflect. If this vessel was purchased earlier when it was more costly, it represents a higher socioeconomic standing and class consciousness than may have been present if the vessel had been purchased later when it was less expensive. By assigning ceramic index values based on the mean ceramic date of features, it is hoped that the cost of the vessels at the time of their purchase will be more accurately represented. Without the temporal restrictions of datable contexts, it would be difficult to attribute any shifting ceramic consumption patterns with specific occupants.

South’s formula for the mean ceramic date (1977:217) was used to determine the average date of

ceramic manufacture represented in the contents of each individual feature. This formula produces a weighted average date based on all the sherds recovered from the given context. The mean ceramic date was also calculated for each feature using only the MNV counts. The dates generated using both sherd frequency and MNV frequency produced similar results. However, due to the highly fragmentary nature of the assemblage, several features either had only small numbers of vessels that could be identified with confidence or none at all. The assemblages primarily affected were the Middle and Late contexts. To partially compensate for low numbers, dates generated from sherd frequency were used to assign the ceramic index value to each individual feature.

Assigning the ceramic index value involved calculating the date (year) of each deposit, then selecting index values for ceramic types (by vessel form, paste, and decoration) represented in the assemblage for that year or the year closest to it. Since absolute and relative ceramic prices change over time, it is important to choose the appropriate year. Again, the mean ceramic date for a given provenience is used as the ceramic price year. To calculate the assemblage ceramic index value, the mean of all ceramic vessel indices in that assemblage is calculated.

The calculation of the ceramic index value proceeds much as the mean ceramic date calculation discussed above. Instead of using the mean date of manufacture in the calculation, the ceramic index value for each particular vessel form is used. These index values are selected from the tables provided by Miller (1991) to match as closely as possible to the mean ceramic date of a particular feature. If features produced only sherds for which vessel form could not be assessed, those sherds did not contribute to the MNV or ceramic index values.

Table 9.1 through 9.5 show the mean ceramic date and ceramic index values for each temporal segment of house occupation, by feature. Based on these results, Table 9.6 presents the results of calculation of the mean ceramic index values for each segment of 15FA290 occupation, and Table 9.7 presents comparisons with other sites. The vessel counts for datable 15FA290 features are not large, so the following interpretations should be viewed as tentative. However, some interesting patterns have emerged and are worth discussion.

As can be seen in Tables 9.6 and 9.7, the ceramic indices of the earlier contexts are moderately high, whereas the later contexts are lower. The low index value of the Middle-Late and Late contexts are associated with ownership of the site by nonoccupants, and occupation of the site by renters or tenants. The low indices result from a complete absence of transfer-printed and porcelain vessels from the MNV count, which includes only vessels for which vessel form (plate, bowl, etc.) could be inferred. These types were present in these contexts but in extremely low numbers (one whiteware transfer printed body sherd and two undecorated English porcelain body sherds). These two ceramic types were fairly expensive, and their absence lowers the ceramic price index for the Middle-Late and Late segment assemblages.

The Early and Early-Middle segment ceramic assemblages (early 19th century) from 15FA290 suggest a middle-class level of ceramic consumption. Samuel Beeler acquired the property in 1795, and likely had constructed the house at 15FA290 by about 1803. He sold the property to Richardson Allen in 1806. By the time Allen had lived on the property for some years (represented by the Early-Middle segment mean ceramic date of 1824), there is evidence for increased consumption of higher-end ceramics, corresponding to an upper-middle class socioeconomic status in the range of rural farmers and small planters (see Table 9.7), which is precisely how the farmstead and holdings associated with 15FA290 would be described.

This trend apparently continued during the early portion of John Estill's tenure at the site, as indicated by the higher ceramic consumption index value of 2.07 associated with the Middle segment of house occupation. However, the contexts assigned to the Middle-Late and Late segments of house occupation both produced minimal ceramic index values (1.00), indicating consumption of the least expensive forms of ceramics during this span of house occupancy. This drop in ceramic index value corresponds to the time span

Table 9.1. Early Segment Features Mean Ceramic Index Value.

Feature	N	Mean Date	MNV	Ceramic Index
5	1	1817.5	1	1.00
15	43	1810	4	1.20
19	2	1802	0	NA
20	9	1832	8	1.62
31	1	1806.5	0	NA
33	1	1790	0	NA
F34, Builder's Trench	7	1821	0	NA
46	1	1817.5	0	NA
Mean Ceramic Index Value				1.27

Table 9.2. Early-Middle Segment Features Mean Ceramic Index Value.

Feature	N	Mean Date	MNV	Ceramic Index
4	0	---	0	NA
13	2	1837	0	NA
29	0	---	0	NA
30	0	---	0	NA
44	51	1851	8	1.46
47	9	1809	1	3.30
51	6	1801	2	1.30
Mean Ceramic Index Value				1.69

Table 9.3. Middle Segment Features Mean Ceramic Index Value.

Feature	N	Mean Date	MNV	Ceramic Index
8	0	---	0	NA
24	0	---	0	NA
25	0	---	0	NQ
32	2	1862	0	NA
40	7	1861	2	1.84
42	6	1832	1	2.21
43	11	1841	3	1.57
42/43	2	1837	2	2.65
48	9	1821	1	NA
49	0	---	0	NA
Mean Ceramic Index Value				2.07

Table 9.4. Middle-Late Segment Features Mean Ceramic Index Value.

Feature	N	Mean Date	MNV	Ceramic Index
7	1	---	0	NA
41	7	1858	1	1.00
Mean Ceramic Index Value				1.00

Table 9.5. Late Segment Feature Mean Ceramic Index Value. The mean date listed is based on the ceramics recovered from this context and does not necessarily reflect the date of deposition.

Feature	N	Mean Date	MNV	Ceramic Index
15 (late use)	0	---	0	NA
18	4	1857*	0	NA
33 (late use)	0	---	0	NA
35	0	---	0	NA
38	0	---	0	NA
50	3	1860	1	1.00
Mean Ceramic Index Value				1.00

Table 9.6. 15FA290 Ceramic Price Index Values for Each Segment of House Occupation at 15FA290.

Temporal Segment	Mean Ceramic Index	Owners	MNV
Early	1.27	Samuel Beeler Richardson Allen	13
Early-Middle	1.69	Richardson Allen John Estill	11
Middle	2.07	John Estill Alexander Brand*	9
Middle-Late	1.00	Alexander Brand* John Stevenson* William Cromwell*	1
Late	1.00	William Cromwell* Nannie Huguey* Milton Young*	1

*While these individuals were owners of 15FA290, there were not the occupants of the house.

Table 9.7. Comparison of 15FA290 Ceramic Index Values with Other Sites.

Site (Reference)	Occupation	Ceramic Index	Year	Vessels
J. Frazer, KY (Mabelitini 2008)	Physician	3.00	1844	164
Cannon's Point, GA (Otto 1984)	Planter	2.63	1824	211
E. Hardin, KY (Andrews and Sandefur 2002)	Farmer	2.40	1838	125
W. McConnell, KY (Day and Clay 2000)	Wealthy Farmer	2.22	1805	N/A
P. Warren, MS (McBride 1991)	Merchant	2.16	1838	225
S. DeRossitt, KY (O'Malley 1990)	Ferry Operator	2.10	1826	45
Barber Hotel, Period 1, KY (Sandefur et al. 2008)	Tavern	2.10	1838	144
Higbee's Tavern, KY (Day 2004)	Tavern	1.99	1814	340
Cannon's Point, GA (Otto 1984)	Overseer	1.94	1824	105
G. Mabry, TN (McKelway 1994)	Small Farmer	1.90	1850	N/A
J. Ardery, KY (Day and Clay 2000)	Wealthy Farmer	1.91	1840	N/A
J. Arnold, KY (Andrews and Stetar 1995)	Farmer	1.85	1836	69
Kings Bay Plantation, GA (Adams and Boling 1989)	Planter	1.81	1815	274
Mabry's Slaves, TN (McKelway 1994)	Slaves	1.78	1850	N/A
James King, GA (Adams and Boling 1989)	Small planter	1.74	1796	83
G. Duckworth, KY (Peres 2003a)	Rural Farmer	1.70	1838	168
Thomas Hamlin, NJ (Adams and Boling 1989)	Farmer	1.68	1796	32
M. Vardeman, KY (Madsen et al. 2005)	Farmer	1.67	1823/1833	112
W. Hale, WV (Niquette 1988)	Small Farmer	1.67	1833	N/A
Baber Hotel, Period 3, KY (Sandefur et al. 2008)	Tavern	1.67	1858	87
L. Drake, IL (Philippe 1990)	Farmer	1.67	1824	62
Barber Hotel, Period 2, KY (Sandefur et al. 2008)	Tavern	1.64	1853	22
John King, GA (Adams and Boling 1989)	Sawyer	1.64	1796	74
J. Finley, KY (Mabelitini 2008)	Merchant	1.63	1814	55
Harmony Hall, GA (Adams and Boling 1989)	Small planter	1.60	1814	129
Black Lucy, MA (Baker 1978)	Freed slave	1.53	1833	58
John Harris, GA (Adams and Boling 1989)	Farmer	1.45	1814	18
Moses Tabbs, MD (Adams and Boling 1989)	Tenant Farmer	1.44	1846	16

during which the house at 15FA290 is known to have been occupied by renters and tenants, and not by the property owners themselves.

The results of the ceramic index analysis indicates that there was a moderate level of ceramic consumption during the Samuel Beeler, Richardson Allen, and early John Estill eras, and that the values of the ceramics apparently increased through this time span. However this was followed by a reduction in ceramic consumption level that corresponds to the house being occupied by tenants or renters rather than being the primary residence of the landowner. From the mid-19th century to the time of the site's

abandonment around 1910, the socioeconomic status of the occupants, as seen in the consumption of ceramics, was low. This change is interpreted as evidence for reduction in economic status.

The types of vessels recovered from the various temporal segments also reflect this decline in the economic standing of the occupants of 15FA290. The vessel types identified in the earlier segments of this site include tea cups and saucers, bowls, small and large plates, tea/coffee pots, platters, and covered dishes. The later segments include only plates, platters, and bowls. The occurrence of a wider variety of vessel types in earlier segments shows an adherence to more formal dining rituals that were practiced by middle and upper-middle classes at this time (Fitts 1999). The decrease in variety over time shows less concern with dining ritual and displays of material wealth, which is more common in lower economic standings where the acquisition of the necessary vessels is prohibited by cost or less important.

There is also a reduction in the amount of decorated ceramics used at the site over time. The Early and Early-Middle segment vessels have transfer printed, shell edge, overglaze hand painted, and underglaze hand painted decorated vessels where as the Middle-to-Late and Late segments have only hand-painted and decal-decorated sherds. The decorated ceramics were more costly, especially the transfer-printed vessels, and these show purchasers of some means. Also, the presence of both transfer-printed and shell edge-decorated plates indicates that there may have been at least two sets of dishes utilized by the occupants of the house in the Early to Middle segments. Shell edge-decorated dishes were less expensive than transfer-printed items and may indicate that the occupants had a set of dishes for small, family meals and maintained a more elaborate set for more public dining. The decline in the ceramic price index, the decrease in variety of vessel types, and the decrease in decorated vessels suggest that the occupants of 15FA290 during the later temporal segments were on the lower end of the socioeconomic spectrum.

