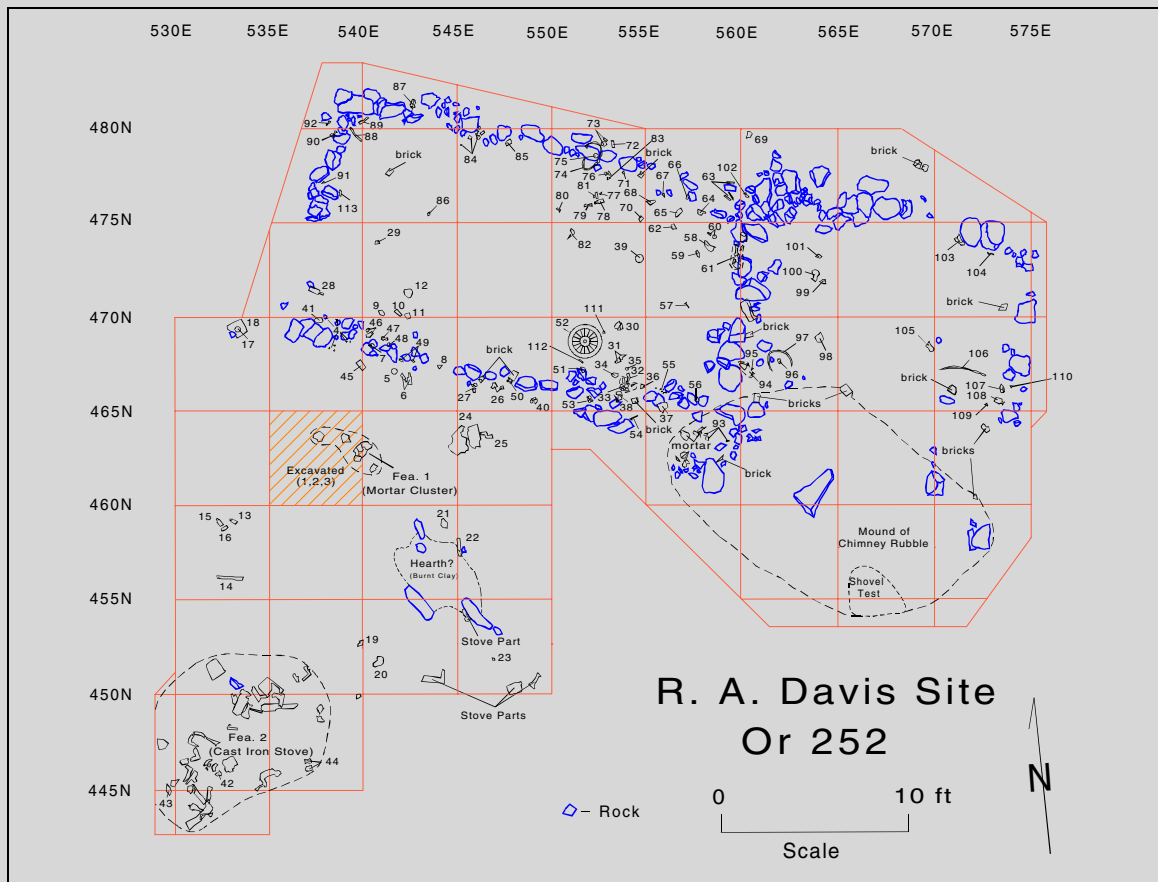


# TEST EXCAVATIONS AT SELECTED LOG CABIN SITES IN ORANGE COUNTY, NORTH CAROLINA

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Research Report No. 10  
Research Laboratories of Anthropology  
The University of North Carolina at Chapel Hill

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## **ABSTRACT**

During the summer and fall of 1992, the Research Laboratories of Anthropology, in conjunction with the Orange County Planning Department, selected three historic sites for archaeological testing. These sites were chosen from a list of historic properties inventoried during the course of an architectural survey of historic sites in the Chapel Hill Township. The purpose of the excavations was to demonstrate how archaeological methods might be useful in providing supplemental information for assessing the historical significance of standing structures, relative to criteria of the National Register of Historic Places.