It should be noted that comparisons between the sites listed in Table 9.7 and 15FA290 show that the number of vessels analyzed at 15FA290 is low. This is not surprising given the settlement pattern for the house. All of the documented occupations were of relatively short duration (24 years at most), and we presume that occupants took their usable belongings with them when they left. We suggest that the archaeological record within the house is the result of gradual attrition and breakage of vessels through use over the century-long occupation of the house. With this sort of breakage pattern we would not expect to have high numbers of analyzable vessels. Additionally there is no indication of a sudden or cataclysmic occurrence that would have brought about mass breakage and discard. The low number of vessels may also be partially attributable to two other factors. One is the proportion of the site investigated. Because we were constrained in these investigations to the portion of the site within the project right-of-way, our interpretations are derived only from the dwelling itself and part of the yard. Presumably other outbuildings are a part of the site, but these are positioned outside the project area and thus remain uninvestigated. Among these potential outbuildings is a probable detached kitchen. We suspect that the number of vessels recovered would have increased greatly had a detached kitchen also been available for investigation. A second factor that impacted our study is that only materials from intact datable feature contexts were used for the analysis. Had all ceramics from the site, including the rubble fill of Feature 1, been analyzed, then the number of vessels in the analysis would have increased. In our opinion the mixed nature of these fill deposits would not provide meaningful diachronic economic data, and would have added little to the trends discussed here.

The low vessel numbers, however, beg the question of whether or not the trends identified in the vessel consumption analysis are accurate, or if the sample is biased in some way that would obscure the true economic patterns. To answer these questions we compared the vessel consumption analysis results against the economic data derived from the documentary research.

The documentary data support the trends highlighted by the ceramic consumption analysis. Prior to the 1850s, the house at 15FA290 appears to have been built by and lived in by families who were fairly well off, but most likely not the richest or most prominent members of Fayette County society. Census data are lacking for Samuel Beeler, but deeds and newspaper notices indicate that he was of some means, being able to purchase 300 acres in the late 18th century and owning at least one slave (FCC: CC A:17-18; *Kentucky*

Gazette Volume XVI, Number 884). Richardson Allen also appears to have been fairly well off, as he was able to support a family of eight, and he also owned between five and ten slaves during his tenure at the site (US Census 1810, 1820, 1830). Newspaper notices indicate that he was an active businessman during the early 19th century, with interests in numerous business ventures including real estate and a livery stable (Green 1985: 136, 142; *Kentucky Gazette* Volume XXIII Number 1266, Tuesday January 23, 1810; Volume XXIV, Number 1278, Tuesday July 10, 1810). Census data indicate that John Estill was most likely of a similar economic background as Beeler and Allen. He was the head of a family of nine, and he owned eight slaves in 1840. He clearly had the means to purchase property (U.S. Census 1840), and he was the owner that most likely made substantial improvements to the site infrastructure by installing a cistern.

After the 1850s the documentary data suggest that the house's owners were of higher economic status. Alexander Brand, who purchased the property in 1854, was clearly a person of greater economic means than his predecessors. The 1860 census indicates his real estate holdings were valued at \$85,300, and his personal estate was \$44,150. This compares to Mary Estill (John Estill's widow) who had real estate valued at \$11,025 in 1850. This wealth disparity, when factored into the general lack of major architectural modifications to the house at 15FA290, supports the earlier contention that Brand did not actually live at the site. Rather, after 1854, the house may have become a tenant house occupied by persons of low economic standing. This interpretation is supported by the low ceramic price index for the Middle-Late segment assemblage (Table 9.6). Unfortunately there is no documentary evidence for tenants at the property during Brand's ownership. Subsequent owners of 15FA290 had an economic profile similar to that of Brand. William Cromwell who purchased the property in 1867 had real estate valued at \$55,000 and a personal estate valued at \$58,150 in 1870 (U.S. Census 1870). Documentary evidence indicates that Cromwell lived across Newtown Pike from 15FA290, and the first documented tenants living at the house were during Cromwell's ownership of the site.

The Late segment tenants at the site would have been of relatively meager economic means relative to the previous owner/occupants of the house. Zachariah Ross who lived at the property in 1870 had no real estate or personal property listed on the 1870 census, and his occupation was listed as farm hand, suggesting that he and his family were most likely poor. Thomas Hanly and his family apparently were of similar means. Hanly's occupation shown on the 1880 census was "works on the pike" suggesting that like Ross, he was also a laborer. The final documented tenant was William Robeson and his family (U.S. Census 1900). Like Ross and Hanly, Robeson was a laborer, most likely of very limited economic means.

Thus the documentary data support the trend identified through the ceramic consumption analysis. The early owner/occupants of the house at 15FA290 appear to have been persons of some economic means, but probably were not among the wealthiest residents of the county. After the 1850s the property passed through a series of owners that had considerably greater economic means, and who used the house as a rental or tenant property. These site residents were of much lower economic standing.

The results of the documentary research when compared to the vessel consumption analysis suggest that although the number of vessels analyzed is low, the patterns match well with the documentary data. This suggests that our decision to restrict the analysis to the intact, datable deposits provided sufficient data to accurately identify general economic trends through time at the site. These trends show a decline in the socioeconomic standing of site occupants after the mid-19th century. The status of the Middle-Late and Late segment site occupants diverges sharply from that of the property owners for this same period, which is but a single example of the generally broad discrepancies in economic standing between landowners and tenants.

FAUNAL REMAINS

The Phase II/III archaeological investigations conducted at 15FA290 recovered a sizable amount of faunal remains. The number of individual specimens (NISP) within this faunal assemblage totals to 1,153, weighing a combined 1,737.8 g (Table 9.8 and Appendix B). While many of these remains were recovered

Table 9.8. Summary of Faunal Remains from Features at 15FA290.

Taxonomic Group	NISP	MNI	Weight (g)
Opossum (<i>Didelphis marsupialis</i>)	2	1	0.6
Eastern mole(<i>Scalopus aquaticus</i>)	1	1	0.1
Squirrel (<i>Sciurus</i> sp.)	18	2	7.6
Rat (<i>Rattus norvegicus</i>)	134	15	35.2
Muskrat (<i>Onadatra zibethica</i>)	14	3	22.7
Cottontail rabbit (<i>Sylvilagus floridanus</i> .)	31	3	17.0
Cow (<i>Bos taurus</i>)	25	1	406.6
Pig (<i>Sus scrofa</i>)	103	2	572.1
Sheep/Goat (<i>Capra/Ovis</i> sp.)	1	-	19.8
Sheep/Goat/Deer (<i>Capra/Ovis Odocoileus</i> sp.)	1	-	3.2
Large mammal	348	-	501.5
Small mammal	26	-	2.1
Unidentifiable mammal	16	-	4.0
Duck (Anatinae)	1	1	0.4
Passenger pigeon (<i>Ectopistes migratorius</i>)	4	2	0.8
cf. Yellow flicker (<i>Colaptes auretes</i>)	1	1	0.1
Crow (<i>Corvus brachyrhynchos</i>)	1	1	1.1
Perching bird (Passeriformes)	3	-	0.3
Ruffed grouse (<i>Bonasa umbellus</i>)	1	1	0.6
Chicken (<i>Gallus gallus</i>)	48	3	52.6
Turkey (<i>Meleagris gallopavo</i>)	5	2	18.6
Grouse, Chicken, or Turkey (Galliformes)	20	-	7.6
Large bird	166	-	27.9
Small bird	1	-	0.1
Unidentifiable bird	38	-	7.8
Turtle (Emydidae)	11	1	5.7
Redhorse (<i>Moxostoma</i> sp.)	2	1	0.5
Basses/Sunfishes (Perciformes)	4	1	0.4
Unidentifiable fish	11	-	10.0
Unidentifiable vertebrate	113	-	17.2
Unidentified freshwater bivalve	3	1	2.6
TOTAL	1153	44	1737.8

from temporally unassigned or mixed proveniences, a faunal subassemblage was obtained from datable feature contexts, and this assemblage was examined in detail for this report. The total analyzed faunal assemblage consists of remains derived mainly from features (n=24) assigned to various temporal segments of site occupation that spans from the early 1800s to about 1910. A few additional faunal remains were derived from contexts that could be reasonably associated with these dated features. The date ranges for features were derived from analysis of temporally sensitive artifacts, discussed in detail in Chapter 7.

More than half (n=16) of the 24 features with bone are temporally mixed (Table 9.9). Three of these features are assigned to the Early to Middle segment, four are assigned to the Middle to Late segment, two are dated Early to Late, and six are interpreted as mixed or indeterminate 19th century. Of the remaining features, five are considered Early, one is assigned to the Middle segment, and three are considered representative of the Late segment. One of these (Feature 36) is likely the result of noncultural bioturbation activity, so the faunal remains from this feature were not considered further in this investigation.

For this study, faunal remains from features with the least questionable chronologic placement were used to examine potential zooarchaeological patterns between temporal segments recognized at 15FA290. This approach resulted in selecting faunal remains from five features (5, 19, 20, 44, and 47) assigned either exclusively or primarily to the Early segment (1800s to 1830s). These were compared to remains extracted from six features (18, 32, 38, 40, 41, and 50) assigned to the Middle and Late segments, representing the time

Table 9.9. Temporally Assigned Features at 15FA290 that Produced Faunal Remains.

Occupation Segment	Feature	Description	Location
Early to Late	1	House Foundation	House
Early	5	Post filled with Midden	Outer House-Lot
Early	19	Pit Ash Dump	Inner House-Lot
Early	20	Subfloor Pit	House
Early	46	Subfloor Ash Pit	House
Early to Middle	44	Burned Area-Below Chimney Base	House
Early to Middle	47	Ash Smear from Hearth Cleaning	House
Early to Middle	51	Midden Smear	House
Early and Late	15	Trash Pit/Rubble Pile	Outer House-Lot
Early and Late	33	Subfloor Pit	House
Middle	8	Post	Inner House-Lot
Middle	9	Post	Inner House-Lot
Middle	32	Subfloor Ash Pit	House
Middle	40	Subfloor Pit	House
Middle	42	Subfloor Pit	House
Middle	43	Subfloor Pit	House
Middle	48	Floor Support	House
Middle to Late	24	Cistern	Inner House-Lot
Middle to Late	41	Floor Support	House
Late	18	Entrance Driveway	Outer House-Lot
Late	38	Subfloor Pit	House
Late	50	Subfloor Pit	House
Late/Disturbed	36	Bioturbation-noncultural	House
Indeterminate	45	Subfloor Ash Pit	House

span from the 1830s to 1910 (Table 9.9). The remains from these separate time periods provide a combined analytical assemblage of 688 NISP, weighing a total of 761.0 g. This smaller faunal assemblage represents 59.7 percent by count and 43.8 percent by weight of the total faunal assemblage from features excavated at 15FA290 (see Table 9.8). The following analysis focuses on comparison of faunal assemblages from the Early segment with the combined Middle and Late segment remains to describe the degree to which the animal use patterns reflect economic conditions of the site occupants. Animal remains from features of mixed ages (Early to Middle, Middle to Late, etc.) were not included in the detailed analyses.

Methods

The faunal remains recovered from 15FA290 were identified to their lowest possible taxonomic level based on direct comparison to study specimens whenever feasible or to diagnostic information available within the relevant zooarchaeological literature (e.g. Olsen 1964, Reitz and Wing 1999, Steadman 1980) when necessary. Quantification is based on the NISP of recognizable species or animal size class (e.g. pig, large mammal), element, side, and represented portion, plus age and sex of taxon, if determinable, for each feature context. Calculation of minimum number of individuals (MNI) was obtained for each species identified, based on the largest number of individual diagnostic bone elements recovered for a particular species. The extreme fragmentation of some specimens meant that they could be identified only to broad taxonomic categories (e.g. unidentified mammal, bird, or vertebrate). This approach was also taken when attributes of fragmentary items did not permit identification among similarly-sized taxa, such as postcranial elements of sheep, goat, and deer. In these cases, the classification sheep/goat and sheep/goat/deer were used. Bones identified as large mammal for the most part did not appear to be as large as cow, but their fragmented condition prevented more precise identification, particularly if they appeared to be subadult. When applicable, some specimens were recorded as a close fit (cf.) to a particular species. No MNI was calculated for tentatively identified specimens except for a few such as sheep/goat in an effort to maximize the measurement of a specific identification (see Table 9.8).

Clear signs of natural or cultural modification were noted when present, particularly butchering marks and animal gnawing. Butchering marks include knife and saw cuts, which were differentiated when possible. Specimens with saw cuts are represented by either one end saw cut or with both ends saw cut in a parallel orientation, separated by various lengths of the bone. When apparent, hand sawn bone was recorded.

Modification was also recorded for bones with gnaw marks from rodents (most likely Muridae [Old World mice and rats]) or carnivores, most likely dogs (Lyman 1994), and degree of gnawing was identified as slight, moderate, or heavy based on the visual condition of the bone. Ingested bone or scat, also likely produced from dogs, was identified from pitting, polished edges, and eroded surface characteristics typical of corrosion from digestion (Binford 1981:55; Schmitt and Lupo 1995:499). Burned bone was recorded as black or calcined (Shipman et al 1984), while characteristics of weathering, mainly cracked and exfoliated surfaces, were recorded, when present, as slight, moderate, or heavy in degree based on the visual condition of the bone. Overall, preservation of the faunal remains recovered from 15FA290 was moderate to excellent. The low frequency of weathered and burnt bone is due largely to an absence of bone burning in food preparation, and the limited length of time that specimens were exposed on the ground surface.

Given that assemblage diversity is strongly linked to assemblage size (see Reitz 1987) it is important to determine if the larger assemblage shows a greater species diversity. The Early segment subassemblage contains 566 remains with a species count of 18. In contrast, a total of 121 remains were derived from Middle and Late segment contexts, with a species count of only nine. Species richness for the Early subassemblage is twice the value of the Middle-Late subassemblage, which strongly suggests that comparison between these two faunal assemblages is subject to potential biases relating to sample size. Without adequate sample sizes the analyses of these two assemblages must largely be descriptive (Reitz and Wing 1999: 107). For this reason, we rely primarily on counts and percentages in the following analyses, rather than statistically based comparisons.

One caveat should be presented here regarding the nature of the faunal assemblage. Because of the constraints of the project boundaries, all portions of the site were not investigated. Some contexts which could affect the overall character of the faunal assemblage such as a presumed detached kitchen or other trash disposal deposits were not included in the current sample from 15FA290. Had these other contexts been available, this analysis could vary from what is presented here.

Faunal Remains from Early Contexts

The faunal assemblage attributed to the early segment of occupation at 15FA290 came from Features 5, 19, 20, 44, and 47 (see Table 9.9) and consists of 566 specimens weighing a total of 550.9 g (Table 9.10). Within this assemblage 224 (39.5 percent) were identified to order, family, genus, or species while 342 (60.4 percent) were identified only to taxonomic class or above. The MNI for this faunal assemblage is 36. The MNI count is dominated by rat with 13 individuals present. The remainder is distributed across 17 different classificatory groups represented by only one to three individuals in each taxon (see Table 9.10). This represents a relatively high diversity of taxa, and includes a broad range of domestic and wild taxa that were viewed as food, plus commensal taxa that were probably not considered subsistence resources by the site occupants (e.g., rat, mole, and perching bird). Some other taxa are problematic as food sources (opossum and crow), while other wild taxa are interpreted as definitely food remains because they would not ordinarily be found in upland contexts (water turtle, suckerfish, and bass/sunfish).

Though the MNI for cow and pig are both one, pig is represented by 30 specimens, while cow is represented by only four bones. The other domestic animals include single specimens of goat/sheep and goat/sheep/deer, representing MNI of one for each of these taxonomic groups.

The pig and cow elements are classified with respect to a Food Utility Index (FUI) following methods developed by Metcalfe and Jones (1988) and modified by Purdue et al. (1989). Following Purdue et al. (1989) the body parts are grouped into three categories—Low, Medium, and High Utility—based on the total

Table 9.10. Faunal Remains from Early Segment Feature Contexts at 15FA290. Numbers in parentheses are percents of each column.

Taxon	NISP	MNI	Weight (g)	Gnawed*	Burnt*	Cut*
Opossum (<i>Didelphis marsupialis</i>)	1 (0.2)	1 (2.8)	0.5 (0.1)	-	-	-
Eastern mole(<i>Scalopus aquaticus</i>)	1 (0.2)	1 (2.8)	0.1 (0.03)	-	-	1K
Squirrel (<i>Sciurus</i> sp.)	4 (0.7)	1 (2.8)	2.5 (0.5)	2R	-	-
Rat (<i>Rattus norvegicus</i>)	89 (15.7)	13 (36.1)	25.5 (4.6)	-	-	-
Muskrat (<i>Onadatra zibethica</i>)	7 (1.3)	3 (8.6)	17.7 (3.2)	1C	-	2K
Cottontail rabbit (<i>Sylvilagus floridanus</i> .)	23 (4.1)	2 (5.5)	11.8 (2.1)	3R	1BB	6K
Cow (<i>Bos taurus</i>)	4 (0.7)	1 (2.8)	59.9 (10.9)	2R	-	2K, 2S
Pig (<i>Sus scrofa</i>)	30 (5.3)	1 (2.8)	126.9 (23.0)	8R, 4C	1BB, 1BC	1K
Sheep/Goat (<i>Capra/Ovis</i> sp.)	1 (0.2)	1 (2.8)	19.8 (3.6)	1C	-	-
Sheep/Goat/Deer (<i>Capra/Ovis/Odocoileus</i> sp.)	1 (0.2)	-	3.2 (0.6)	1R	-	-
Large mammal	101 (17.8)	-	194.1 (35.6)	21R, 2C	1BB, 24BC	6K, 1CH, 6S
Small mammal	26 (4.6)	-	2.1 (0.39)	-	-	-
Unidentifiable mammal	2 (0.3)	-	0.3 (0.06)	-	1BC	-
Duck (Anatinae)	1 (0.2)	1 (2.8)	0.4 (0.08)	-	-	-
Passenger pigeon (<i>Ectopistes migratorius</i>)	4 (0.7)	2 (5.5)	0.8 (0.16)	-	-	-
Crow (<i>Corvus brachyrhynchos</i>)	1(0.2)	1 (2.8)	1.1 (0.2)	-	-	-
Perching bird (Passeriformes)	3 (0.5)	1 (2.8)	0.3 (0.06)	-	-	-
Chicken (<i>Gallus gallus</i>)	20 (3.5)	2 (5.5)	34.6 (6.3)	7R, 1C	2BB	4K
Turkey (<i>Meleagris gallopavo</i>)	2 (0.3)	2 (5.5)	4.0 (0.7)	2R	-	-
Grouse, Chicken, Turkey (Galliformes)	22 (3.9)	-	9.3 (1.7)	7R	-	1K
Large Bird	137 (24.2)	-	19.1 (3.5)	7R, 2C	-	-
Unidentifiable bird	18 (3.2)	-	4.4 (0.8)	1R, 2C	-	-
Turtle (Emydidae)	5 (0.9)	1 (2.8)	2.4 (0.4)	-	-	-
Redhorse (<i>Moxostoma</i> sp.)	2 (0.4)	1 (2.8)	0.5 (0.1)	-	-	-
Basses, Sunfishes (Perciformes)	3 (0.5)	1 (2.8)	0.3 (0.06)	-	-	-
Unidentifiable fish	9 (1.6)	-	0.8 (0.16)	-	-	-
Unidentifiable vertebrate	49 (8.7)	-	8.5 (1.5)	2R	1BC	-
TOTAL	567 (100.0)	36 (100.0)	550.9 (100.0)	63R, 13C	5BB, 27BC	23K, 1CH, 8S

*R = Rodent gnawed, C = Carnivore gnawed, K = Knife cut, CH = Chop cut, S = Saw cut, BB = Burnt black. BC = Burnt calcined.

amount of meat, marrow, and fat available from various body parts. The FUI is used here to address the possible economic value represented by these two domestic species from both time segments of site occupation (Table 9.11).

Although the sample size of pig and cow remains from the Early context is not robust (n=35), both domestic species are represented by Low and Medium utility elements. A single proximal and shaft of a pig femur is the only High utility element recovered from this assemblage. Such a pattern suggests a greater use of cheaper meat portions. However, the heavy use of pigs' head and lower legs, which is a pattern evident in the Early assemblage from 15FA290, may simply be the result of better preservation of more easily identified elements (see Reitz 1987:116).

Opossum is represented by a single vertebra. There is little direct evidence that this specimen represents a food resource procured by a resident of the site. However, the vertebra is the only opossum element recovered from Feature 44, located at the bottom of the eastern chimney base. A greater number of opossum bones would be expected if the individual expired near or within this feature. The numerous rat bones (n=88) recovered from this feature classifies it as a major dwelling place for commensal animals. These factors offer the possibility that rats brought the opossum vertebra to the chimney base area. However, it is believed that the opossum was utilized by humans and that the remains were discarded and later scavenged by commensal rats living in Feature 44.