## ACKNOWLEDGMENTS

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Numerous students enrolled in the Research Laboratories of Anthropology archaeological field school assisted with the fieldwork. Special thanks goes to Patty Jean Hicks, Bill Terrell, and Richard Terrell who volunteered for additional fieldwork. We also appreciate the help of Linda Carnes-McNaughton who shared her knowledge of artifact identification. Tim and Linda Phillips graciously allowed us free access to the Davis property as we interrupted their daily routines. Finally we acknowledge the generous cooperation of all the land owners—Mr. Charles W. Davis, Jr., Mr. and Mrs. John Earnhardt, and Mr. and Mrs. Clarence Drew.

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# CHAPTER 1

## INTRODUCTION

### Project Background

The Orange County Planning Department and the Research Laboratories of Anthropology of the University of North Carolina at Chapel Hill conducted archaeological tests at three historic log cabin sites located in Chapel Hill Township. The project was designed to compliment an architectural survey of the township by demonstrating the utility of archaeological methods in assessing the historical significance of standing structures and structural remains. The log cabin sites were chosen because they represent some of the oldest buildings in the township, yet are some of the most difficult structures to date relying on architectural features. They are also ubiquitous in Chapel Hill Township, comprising almost a third of the 160 properties inventoried by the survey team (Lally and Little 1992).

The significance of most sites identified during the course of architectural surveys is evaluated according to National Register Criterion (c) which is based upon factors such as distinctiveness of style, integrity of construction, and other architectural or artistic considerations within a broad historical perspective. Occasionally National Register Criteria (a) and (b) are used, if a property was associated with important historical events or the lives of individuals significant in our history. Rarely is an architectural site evaluated in terms of Criterion (d) of the Register which states that a site may be significant if it has yielded or is likely to yield information important in history or prehistory (36 CFR Part 800.1). This criterion is usually reserved to evaluate prehistoric archaeological sites; however, there is a growing concern by archaeologists that although a building's architectural integrity may be lost, important data might still be recovered through archaeological excavations. In some cases, the standing structure may be completely lost, yet buried cultural deposits could still be present that make the site significant under National Register Criterion (d). The current project was initiated with these ideas in mind, and was designed more as an experiment than as a comprehensive appraisal of all the structures inventoried during the course of the architectural survey.

The authors also believe that archaeology can often fill gaps in the documentary record. Written histories traditionally chronicle important events and the lives of the politically and socially powerful. The everyday lives of ordinary citizens are often ignored or mentioned tangentially. And more often than not, the documentary records relevant to the mainstream of society are scant and incomplete. This hiatus can often be bridged by using archaeological methods to retrieve material cultural remains and interpreting these data within an anthropological framework. In addition, archaeologists have devised very accurate methods of dating various classes of historic artifacts, particularly ceramics. These techniques can be very helpful in dating structures lacking temporally sensitive architectural features or documentary evidence of their age. They can also be used to verify or invalidate oral traditions that often comprise the history of older buildings.

Based on information provided by the architectural survey, several building sites were inspected and assessed in terms of their potential for containing buried archaeological deposits such as trash dumps, structural remains, and unmarked human graves. From this sample, three were selected for test excavations: (1) the R. A. Davis site (RLA Or 252; AH Or 494), located four miles south of Hillsborough, west of old NC 86; (2) the Lloyd-Andrews site (RLA Or 253; AH Or 414), located in the Calvander community north of Chapel Hill; and (3) the Neville site (RLA Or 254; AH Or 425), located near the intersection of old NC 86 and New Hope Church Rd. (RLA refers to site numbers assigned by the Research Laboratories of Anthropology, whereas AH refers to numbers assigned by the Division of Archives and History.) The Neville and Lloyd-Andrews sites were represented by standing log structures recorded during the architectural survey. Although several existing log buildings were recorded during the architectural survey of the Davis farm complex, the excavation site consisted of foundation remains discovered during the course of the archaeological investigation.

### **Log Cabins on the North Carolina Piedmont**

Because all of the sites chosen for investigation were log structures, a brief summary of the history of log construction is presented below. This is certainly not an exhaustive treatment of the subject, as several books have been written dealing with the origins and evolution of log cabins in North America. However, this brief narrative does attempt to present pertinent comments on size, construction techniques, and the dimensions of structural variability germane to the North Carolina Piedmont.