Wild food resources include squirrel, muskrat, and eastern cottontail rabbit. The recovery of remains from these three mammal species shows that early residents of Feature 1 exploited wild food resources. Remains of wild mammals may not all represent food resources but in fact may reflect efforts to participate in

Table 9.11. Food Utility Indices (FUI) Generated for Cow and Pig Remains from the Early and Middle-Late Faunal Assemblages at 15FA290. Percentages for each taxon in each segment are shown in parentheses.

Species	Early Segment			Middle-Late Segment			Total
	Low Utility	Medium Utility	High Utility	Low Utility	Medium Utility	High Utility	
Pig (N=41)							
Head	11			1			12
Axial		3			2		5
Forequarter					2		2
Hindquarter			1		1		2
Feet		15		5			20
Subtotal	11 (36.7)	18 (60.0)	1 (3.3)	6 (54.5)	5 (45.5)		41
Cow (N=7)							
Head	1			1			2
Axial		2			1		3
Forequarter		1					1
Hindquarter							
Feet	1						1
Subtotal	2 (40.0)	3 (60.0)		1 (50.0)	1 (50.0)		7
TOTAL	13	21	1	7	6	0	48

the fur market (Allgood 2006: 36). The right and left mandibles of a muskrat from Feature 44 exhibit slight transverse knife cuts along the chin area likely the result of removing the pelt by way of the snout. However, the pelt was also likely removed if the animal was eaten as food, so participation in the fur market is speculative.

Rat is one of several commensal species represented in the Early assemblage. This taxon includes 89 specimens, 88 of which were derived from Feature 44 below the collapsed east chimney base. The MNI of rat is 13 based on the number of right tibiae. The frequency of rat remains suggests the human inhabitants were possibly infested by these commensal individuals. The remains of these individuals all appear to be the Norway rat (*Rattus norvegicus*). This rat species is closely associated with people and structures, tending to burrow along foundations and under rubbish piles and feeding on anything edible (Burt 1976:195).

The eastern mole is also a commensal species represented by one tibia specimen. Interestingly, this tibia has markings diagonally across both sides of the bone that are the remnants of cuts or scrapes. It is believed these markings were caused by a scissor-jaw trap used in capturing the mole. The possibility that these marks were made by a trap suggests moles were also a pest species that infested the site while it was occupied.

The Early segment faunal assemblage includes a variety of wild, domestic, and commensal bird species. Chicken is represented by 20 specimens. The MNI is two based on the frequency of the right tarsometatarsus; one of these bones has a spur, indicative of a male. Turkey is represented by two specimens, with a MNI of two. Galliformes, the taxonomic order that includes grouse, chickens, and turkey, is represented by 22 specimens. No MNI is calculated for this order because it could not be determined if elements would be from a chicken or turkey already counted. Another aspect of these remains is the high number of subadult bones, most of which came from Feature 44. Measuring the long bone lengths did not permit embryonic turkey bones to be distinguished from those of newly hatched chicken (Church and Johnson 1964). Interestingly, Feature 44 contained the greatest amount of egg shell recorded for the site (n=121, 5.0 g). Based on their shape, the egg shells are from chicken or larger-sized birds. Their exterior characteristics fit well within the description of turkey eggs presented by Shufeldt (1912:209) who concludes “the eggs of tame and wild turkeys are indistinguishable”.

Passenger pigeon is represented by four specimens, giving a MNI of two. Passenger pigeon, though it may have been considered a nuisance species, is considered here as an intentionally procured wild game bird.

Duck is represented by one specimen from a mallard-size duck, providing a MNI of one. Like passenger pigeon, duck is also viewed as a wild game animal taken for food.

Crow is most likely a commensal taxon. It is represented by one ulna (MNI=1). Perching birds also are considered commensal, and they are represented by three specimens that could not be identified to genus. The MNI for perching birds is one.

A total of 14 fish specimens represent one of two aquatic resources recovered from early 19th century contexts at 15FA290. The fish remains consist of two redhorse specimens and three specimens identified only to the taxonomic family of bass/sunfish. Remains of water turtle represent the other aquatic resource recovered from this temporal segment. These specimens consist of shell, vertebra, skull, and mandible fragments from a turtle other than a softshell (*Trionyx* sp.) or snapper (*Chelydra* s.). The presence of fish and water turtle resources is seen as further evidence for extraction of wild animal resources by the early residents of 15FA290.

Modifications to bone take a variety of forms. A total of 76 specimens (13.4 percent) from the Early segment faunal assemblage had gnaw marks. Sixty three of these have rodent gnaw marks. Of these, 62 are from Feature 44 and one is from Feature 20; all are interior to the house. Thirteen bones show evidence of carnivore gnawing; again, all but one of these specimens is from Feature 44, interior to the house. The remaining carnivore-gnawed specimen is from Feature 19, exterior to the house near the cistern. The carnivore-gnawed bone is most likely from dogs but other animals such as opossum, raccoon, and skunk could have gnawed some of the bone. Only one bone shows both rodent and dog gnaw marks. The high frequency of rodent-gnawed bone suggests that rodents had more access to bone than any dog that may have lived at the site. Rodents were likely living at the site while it was occupied, which is consistent with the high degree of bioturbation observed in floor accumulation strata (see discussion in Chapter 7 of Test Units 12 and 13) and in subfloor pits (see feature descriptions in Chapter 7). A total of 37 specimens (5.7 percent of the Early faunal assemblage) showed evidence of burning. Most (n = 32) are burnt calcined while only five are burnt black.

The butchered bone within this context totals 32 specimens by count or 5.7 percent of this faunal assemblage. Butchered bone exhibited 23 knife cuts (21 from bones in Feature 44; one each in Features 5 and 47), eight saw cuts (all from Feature 44), and one chop cut probably made by a heavy cleaver (Feature 44). Only three of the eight saw-cut specimens appear to be done by hand. Saw-cut bones are represented by specimens with one saw-cut end or specimens with both ends saw-cut in a parallel orientation and separated by various measured bone lengths (referred to here as parallel-cut bone). Four specimens are classified as parallel-cut bone. These include two scapulae, one identified as cow and the other as large mammal, one vertebra from a large mammal, and one long bone from a large mammal.

The length of bone between parallel saw cuts ends can reveal the bone cut portions utilized by occupants of a site. All the parallel-cut bone from the Early assemblage is less than 2 cm between the cuts. Long bones cut at this thickness represent round cuts on long bone from cow or pig. The scapula sections likely represent shoulder roasts, while the vertebra section likely represents a loin cut.

Faunal Remains from Middle and Late Contexts

The faunal assemblage attributed to the Middle and Late segments of occupation at 15FA290 came from Features 18, 32, 38, 40, 41, and 50 (see Table 9.9) and consists of 121 specimens, weighing 210.1 g (Table 9.12). Within this assemblage 33 specimens (27.3 percent) were identified to order, family, genus, or species while 88 (72.7 percent) were identified to only class or above. This is a smaller assemblage than the Early segment faunal remains, and comparison of the two assemblages offers some challenges.

The Middle-Late assemblage by NISP consists of 75 mammal (62.0 percent), 26 bird (21.5 percent), one fish (0.8 percent), 18 unidentifiable vertebrate (14.9 percent), and one freshwater bivalve (0.8 percent).

Table 9.12. Faunal Remains from Middle and Late Segment Feature Contexts at 15FA290. Numbers in parentheses are percents of each column.

Species	NISP	MNI	Weight (g)	Gnawed*	Burnt*	Cut*
Squirrel (<i>Sciurus</i> sp.)	1 (0.8)	1 (9.1)	0.2 (0.1)	-	-	-
Rat (<i>Rattus norvegicus</i>)	10 (8.3)	2 (18.2)	2.4 (1.1)	2R	-	-
Muskrat (<i>Onadatra zibethica</i>)	1 (0.8)	1 (9.1)	0.3 (0.1)	-	-	-
Cottontail rabbit (<i>Sylvilagus floridanus</i>)	1 (0.8)	1 (9.1)	1.3 (0.6)	1R	-	-
Cow (<i>Bos taurus</i>)	2 (1.7)	1 (9.1)	34.0 (16.2)	-	-	1S
Pig (<i>Sus scrofa</i>)	11 (9.1)	1 (9.1)	108.2 (51.5)	4R	-	2K, 1S
Large mammal	45 (37.2)	-	40.0 (19.0)	11R	1BC	2CH, 2S
Unidentifiable mammal	4 (3.3)	-	2.5 (1.2)	2R	-	-
Chicken (<i>Gallus gallus</i>)	3 (2.5)	1 (9.1)	3.8 (1.8)	1R	-	-
Turkey (<i>Meleagris gallopavo</i>)	2 (1.7)	1 (9.1)	11.6 (5.5)	1R	-	1K
Grouse, Chicken, Turkey (Galliformes)	2 (1.7)	-	0.2 (0.1)	-	-	-
Large bird	8 (6.6)	-	2.1 (1.0)	3R	-	1K
Unidentifiable bird	11 (9.1)	-	0.8 (0.4)	-	-	-
Unidentifiable fish	1 (0.8)	1 (9.1)	0.1 (<0.1)	-	-	-
Unidentifiable vertebrate	18 (14.9)	-	2.5 (1.2)	1R	-	-
Unidentifiable freshwater bivalve	1 (0.8)	1 (9.1)	0.1 (<0.1)	-	-	-
TOTAL	121 (100)	11 (100.0)	210.1 (100.0)	26R	1BC	4K, 2CH, 4S

*R = Rodent gnawed, C = Carnivore gnawed, K = Knife cut, CH = Chop cut, S = Saw cut, BC = Burnt calcined.

The MNI is 11, represented by one or two individuals each of squirrel, rat, muskrat, rabbit, cow, pig, chicken, turkey, fish, and freshwater bivalve (Table 9.12). One difference between the Early and Middle-Late assemblages is the lower MNI in the latter group. However, much of this difference is due to the lower numbers of rat in that group, while rat dominated the MNI count for the Early assemblage. If species richness alone is considered, the assemblages are more comparable. The Early assemblage includes 20 taxa identified more finely than class, while the Middle-Late assemblage has 10 taxonomic groups. Even in this smaller assemblage there is a relatively high diversity of taxa that includes a broad range of domestic species, wild taxa, and commensal taxa. All of the taxa identified in the Middle-Late assemblage are also present in the Early assemblage except for the freshwater mussel. The species present in the Early assemblage that are not included in the Middle-Late assemblage are mainly commensal and fish taxa. Thus, in terms of principal food sources represented, the two assemblages are generally comparable.

Cow remains from Middle-Late contexts total two specimens representing a MNI of one. Pig, consisting of 11 specimens from this set of features, is also represented by a single individual. As with the cow and pig remains from the Early segment, the 13 cow and pig specimens from the Middle and Late segments are represented by low- and medium-utility elements (see Table 9.11). This later segment, however, contains no high-utility elements and has a lower proportion of medium-utility elements (especially of cow) compared to the Early segment. Although the sample size of this later assemblage is too small to make substantive conclusions, this general FUI pattern suggests that cheaper meat portions tended to be selected more often by site occupants regardless of temporal period, and that this trend was even more pronounced in the Middle-Late segments of site occupation. However, the overall FUI values represented in the frequency of pig and cow elements shows only slight change through time.

Squirrel, muskrat, and rabbit represent three wild mammal species recovered from this set of features. Each is represented by a single specimen with a MNI of one. These specimens likely represent wild taxa taken as food resources to supplement domestic species. Another explanation for the presences of these species within the assemblage, especially muskrat, may also be that they were utilized in the fur market.

Rat is the only commensal species represented in the Middle-Late faunal assemblage. In contrast to the Early assemblage, rat from Middle-Late contexts are represented by lower numbers of specimens (NISP=11) and lower MNI (n=2). Rats might not have been as much of a nuisance for the site inhabitants in these later segments of site occupation, and this may relate to changing patterns of refuse disposal.

Chicken and turkey were the two bird species positively identified from the Middle to Late features at 15FA290. Chicken is represented by three specimens comprising a single individual. Turkey is represented by two specimens, also comprising a single individual. Galliformes, the order that includes grouse, chickens, and turkey, is represented by two specimens, both of which are subadult bones. The MNI is not calculated for this order. The immature nature of these galliform bones suggests that they may have come from earlier contexts that became mixed with later deposits through bioturbation or human activities.

A single fish specimen represents one of two aquatic resources recovered from Middle to Late feature contexts. Utilization of fish is also seen as an aspect of supplementing domestic animal foods with wild taxa. A single freshwater bivalve shell fragment was also recovered from Middle-Late contexts. It is difficult to determine if inhabitants of 15FA290 used mussels as food resources. Freshwater bivalves were extensively used as a food resource during the prehistoric period (Parmalee and Klippel 1974). During the historic period, freshwater mussels were generally not used as food, but were more often collected to “acquire...shells as raw material for shell buttons or in hopes of obtaining freshwater pearls” (Barnstner and Martin 1987:313). Bivalves could also have been used for fish bait, as a food source for pigs, or as crop grinding stones for chickens or turkeys.

Twenty-six specimens (19.8 percent) from the Middle-Late assemblage were identified with rodent gnaw marks (see Table 9.12); no remains showed carnivore gnawing. Most of the rodent-gnawed bone came from Feature 41 (n=13) and Feature 50 (n=7), and only Feature 18 had no rodent-gnawed bone. The presence of gnawed bone indicates that rodents had access to bone in subfloor locations or were able to carry bone to these locations. The lack of carnivore-gnawed bone suggests that if dogs lived on site they were given few if any bones. From the lower incidence of gnawed bone we can also surmise that most of the remains derived from Middle-Late segment occupation were discarded remote from the excavated portions of the site. Otherwise a greater amount of gnawed bone would have been recovered from subfloor contexts.

Only a single burnt specimen, 0.8 percent of the assemblage, came from Middle-Late feature contexts (Feature 41). The low incidence of burnt bone likely signifies burning of bone refuse off-site rather than the actual absence of bone burning by the site inhabitants.

The butchered bone identified in the Middle-Late context assemblage consists of 10 specimens or 8.3 percent of this faunal assemblage. This includes four bones with knife cuts, four with saw cuts, and two with chop cuts. None of the saw cuts appear to be executed by hand. Two of the saw-cut elements are unidentifiable large mammal fragments, one is a scapula portion from a pig, and the fourth is a cow pelvis portion that is parallel-cut in a 10.5-cm thick section. Some knife cuts are also present on this specimen. The pelvis section likely represents the remains of a rump roast with knife cuts resulting from carving the meat from the bone.

Interpretations and Discussion

The faunal remains recovered from Phase II/III archaeological investigations at 15FA290 indicate that pig, based on count and weight, was the most common domestic meat source used during both Early and Middle-Late occupational segments. Based on the weight of remains, cow represents the second most common domestic meat source used at the site. However, a variety of other animals were used (presumably) as food sources, and comparison of various taxonomic groups may provide information on the economic standing of the site inhabitants at different segments of the site’s occupational span.

The taxa documented in these assemblages offer insight into the frequency of wild versus domestic animal types utilized by the people at 15FA290 (Table 9.13) as well as the types and frequency of animals existing at the site without consent of the human inhabitants (commensal taxa). Most of the latter are small-bodied animal species whose presence may be easily explained by their attraction to refuse discarded by the human inhabitants (Reitz and Wing 1999: 115). The commensal animals identified at 15FA290 consist of eastern mole, European rat, crow, and perching birds. The domestic species consist of cow, pig, sheep/goat,

Table 9.13. Faunal Groups from the Early and Middle-Late Faunal Assemblage at 15FA290.

Fauna Type	Early		Middle to Late	
	NISP (%)	MNI (%)	NISP (%)	MNI (%)
Wild	58 (27.8)	13 (38.2)	4 (12.1)	3 (33.3)
Domestic	57 (27.3)	6 (17.7)	18 (54.5)	4 (44.4)
Commensal	94 (44.9)	15 (44.1)	11 (33.3)	2 (22.2)
TOTAL	209 (100.0)	34 (100.0)	33 (100.0)	9 (100.0)

Table 9.14. Proportions of Wild and Domestic Faunal Groups in Faunal Assemblages at 15FA290. Commensal taxa have been removed from totals.

Fauna Type	Early Segment			Middle to Late Segment		
	NISP (%)	MNI (%)	No. of Taxa	NISP (%)	MNI (%)	No. of Taxa
Wild	58 (50.4)	13 (68.4)	9	4 (18.2)	3 (42.9)	4
Domestic	57 (49.6)	6 (31.6)	5	18 (81.8)	4 (57.1)	4
TOTAL	115	19	14	22	7	8

chicken, and turkey. The turkey is classified as domestic, though this assignment is not certain for this assemblage. Wild taxa consist of all identified species not considered domestic or commensal. This includes opossum, squirrel, muskrat, rabbit, duck, passenger pigeon, turtle, and fish.

There is both a greater variety of commensal taxa identified in the Early assemblage than in the Middle-Late assemblage as well as a greater numbers of these taxa in Early contexts. For the Middle-Late assemblage, the commensal animals include only the European rat, while rat, mole, crow, and perching birds are present in the Early assemblage. Possible explanations for this decrease include the effects of smaller sample sizes and possible changes in local habitat richness through land clearing, potentially resulting in a diminished frequency of local native terrestrial species.

The relative frequency of wild food resources in these assemblages is used here as a proxy indicator of the economic standing of the site inhabitants. Higher proportions of wild taxa would suggest that the site occupants were of lower economic standing because they relied on wild taxa to a greater degree to supplement the available domestic taxa. Taking commensal species out of the calculations because they are not food resources, and assuming that all wild taxa do represent food resources, produces the summary information shown in Table 9.14. The MNI of wild taxa from Middle-Late feature contexts (n=3) is much lower than the MNI for wild taxa from early contexts (n=13) at 15FA290 (see Tables 9.13 and 9.14). The percentage that is classified as wild taxa is still fairly high (42 percent; see Table 9.13), which suggests continued reliance on wild resources for food. However, NISP for wild animals decreases to only about 18 percent of the Middle-Late assemblage, and the number of wild taxa decreases from 9 to only 4 (rabbit, muskrat, squirrel, and fish) in the later assemblage. By these measures, reliance on wild animals apparently decreases significantly through time.

The Early assemblage contained only one specimen identified as sheep/goat. The low incidence of such remains suggests that sheep/goat did not play a significant role in the diet of the site occupants. Explanations for this low incidence include use of these animals for reasons other than for food (e.g., wool production), which would likely reduce the frequency of their remains in the faunal assemblage. The greater labor requirements for upkeep of these species compared to the relative ease in maintenance of pigs may also have selected against the use of sheep/goat as a food resource on Kentucky farms in general (Peres 2003b:24).

The recovery of passenger pigeon from the site offers a chance to briefly examine the natural history of this extinct species to help determine its placement within the faunal assemblage from the site. Facts most notable about passenger pigeons concern their amazingly large recorded populations and the relative ease of obtaining this species as a food resource. One major account was made by James Audubon in the early 1830s:

I have commenced my description of this species with the above account of its flight, because the most important facts connected with its habits relate to its migrations. These are entirely owing to the necessity of procuring food, and are not performed with the view of escaping the severity of a northern latitude, or of seeking a southern one for the purpose of breeding. They consequently do not take place at any fixed period or season of the year. Indeed, it sometimes happens that a continuance of a sufficient supply of food in one district will keep these birds absent from another for years. I know, at least, to a certainty, that in Kentucky they remained for several years constantly, and were nowhere else to be found. They all suddenly disappeared one season when the mast was exhausted, and did not return for a long period. Similar facts have been observed in other States.

Before sunset I reached Louisville, distant from Hardensburgh fifty-five miles. The Pigeons were still passing in undiminished numbers, and continued to do so for three days in succession. The people were all in arms. The banks of the Ohio were crowded with men and boys, incessantly shooting at the pilgrims, which there flew lower as they passed the river. Multitudes were thus destroyed. For a week or more, the population fed on no other flesh than that of Pigeons, and talked of nothing but Pigeons.

It is possible then that at least the early inhabitants of 15FA290 also hunted passenger pigeons during periods when the bird was abundant and easily procured. It is interesting to note that no passenger pigeons were identified from the Middle-Late assemblage. The absence may be due to smaller sample sizes for the later assemblage or the variations in population sizes and regional abundance of passenger pigeons.

Domestic animals identified in the assemblage include cow, pig, sheep/goat, chicken, and turkey. Four of these are present in both analyzed assemblages, with only sheep/goat missing from the later suite of remains. Chicken and turkey would have provided the largest amount of meat to the site inhabitants based on the MNI represented in these assemblages. However, both of the faunal assemblages are relatively small, and only single pig and a single cow are identified for each time period. Presence of hand-sawed bones in the Early assemblage suggests that site inhabitants may have been conducting at least some of their own butchering; the later assemblage lacks evidence of hand-sawed bones. Another possible proxy indicator of economic standing is the type of meat cuts represented by butchered bones. Unfortunately, both the Early and Middle-Late assemblages are too small to address this question with confidence. Butchered remains from the Early assemblage include round cuts from a long bone, two shoulder roasts, and a loin cut, all from cow, pig, or unidentifiable large mammal. The Middle-Late assemblage includes a shoulder roast portion from a pig and a large rump roast portion from a cow. The large rump roast and absence of hand-sawed bones suggest that the economic standing of the site inhabitants, particularly engaging in the local market economy, may have increased through time. However, this interpretation is based on only a single element, and it runs counter to interpretations based on the ceramic data and on documentary/archival evidence.