It has been said that without the lowly log cabin, the settlement of the eastern frontier would have been severely delayed and followed a very different course. Instead of small numbers of individual families venturing into the wilderness virtually alone, towns and cities would have to have been planned and built first in order to provide the services, tools and materials necessary for building more elaborate domestic structures. But the simple log cabin allowed anyone with an adventurous spirit to take on the challenges of the frontier. All that was needed was a sharp ax, a strong back, and a stand of tall, relatively uniform timber. Within a few days, a tight, secure, weatherproof shelter could be erected by laying horizontal logs atop one another.

Still in most cases the construction of a log cabin was a multi-family effort and often the size of the cabin was not only dictated by the size of the family needing shelter, but also by the number of neighbors whose help could be solicited during construction. Small structures of 12 ft by 15 ft could be raised to modest heights by a man and his wife; however larger units, usually 16 ft to 18 ft in one dimension, required the combined effort of several individuals. As early as 1770, some cabins were being built that measured 24 ft by 20 ft (Weslager 1969:54).

The type of logs used in construction was usually dictated by which species were close by—oak, pine, hickory, or poplar were all used if they were of the proper size. However, most builders preferred to work with a single species in the construction of each cabin. If the proper skills and tools were available, shingles were made to cover the roof. If not, sheets of bark and thatch would do. Cracks between the logs were chinked with small stones and daub, while skins

were hung on the inside walls to provide additional insulation. Sleeping lofts were common, particularly if children were part of the family (Weslager 1969:14–18).

Usually log cabins were considered by their builders to be temporary structures until a sawpit was dug or a sawmill was built. However, in many cases, even after more elaborate dwellings were constructed, the original log building continued to be used as a kitchen, barn, or storage facility. And just as often, the original building was added on to and covered over with a layer of sawed lumber. The humble cabin was then concealed within a more modernistic shell reflecting the prosperity of its owner. Windows, too, were often late additions that marked the arrival of towns, roads, and railroads on the frontier. Once transportation networks were established and towns developed, cabin construction was severely curtailed. In the Carolina Piedmont, few log cabins were built after 1890.

Historians have debated the matter of who introduced log structures to the colonies—Scandinavians or Germans. In northern Europe, log construction has considerable antiquity, dating to the Maglemosian culture of the Mesolithic period (ca. 6000 to 8000 B.C.). During this period in Denmark, southern Sweden, and northern Germany, logs with notched corners were laid horizontally to construct dwellings (Bordaz 1970:92; Wilson 1984:4). Although the tradition of log construction was widespread in Europe by the time of the colonization of the New World, the earliest colonists came from countries like France, the Netherlands, and England where log construction was not the norm. It was probably the establishment of New Sweden on the Delaware Bay in 1638 that marked the arrival of log construction technology in North America. However, because of their small numbers and isolation, the Swedish settlers had little influence on the spread of this new technology (Weslager 1971:150–202).

The latter part of the seventeenth century saw the arrival of large numbers of immigrants from what is now Germany and Switzerland who also brought with them the knowledge of log construction techniques. They settled in Pennsylvania for the most part and were soon joined by equally large numbers of Scotch-Irish immigrants. Unlike their more conservative English cousins, the Scotch-Irish quickly adapted the construction techniques of the Germans and Swiss. As hordes of these Pennsylvania settlers fanned out to the south and west along the Appalachians, the log cabin quickly became the dominate structural form everywhere except the tidewater regions along the Coastal Plain. During the middle of the eighteenth century, they begin to sprout up across the North Carolina Piedmont. By 1750, log cabins, barns, and churches were being built in what is now Orange County by the Strayhorns, Craigs, and Blackwoods who settled along the Eno River and New Hope Creek.

Although the Germans and Swiss introduced the methods and techniques of log construction, most of the floor planes were derived from the English and Scotch-Irish (Jordan 1885:12). The most popular configuration in the Mid-Atlantic region was a single-pen plan with side-facing gables. The entry door was positioned in a wall running parallel to the ridge pole. Chimneys were usually centered on the outside of a gable-end wall and made of brick, stone, logs, or a combination of these materials. Rectangular Scotch-Irish cabins are older than the square "English" single-pen structures (Glassie 1963:341–343). The long dimension of the Scotch-Irish cabins usually exceeded the width of the gable ends by at least five feet. Sometimes



these cabins were divided by an interior partition with the larger room containing the fireplace and exterior door. If two doors were used, the rear and front entryways were aligned along the same axis. This cabin form was very popular in the Blue Ridge mountains of Tennessee and North Carolina, and the northern Piedmont of North Carolina (Glassie 1968:353–355).