Overall the pattern of animal use identified within both analyzed faunal assemblages from 15FA290 appears to fit within the social and agricultural complex termed the Upland South cultural tradition. The Upland South cultural tradition was a term coined originally by geographers to describe the agricultural characteristics of the Kentucky bluegrass and the Nashville basin. This tradition stemmed from a “western expression of the fusion of agricultural elements contributed from the general areas of southeastern Pennsylvania and tide water Virginia (Mitchell 1972: 741). Peres (2003b: 23) following others (O’Brien and Majewski 1989, Tuma 2002) described this tradition as including:

the cultivation of corn, wheat, and rye, and an emphasis on pig and cattle husbandry. One of the principal traits for the Upland South tradition is an emphasis on pork consumption versus beef ... along with the presence of various s local wild animals...[Furthermore,] this diversified farming and hunting complex allowed farmers to be relatively self-sufficient.

Self-sufficiency can be viewed as a response to environmental conditions, geographic settings, or economic conditions that restrict access to market faunal resources (Reitz 1987:116, Peres 2003b:35). Although comparison of the two assemblages is hampered by their small sample sizes, the human inhabitants for both time periods appear to have followed a similar pattern of animal resource exploitation.

The zooarchaeological information concerning the frequency of domestic and wild animals from 11 historic sites in Kentucky is used here to compare the frequency of such species in the assemblage from 15FA290 (Table 9.15). To enhance comparability, only faunal assemblages recovered from house and farmstead sites were examined. Although some faunal assemblages did contain remains from horse, cat, or dog, these species were not tabulated because they are considered here as nonfood resources. This view is supported by the lack of specimens that exhibit butcher marks or burning. Furthermore, this comparison applies counts and percentages of NISP and MNI (if available) from home and homestead sites dating from the late 18th to the mid-20th centuries. This covers the time span recognized for the occupation of 15FA290. The table also indicates whether the general type of subsistence pattern identified at the site can be described as an Upland South cultural tradition diet.

Five of the 11 faunal assemblages (Vardeman House, Cowan Farmstead, McConnell's Homestead, Armstrong Farmstead, and Duckworth Homestead) were characterized by the analysts as having a subsistence pattern following the Upland South cultural tradition diet. The percentage of wild taxa identified at these five site range from 9 to just over 30 percent. Diet type was not identified at the remaining six sites. However, the percentage of wild taxa represented at the Elijah Foley House, William Whitley site, and Johnson-Bates Farmstead all fall within the range of wild taxa percentages identified at sites characterized as following an Upland South diet tradition (Table 9.15). These assemblages therefore are interpreted as also representing an Upland South diet tradition.

The other three sites (Waveland Residence, Kinkeadtown, and Hardin Farmstead) also had no diet type assigned by the analysts, and all three have less than 9 percent wild animals in their faunal assemblages. The limited amount of wild animals at Hardin is likely due to a small or skewed sample size since the mid-19th century occupation of the farmstead included approximately 500 acres (Andrews and Fenton 2001: 118). The assemblage from Kinkeadtown, located within Lexington, Kentucky, reflects an urban subsistence practice where the "residents purchased commercially-available cuts of [meat]...from local butchers [and used] birds as a supplementary source of meat [because] local wild resources were not accessible either due to the lack of suitable local habitats or to lack of leisure time that would permit hunting or fishing" (Martin et al. 1996:Appendix 54). The position of the Waveland Residence, 3.5 km (2.2 miles) from downtown Lexington, suggests that the limited wild resources in this assemblage may be from a lack of suitable local hunting habitats near the site.

The animal use pattern documented at 15FA290 suggests the site inhabitants primarily obtained meat from pigs, cows, chicken, and turkey, supplemented by wild animals such as squirrel, rabbit, muskrat, birds (passenger pigeons and ducks), turtle, and fish (see Tables 9.10 and 9.11). The NISP wild animal percentage for the Early assemblage is almost three times the percentage identified for the Middle-Late assemblage (Table 9.14). Differences between the assemblages are likely due to sample size although local habitat changes may also be a factor.

Taken together, these attributes of the faunal assemblages at 15FA290 indicate that the site inhabitants were of modest economic standing at best, regardless of the temporal segment, and their economic standing did not significantly improve through time. Wild taxa form a significant proportion of both sub-assemblages and are consistently within the percentage recorded for sites identified as following the Upland South cultural tradition diet. The presence of large numbers of rats as commensal taxa suggests that site inhabitants were not particularly tidy in terms of their refuse disposal practices, and such tidiness might be an indicator of higher social or economic standing. Five of the 12 sites discussed here, including 15FA290, have rat (*Rattus* sp.) listed within the assemblage. The NISP frequency of rat for particular site assemblages sheds light on the degree to which the different sites possibly had the best habitat condition for rats (Table 9.16). Site 15FA290 has the highest percentage of NISP of rat, which suggests that refuse disposal patterns of the site occupants were not up to modern, or even 19th century, standards. However, the three sites with the highest rat NISP percentage are all late 18th to mid-19th century in age, while the three sites with low rat NISP percentages are all late 19th century to early 20th century in age. It is likely that changes in refuse disposal practices account for the higher or lower representation of rat in these faunal assemblages.

Table 9.15. Summary of Diet Type Based on Domestic vs. Wild Taxa Recovered from Selected Historic Farmsteads and Residences Excavated in Kentucky. US = Upland South cultural tradition diet, “?” = no diet type given in cited reference,” - “= no MNI given in reference cited.

Site (Reference)	Total NISP	Domestic		Wild		Time Period	Diet Type
		NISP (%)	MNI	NISP (%)	MNI		
Waveland Residence, 15FA177 (Walters 1985)	643	321 (98.8)	8	4 (1.2)	3	Mid-Late 19 th C.	?
Johnson-Bates Farmstead, 15JF538 (Martin 1987)	394	153 (81.8)	15	34 (18.2)	10	Mid 19 th to Early 20 th C	?
Kinkeadtown, 15FA214 (Martin et al. 1996)	2,169	808 (94.9)	42	43 (5.1)	16	Late 19 th C. Urban	?
Elijah Foley House, 15FA231 (Haskins 1998)	201	109 (90.8)	-	11 (9.2)	-	Late 19 th C.	?
McConnell’s Homestead, 15BB75 (Tuma 2002)	4,008 (Structure 1)	854 (83.6)	37	167 (16.4)	25	Late 18 th - Mid 19 th C.	US
Hardin Farmstead, 15ON55-57 (Andrews and Sandefur 2002)	502	110 (91.7)	-	10 (8.3)	-	Early-Mid 19 th C	?
William Whitley Site, 15LI55 (Linebaugh and Loughlin 2003)	917 (selected contexts)	92 (84.4)	3	17 (15.6)	7	Mid 19 th C	?
Duckworth Homestead, 15BH212 (Peres 2003a)	5,104	712 (69.1)	71	319 (30.9)	58	Late 18 th -Mid 19 th C.	US
Cowan Farmstead, 15PU234 (Peres 2003b)	966	168 (84.0)	9	32 (16.0)	7	Mid 19 th - Mid 20 th C.	US
Vardeman House, 15LI88 (Peres 2005)	1,912	619 (90.4)	11	66 (9.6)	10	Late 18 th -Early 19 th C	US
Armstrong Farmstead, 15FA185 (Allgood 2006)	9,103	1,547 (82.2)	49	334 (17.8)	49	Early 19 th C.	US

Table 9.16. Summary of Rat (*Rattus* sp.) Identified from Selected Historic Farmsteads and Residences Excavated in Kentucky.

Site (Reference)	Total NISP	NISP (%)	MNI
Johnson-Bates Farmstead, 15JF538 (Martin 1987)	394	5 (1.3)	4
Kinkeadtown, 15FA214 (Martin et al. 1996)	2,169	13 (0.6)	4
Elijah Foley House, 15FA231 (Haskins 1998)	201	4 (0.9)	1
McConnell’s Homestead 15BB75 (Tuma 2002)	4,008 (Structure #1)	460 (11.5)	52
Armstrong Farmstead, 15FA185 (Allgood 2006)	9,103	410 (4.5)	37
15FA290 (this report)	698	100 (14.3)	15

Overall the interpretations of these faunal remains from 15FA290 are generally consistent with the artifactual remains, which indicate occupation of the site by persons of modest to substantial economic means. However, the faunal remains do present trends that run counter to the interpretations based on ceramic data and archival research. Specifically, the faunal remains suggest that reliance on wild food taxa decreased in the later part of the site history, and that there was an increased reliance on market-obtained meat in Middle and Late segments of house occupancy. These trends observed in the faunal remains should be tempered by the fact that the sample sizes for both Early and Middle-Late segments are very small; larger sample sizes might present different interpretations. In addition, the faunal data should also be interpreted in the context of changes in overall market economies after the Civil War. With better transportation and meat preservation techniques available, more meat could be purchased on the market. It is perhaps significant that only meat cuts with low and medium FUI were associated with the Middle-Late assemblage. This is consistent with the interpretations of the ceramic data and the archival research, which indicate lower economic standing for site occupants in the last half of the site’s history (1850s to 1910).

The archaeological deposits themselves indicate that the house represented by Feature 1 was modest in size, and there are no major additions or modifications that could be identified archaeologically. The documentary data also support these inferences regarding the economic standing of the site occupants. Deed research indicates that the farm property associated with the Feature 1 residence was always modest in size, able to be self-sustaining but considerably smaller than many of the neighbors' holdings. In the Middle and Late segments of site use (ca. 1860 to 1910), the Feature 1 structure most likely served as a residence for renters or tenant farmers, all of whom would likely be classified as having low economic standing.

CONCLUSIONS

In sum, our investigations into the racial and ethnic identities of site occupants produced mixed results. The archaeological deposits revealed little if any patterns or contexts that were directly indicative of the racial/ethnic identities of the residents or builders of the house at 15FA290. The potential caches of isolated artifacts identified in the earliest dated deposits are more likely to be the result of accidental loss or discard rather than caching, and none revealed any information on the racial/ethnic identities of the house residents. Documentary research produced better results, but these data were not complete. Of the Early and Middle period residents, the documents only indicate that these people were white. Census documents indicated that during the Late period, the house was occupied by two African American families, (Ross and Robeson) and one family where at least the patriarch was of Irish origin (Hanly). No deposits could be specifically associated with any documented occupation episode of the house.

Investigations into the economic status of the house's residents and changes in this status through time produced better, though again mixed results. The data from the vessel consumption analysis indicates that the occupants with the highest economic standing lived there during the Early and Middle periods of the house chronology. Ceramic consumption was moderately high during this time. Features associated with the Middle-Late and Late segments of house occupation, however, show a sharp reduction in ceramic consumption, indicating a lower economic status for the residents. These economic data match well with the documentary data that indicate that from the house's construction through the early 1850s the house was owned and lived in by families that were fairly well off, being able to buy and property and own slaves. After 1854, the house was owned by persons of higher economic standing who might be considered wealthy. However, these owners did not live at 15FA290, and the site was occupied by renters or tenants, who based on the late 19th century census data, were clearly of low economic means.

The faunal analysis indicates that the residents of 15FA290 were probably participating in an Upland South cultural tradition diet. These data indicate that pig and to a lesser extent cow were the primary domesticates eaten at the site, and that these domesticated species were supplemented by wild taxa. Based on this analysis, the economic status of the inhabitants is interpreted as modest for the duration of the house occupation, and perhaps as declining in the latter half of site use. This pattern generally fits with the vessel consumption and documentary data, although the characterization of the Early and Middle period owner/residents as modest may under-estimate their economic status.

CHAPTER 10

SUMMARY AND RECOMMENDATIONS

At the request of the Kentucky Transportation Cabinet (KYTC), archaeologists from the University of Kentucky's Program for Archaeological Research (UK-PAR) completed a Phase II archaeological testing project of 15FA290, a multicomponent site (with the primary component being remains of a 19th century farmstead) located in the right-of-way and adjacent construction easement of the proposed realignment/widening of KY 922 (Newtown Pike) between the Interstate 75 interchange and Ironworks Road in Fayette County, Kentucky. The Phase II archaeological testing was conducted to evaluate the eligibility of that portion of 15FA290 that lies within the proposed construction corridor for listing on the National Register of Historic Places (NRHP). The Phase II investigations included systematic shovel test excavation, test unit excavation, mechanical removal of plow zone, and hand excavation of selected exposed features. These Phase II tasks resulted in exposure of a complete house foundation and associated features in both inner yard and outer yard settings. As a result of these findings, an on-site evaluation was conducted by staff of the Kentucky Heritage Council (KHC), KYTC, and UK-PAR. At that time, the determination was made that 15FA290 was eligible for listing on the NRHP, and that data recovery excavations (Phase III investigations) should be done to mitigate the impact of the proposed highway realignment on this portion of the site. The data recovery excavations commenced immediately, and these tasks included additional hand-excavation of test units within and adjacent to the house, mechanical removal of rubble from within the house foundation, and hand-excavation of all features exposed within the house and in surrounding inner and outer yards. This chapter presents a summary of the Phase II/III investigations and management recommendations for the site.

SUMMARY OF ARCHAEOLOGICAL WORK AT 15FA290

Archaeological work at 15FA290 began with the excavation of 28 shovel tests in an attempt to define the boundaries of a possible subplow zone midden encountered in the Phase 1 work. No midden area was documented, leading us to conclude that there were at best only small patches of intact subplow zone deposits remaining on the site. Shovel tests were followed by hand-excavation of ten 1-x-1-m test units. Recovered artifacts suggested that the historic occupation likely terminated around the turn of the 20th century. Each test unit also produced a small number of early 19th century artifacts, indicating that occupation of the site probably began in the 1800s or 1810s. No features or architectural remains were identified in the test units, and artifact density was highly variable among test units. Following the completion of these test unit excavations, a small trackhoe with a flat-bladed bucket was used to remove plow zone sediment and expose features and architectural remains at the base of the plow zone. Three large blocks and four small strips (about 500 square meters in total extent) were placed in areas that were likely to produce architectural remains or midden deposits, based on site topography and artifact densities observed in shovel tests and test units. Mechanical removal of plow zone exposed an entry/driveway feature, scattered posts, and small midden patches. It also exposed the stone foundation of a house and the brick outline of an adjacent cistern. The house has three rooms—two larger rooms side-by-side to the east and west, each of which contained a chimney base, and a long room positioned along the north side of the East and West rooms. The house dimensions are approximately 10 m by 7.6 m. The cistern was a circular outline of brick measuring about 3.0 meters in diameter. No other architectural features, such as pier foundations for outbuildings, were documented.

After complete exposure of the house foundation and adjacent cistern outline (which were mapped in detail), additional hand excavations were conducted. Four more test units were placed within the house foundation to obtain information on the stratigraphic sequence of the interior fill and to determine if interior features were present. Two test units were also placed near the cistern where backdirt from the cistern construction had sealed a light midden containing early 19th century artifacts. Another test unit was placed in a possible trash dump area in a shallow depression/draw on the north side of the site. At least four features were documented in the test units placed in the house interior, all of which originated below a thick layer of

rubble fill containing mixed early to late 19th century artifacts. The interior features contained primarily early to mid-19th century artifacts. Heavy machinery was then used to remove the rubble fill from the East and West rooms of the house interior and expose the floor and other possible features. Interior features were added to the house foundation map, and all interior features were excavated. Many of these contained early to mid-19th century artifact assemblages, but some late 19th century features were also present. In addition, all previously documented features outside the house were excavated or sampled, including portions of the foundation builders' trench. Finally the cistern was bisected using the backhoe, and the profile was drawn and photographed. Few artifacts were recovered from the cistern, and none of them were temporally diagnostic; the artifacts in the cistern likely pertain to its final filling in the early 20th century. A total of 52 features including the house foundation (Feature 1) and cistern (Feature 24) were documented and either completely or partially excavated. No evidence was found of a detached kitchen, but this facility is probably located just outside the right-of-way and temporary easement for the project, just west of the cistern and on property owned by the University of Kentucky (Maine Chance Agricultural Farm).

SUMMARY OF ARCHAEOLOGICAL DEPOSITS

Based on these investigations, 15FA290 can be characterized as a multicomponent site with a minor prehistoric component and a primary historic occupation that dates from the early 1800s through ca. 1910. The prehistoric component of the site is represented by a low-density scatter of prehistoric lithic debitage and tools, and two ceramic sherds assignable to the Jessamine Cordmarked type, which is characteristic of the terminal Late Woodland to early Fort Ancient periods. Temporally diagnostic lithic artifacts include Kirk Stemmed and Charleston Corner notched projectile points which date to the Early Archaic period, a Saratoga Cluster and a Matanzas Cluster projectile point which date from the Middle to Late Archaic periods, and a Type 4 Fort Ancient Triangular projectile point which dates to the Late Prehistoric period. None of the diagnostic lithic artifacts were recovered from intact deposits. All but the Type 4 Fort Ancient projectile point were recovered from fill deposits inside the historic residence or from mechanical trench excavations. We suggest that these projectile points have been collected by the historic period occupants of the house. Alternatively the prehistoric use of the site may have included a series of ephemeral occupations that left little evidence in the archaeological record aside from a light scatter of lithic debitage and a few projectile points. In any event the prehistoric component of the site is minor compared to the historic occupation. The absence of intact prehistoric features or other intact prehistoric sedimentary contexts and the extremely low density of prehistoric artifacts all indicate that this component of 15FA290 is not eligible for listing on the NRHP. It does not contribute to the site's NRHP eligibility.

The historic occupation of the portion of 15FA290 within the ROW boundary comprises a historic residence and associated side yards. Documentary research and datable artifacts both indicate that the house was initially constructed during the first years of the 19th century, and was demolished around 1910. The portion of the site within the project ROW includes the foundation for a domestic residence and an adjacent cistern. The house foundation consists of dry-laid, shaped limestone blocks set into builders' trenches. The foundation comprises two rectangular rooms whose long axes are oriented roughly north south (East Room and West Room), and an integrated room along the north side of the structure (North Room) with a long east-west axis that runs the entire width of the East and West rooms, but is much narrower than either of the other rooms. Chimney bases were identified on the exterior wall of both the East and West rooms. Test unit investigations and mechanical stripping inside the East and West rooms revealed a total of 30 features, the majority of which were shallow pits filled with household refuse and ash, likely from hearth cleaning episodes. Several long, linear features in the East Room are suspected to have been related to maintenance activities possibly associated with a floor repair episode necessitated by the collapse of the East Room chimney base and surrounding flooring. Based on the morphology of the foundation and its orientation relative to Newtown Pike, we interpret the house as probably having a hall and parlor layout (East and West rooms) with an associated shed or porch (North Room), which is fairly typical of the time period. The North Room foundation is integrated with the other foundation walls, so this room was apparently not a later addition to the house plan.

On the west side of the foundation a cistern was identified during mechanical removal of plow zone. This architectural feature was lined with Portland cement and had a hemispherical brick vault. Backdirt from the cistern construction capped a remnant A horizon deposit dating to the early part of the 19th century, indicating that the cistern was a later addition, probably constructed around 1830. The cistern is the only major architectural addition identified at the site.

Other features identified in the yard areas around the foundation consisted primarily of fence posts. A possible driveway was located to the north of the foundation. This feature appears to represent late 19th century use of the outer yard area. No additional outbuildings were identified during this data recovery. Documentary evidence indicates that in 1810 other outbuilding were part of this farm, including a still-house, barn, and stable. Other outbuildings that we assume would have been present at the site, but were not identified within the project area boundary, include a detached kitchen and one or more privies. These structures are probably located outside the project area, just west of the new right-of-way for Newtown Pike.

Based on the recovery of abundant historic artifacts that span the 19th century, the presence of intact historic architectural features below the plow zone, and the presence of multiple intact features associated with specific occupation segments and specific functions, 15FA290 was considered to be eligible for listing on the NRHP. The portion of the site that lay within the proposed right-of-way and adjacent construction easement was subjected to large-scale data recovery investigations, and all known features were excavated in this portion of the site. These actions have mitigated the impact of the Newtown Pike construction on this portion of 15FA290, and no additional work is required. However, additional features are likely preserved in the unexcavated portion of the site that continues west of the current construction corridor. These features most likely include a detached kitchen and additional outbuildings, and remains of slave quarters may also be present. All of these features are probably contemporary with part or all of the temporal span represented by the residence at 15FA290, which is estimated to span from about 1803 to 1910.

SUMMARY OF RECOVERED ARTIFACTS

A total of 7,224 artifacts was recovered during this Phase II/III investigation of 15FA290, forty percent of which (n=2,918) are assigned to the Kitchen functional group. Other important functional groups represented in the assemblage include Architecture (n=2,515, 36.7 percent), Activities (n=207, 3 percent), Arms (n=39, 0.5 percent), Clothing (n=111, 1.6 percent), Furniture (n=53, 0.7 percent), Personal/Medicinal (n=89, 1.2 percent), Transportation (n=15, 0.2 percent), and Unassigned.

These artifacts are all consistent with a domestic occupation dating from the early 19th century through the early part of the 20th century. The earliest dated materials recovered at the site include creamware, pearlware, redware, early machine-cut nails and hand-wrought nails. This assemblage points to construction of the house in the early years of the 19th century with a definite construction date no later than 1818 or 1819. The artifact assemblage also indicates that occupation of the house was fairly continuous throughout the 19th century until the house was abandoned and razed in the first decade of the 20th century. While there may have been periods where the house was unoccupied during the 19th century, these periods do not appear to have been extended. Overall, the historic artifact assemblage is consistent with the date range for the house's construction and occupation that is documented in historic records.