Although not as common, double-pen cabins also were built in the Mid-Atlantic region. Often the double pen resulted from abutting an additional room to the original single-pen house against the non-chimney side. The two pens could also be constructed in "saddlebag" fashion so that they shared a common chimney with a double fireplace. Sometimes the two pens were separated by a passageway but joined by a common roof, forming a "dog-trot" floor plan.

The construction techniques also varied considerably. Sometimes the logs were left round and simply notched with U-shaped notches. More frequently they were hewed and squared to varying degrees, and corners were formed by more elaborate notches—V-shaped, dove-tailed, or half dove-tailed, to name a few.

From this brief description, it is clear that considerable variability existed in log structures, not only in terms of floor plans and size, but also in construction techniques. Unfortunately for historians, the variability in log structures is not temporally sensitive. It is true that, as a general rule, the cruder the cabin the earlier. Cabins constructed with round logs with simple U-notches, log chimneys, and without windows or shingled roofs are usually earlier than those made from hewn logs with dovetail notches, stone chimneys, windows and shingled roofs. In some areas, rectangular cabins may predate square buildings. However, there are exceptions even to these rudimentary chronological rules. More often than not, the variability in log structures reflects the economic status, ethnicity, and skills of the builders, not when they were built (Jordan 1985:2). Thus, it is difficult, if not impossible, to architecturally differentiate most structures except in terms of rather coarse temporal categories such as "late eighteenth century" or mid-to-late nineteenth century." Hopefully, we can demonstrate in the following discussions how archaeological methods can be used to refine these chronological assessments, as well as to better understand the cultural behavior of piedmont pioneers who made these cabins their homes.

## CHAPTER 2

### EXCAVATIONS AT THE ROBERT DAVIS SITE

#### Background

The Charles Davis farm complex was chosen for investigation because it contains some of the best preserved log structures in Orange County. These consist of several hand-hewn out-buildings that once served as a kitchen, smokehouse, barn, cotton gin, and residence. Three later frame builds are also part of the complex. The residence has undergone several renovations, including the addition of two rooms to the rear of the original log structure and a porch across the front. Today the entire building is covered with aluminum siding, and there is little architectural evidence to suggest that it was once a simple log cabin. Except for the barn, which retains its original function, the other buildings are currently used primarily for storage and have been moved from their original locations.

This property is currently owned by Mr. Charles W. Davis, Jr. whose great-grandfather, J.H. Davis, constructed the original log house and associated out-buildings sometime before the Civil War. The generation before Mr. J. H. Davis went by the name "Davies" and their land holdings included the current farmstead as well as several hundred additional acres, known as the Davies Plantation, between New Hope Creek and Union Grove Church. Mr. Charles Davis, Jr.'s grandfather, Robert, was born in the log cabin in 1867 and lived there until his marriage sometime in the 1880s. After his marriage, Robert Davis built a log cabin approximately one-half mile west of the homeplace. The three oldest of eight children, including Mr. Charles Davis' father, were born in this cabin. Charles Davis, Sr. was born in 1893. With the death of his father, J. H. Davis, in 1895, Robert Davis and his family moved back to the homeplace and added the two rooms to the rear of the cabin. A well was dug adjacent to the house to replace the spring that had been supplying the family's water. Cooking facilities were moved from the detached kitchen into the house, and the old kitchen building was relocated to its present site where it later became a garage. The cotton gin was installed and became operational around 1878. The gin building also contained a flour mill. The cotton gin, flour mill, and a blacksmith shop served the New Hope community until Mr. Charles Davis, Sr.'s death in 1938.

Originally our plans were to excavate in the vicinity of the original locations of the standing structures to determine if subsurface features were present and to collect artifact samples that could be used to date more precisely the earliest activities associated with the farmstead. However, after conversations with Mr. Charles Davis, Jr. who provided the details for the family presented above, we decided our efforts might be better spent searching for the remains of the cabin his grandfather had built in the 1880s and lived in for about ten years before returning to the homeplace.

Although Mr. Davis had been told about the cabin by his father and grandfather, he had never seen it. Soon after his grandfather had moved back to the homeplace, it was dismantled and the logs and other materials were used to construct buildings elsewhere on the property.