Temporally diagnostic artifacts recovered during these investigations were used to separate the temporal span of the Feature 1 residence into smaller segments of time. An Early segment of site use reflects the time between initial construction of the house (1800s) until about 1830. The Middle segment includes the 1830s to the 1870s, while the Late segment of house chronology extends from the 1870s to its final destruction in about 1910. The artifact assemblages recovered from specific feature and excavation contexts were used to assign features to one or more of these more narrowly defined temporal segments. Subsequent analyses of material classes focused strongly on features with specific date ranges rather than the entire century of site occupation to provide the best interpretations possible regarding the site and its occupants.

SUMMARY OF DOCUMENTARY RESEARCH

In addition to the archaeological work of 15FA290, UK-PAR personnel also conducted documentary research on the site. This research showed that the land on which 15FA290 is located was part of a 2,669-acre tract granted to John Bradford in 1784. Bradford subsequently sold a 300-acre tract that included what would become 15FA290 to Samuel Beeler in 1795.

Newspaper notices suggest that Beeler may have constructed the house at 15FA290 and lived there as early as 1803. From the early 1800s through 1854 the house was occupied by a series of owner/occupants including Beeler, Richardson Allen and his family who acquired the site in 1806, and John Estill and his family who resided at the site from 1830 until 1854.

After 1854 the site was owned by a series of wealthier individuals who apparently used the house as a rental or tenant property while living elsewhere. These owners include Alexander Brand who purchased the property in 1854, William Cromwell who acquired it in 1867, Cromwell's daughter Nannie C. Huguey who purchased the property from her father in 1890, and Milton Young who acquired it in 1900. None of these owners is likely to have ever actually lived at the property. Unfortunately the records of who rented or lived as tenants at the house are erratic and incomplete. Three tenant occupants could be documented at the site through census records, including the Zachariah Ross family who lived there in 1870, the Thomas Hanly family who was in residence in 1880, and the William Roberson family who lived at the house in 1900. The census data indicate that these tenants were of relatively meager economic means, being employed as farm hands and laborers. In addition, census data indicate that the Ross and Roberson families are African-American, while Thomas Hanly was an Irish immigrant. In 1908 Charles Schaffer acquired the property and incorporated it into the larger McGrathiana Stud Farm. The house at 15FA290 was probably razed around 1910.

SITE STRUCTURE AND USE OF 15FA290

Our analysis of the layout and use of 15FA290 was constrained because the entire site was not excavated. The project area boundaries constrained our investigations to a 42-m wide corridor. Fortunately this corridor included the residence and cistern as well as portions of side yards. Unfortunately no other outbuildings were located in this area. The site continues west beyond the project area, and we suspect the remains of other outbuildings, including a probable detached kitchen, are located in this portion of the site. Based on the orientation of the foundation we suggest that the house would have faced south towards Lexington. The foundation remains indicate that no major structural changes were made to the house during its entire span of occupation. The cistern appears to have been a slightly later addition. Based on its stratigraphic relationship with a buried A horizon and Feature 19, we conclude that the cistern was added soon after John Estill acquired the property in 1830. Additionally a series of linear features in the East Room suggest that the floor was probably repaired, probably during the latter part of the tenure of John Estill and family. These linear features are interpreted as supports or trusses that would have been used to shore up the floor during the repair or as permanent fixtures. The cause for the floor failure is not clear, but in the same room there is evidence that the chimney may have failed. We speculate that this room may have caught fire, damaging not only the chimney base but also the floor.

Analyses of the pit features identified in the East and West Rooms of the house indicate that most were used for ash or refuse discard, and the majority date to the Early and Middle segments of the house chronology. We suggest that the early dates for these features may be indicative of a shift in refuse disposal patterns over time. We presume that later in the Middle segment and during the Late segment more discard would have occurred outside the residence. However, this conclusion is tentative since we do not have the other outbuildings or exterior midden deposits to use in comparison with the deposits from the house interior.

In terms of the overall use of the structure, the material record is consistent with the documentary data

that detail a series of shorter term occupations (none lasting longer than a generation). Presumably once a resident family left the house the majority of their usable possessions would have gone with them. Thus the material record reflects the attrition that would have occurred to a material assemblage resulting from accidental breakage through everyday use and occasional loss of smaller items.

IDENTITY AND ECONOMIC STATUS

The research topics addressed during this Phase II/III data recovery investigation relate to identification of the racial and ethnic identities of the builders and residents of 15FA290, as well as their economic standing. Broad patterns of economic change over the century-long occupation of the site were also investigated, providing context for the site interpretations. Assessing racial or ethnic identities through the material record is difficult because these aspects of identity often do not leave distinct and unambiguous material signatures. However, some historic archaeologists have been able to identify the racial and ethnic identities of past peoples through studies of cached ritual paraphernalia. Caches recovered from African or African-American slave contexts, for example, have been associated with BaKongo cosmology and ritual from West Africa (Fennel 2003). Ties to European folk magic have been identified in the form of witch-bottles, a type of sympathetic magic thought to protect a house and its occupants from evil forces.

A number of potentially cached materials were identified during the Phase II/III investigations, including a bottle from the base of a chimney, red and yellow powdered pigments, a brass locket recovered from a builders' trench, a gun flint recovered from a chimney base, and an iron knife recovered from an interior wall. Analyses of these materials and their contexts indicate that in most cases the contexts in which the materials were recovered were mixed or were in locations that would also be consistent with discard of refuse or accidental loss. Thus we do not consider any of these deposits to be caches, and we conclude that these deposits do not provide any data on the racial or ethnic affiliation of the house's residents or builders. Documentary research yielded better results. Census data indicate that the Late segment residents of the house included two African-American families and one white family, the head of which was an Irish immigrant. Unfortunately, our site chronology was not amenable to fine-grained divisions, and none of the Late period deposits could be confidently attributed to any particular resident. For the Early and Middle segments of the house chronology, the census data indicate that all of the residents were white, but no data relating to their ethnic backgrounds could be located. As with the later materials we were unable to attribute any archaeological deposits to a particular resident, though evidence points to the Estill tenure as the period when the cistern was emplaced and the East Room floor was repaired.

Three lines of evidence were used to reconstruct the economic status of the house's residents—documentary research, a vessel consumption analysis of recovered ceramics from dated feature deposits, and analysis of the faunal remains from selected dated features. The vessel consumption analysis suggested that the economic status of the house's residents was highest in the Early and Middle segment and was minimal in the Late segment. The data indicate that prior to the 1850s, the residents were of moderate economic means. After the mid-1800s, however, the number of vessels consumed and their relative value drops precipitously, suggesting a decline in economic status of the occupants. These data fit with the documentary research which indicated that the first three residents of the house (Beeler, Allen, and Estill) would have been moderately wealthy farmers and businessmen. After 1854, the house is sold to a series of wealthier individuals who use the house as a rental or tenant property. These tenant or renter residents, which include the Ross, Roberson, and Hanly families in the Late segment of the house chronology, were all listed as laborers or farm hands in the census, suggesting that they were relatively poor compared to the early owner/occupants. The faunal data suggest a similar pattern, though the results are not as clear. Faunal remains suggest that the residents of 15FA290 were part of the Upland South dietary tradition, with pig and cow the primary domesticated species utilized at the site. These domesticated species were supplemented with a variety of wild species that would have been hunted or trapped. The high proportions of wild species suggest that the residents were of modest means, regardless of the time period. However, the food utility indices of meat cuts suggest decline through time in the quality of meat used by residents.

Based on these analyses we interpret the Early and Middle segment occupations of 15FA290 as reflecting higher economic status, at least through the tenure of John Estill. All of the early owner/occupants had the means to buy property and own slaves, but they do not appear to have been extremely wealthy. By the Late segment the house's residents were of more limited economic means, though the absentee owners could be considered wealthy. All of the Late period tenants worked as farm hands or laborers, and would most likely be considered poor.

CONCLUSION AND MANAGEMENT RECOMMENDATIONS

This Phase II/III data recovery investigation indicates that 15FA290 was primarily a historic period domestic site that was occupied for slightly more than 100 years between ca. 1803 and 1910. The portion of the site within the project construction corridor included the foundation remains of a dwelling that was constructed during the initial years of the 19th century. Based on the foundation footprint and orientation, the house was probably a hall-parlor structure that would have faced south towards Lexington, with chimneys on the east and west gables of the house and an extra room on the north side of the house, giving access to the yards and outbuildings. The only outbuilding associated with the dwelling is a cistern which is positioned just west of the house. Based on the style of the cistern and its stratigraphic relationship to a buried A horizon remnant, the cistern appears to have been a later addition to the house most likely constructed during the 1830s. Documentary research indicates that from the time of its construction, through the mid 1800s, the house was lived in by a series of moderately well-to-do farmers and businessmen and their families. After the 1850s the house passed into the ownership of a series of wealthier nonresident owners who converted the house to a rental or tenant property. Census data show at least three renters or tenants lived in the house between 1870 and 1900. These renters or tenants were all of lower economic standing than their predecessors at the site. The house was razed sometime around 1910 after the property was acquired by Charles Schaffer and was incorporated into the McGrathiana Stud Farm.

As an archaeological site, 15FA290 has research potential because it represents a modest, rural 19th century house that did not survive into the 20th century. Because of changes in patterns of land tenure that began in the late 19th century, including the consolidation of smaller tracts of land into large horse farms in the Bluegrass region, the smaller-scale rural farmsteads that were more characteristic of the early 19th century have largely disappeared. Those that have survived have typically been houses that have been kept within a single family. Such structures present a different material record that emphasizes continuity of material culture. Site 15FA290, in contrast, presents a series of relatively short term occupations, none of which lasts longer than a generation. Thus the site presented a good opportunity to examine shifting patterns of consumption and discard through the 19th century. The archival evidence and artifactual analyses document a pattern of steady or slightly increasing economic standing of site occupants through the 1850s, followed by a decline in economic standing in the late 19th century, after the site is converted to a rental/tenant property.

Based on the presence of intact deposits and features below the plow zone, we concluded that the portion of 15FA290 located within the Newtown Pike construction corridor was eligible for nomination to the NRHP under criterion D. Because of the impacts of the proposed realignment/widening of KY 922 (Newtown Pike) a Phase III data recovery was conducted on the portion of the site within the project ROW in order to mitigate these impacts. This work was successfully completed, and this report presents the final results and analyses of this project. Because the impact of the Newtown Pike construction was successfully mitigated, no further work is required within the project right-of-way. Based on the results of these Phase III data recovery investigations, and the potential for the presence of additional features and architectural remains, we suggest that the portion of 15FA290 that lies west of the current project ROW may also be eligible for nomination to the NRHP under Criterion D. This western portion of 15FA290 likely contains the remains of a detached kitchen and outbuildings associated with the residence at 15FA290, including possible slave quarters. Additional intact deposits may also be present, including privies, refuse disposal areas, and activity areas. If future projects will impact the western portion of 15FA290, we recommend further archaeological testing to assess the potential NRHP eligibility of the remaining part of the site.

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