The exact location of the cabin was unknown to Mr. Davis, but he did remember being told that it was located on a hilltop approximately one-half mile from the main house.

This then, seemed like an ideal opportunity to demonstrate how archaeology could be used to locate and assess an historical site that a conventional architectural survey is not designed to address. Consequently, three modest goals were quickly formulated. First, an archaeological survey was undertaken to find, if possible, the site of the cabin. Upon achieving this, two additional but related goals were to be implemented. These included recovering enough cultural material to confirm or reject the presumed late nineteenth century date of the cabin and assessing the site's potential for contributing to our understanding of daily life on an historic period farmstead in Orange County.

Fieldwork was conducted intermittently during June and July 1992. The excavations were directed by Daniel under the supervision of Ward. The field crew was composed mainly of undergraduate students enrolled in the Research Laboratories of Anthropology's summer field school.

### **Methodology**

With Mr. Charles Davis' help, finding the site took less than one day. Although he did not know the exact location of the cabin, he accompanied Daniel to an area on the hill where he had been told it once stood. Today, the hill is heavily forested with mixed pine and hardwoods, and is cut across by a narrow dirt road that connects with the main homeplace. Aside from the road, the forest growth had obscured any obvious indications of human activity on the hill.

A brief examination of the spot where Mr. Davis stopped along the road revealed a late nineteenth century medicine bottle. Although no further evidence of the cabin was observed, the recovery of the bottle was encouraging enough that the location was marked as a beginning point for more systematic survey. Daniel subsequently returned with two students and a rather straightforward survey strategy was adopted: the survey team slowly walked through the area paralleling the road looking for any material evidence of the cabin's location (e.g., artifacts or structural remains).

A closer examination of the area where the bottle was recovered revealed numerous outcrops of igneous rocks—an unlikely spot for a cabin. Since these outcrops were situated near the edge of the hill it was decided to follow the road east across the summit. A short time later ceramics and a few pieces of a disassembled cast iron stove were found protruding through the leaf litter just east of the outcrops. Further clearing of leaves and forest undergrowth revealed a substantial portion of a wood-burning stove and other historic artifacts.

A closer inspection of this area revealed a small mound of dirt and rocks that looked suspiciously like a chimney fall. A small hole excavated in one corner of the mound revealed burned clay, stacked rock, and mortar—confirming the location of the chimney and associated

structure. As it turned out, Mr. Davis' recollection was very accurate, as the chimney was only about 100 ft east of the spot where he originally stopped on the hill.

Despite knowing the location of the chimney, we could not initially determine the exact orientation of the cabin. The vegetation and leaf litter were so thick that the remains of the foundation were totally obscured. In fact, our first impression was that no foundation remained. It was not until a close inspection of the ground immediately around the chimney revealed a small group of stacked stones that we began to suspect any part of the cabin existed beyond the chimney. This prompted a systematic clearing of undergrowth and leaf litter, and eventually exposed the well-preserved stone foundation of a two-room structure (Figure 1). The original single-pen cabin adjoining the chimney measured 15 ft by 15 ft, whereas a larger addition off the west wall measured 24 ft by 15 ft (Figure 2).

In addition to exposing the foundation, an area of approximately 240 sq ft immediately south of the large room was raked to complete the exposure of the disarticulated cast iron stove and other associated artifacts (Figure 3). The stone foundation and all artifacts exposed as a result of raking and clearing were mapped *in situ* (Figure 4). At the end of the clearing process, over 100 artifacts had been mapped and inventoried (Figure 5).

Mapping the foundation remains and artifacts was facilitated by the placement of a grid aligned approximating magnetic north across the site. A transit and survey tape were used to place pins at five-foot intervals across the structure and cleared area. A pin placed in the road approximately 40 ft northwest of the northwest corner of the addition served as datum and was arbitrarily labeled 500 ft north, 500 ft east. All squares were designated by their southeast corner.

One square was also excavated just south of the large room. This unit (460N540E) was dug by hand and all soil sifted through a one-half inch wire mesh. Excavation of this unit revealed artifacts present in a single soil zone (Zone 1) overlying clay subsoil. Zone 1 was a very thin (circa 0.4 ft) unplowed dark brown clayey loam, containing numerous roots and small rocks. What eventually proved to be a rotted (and perhaps burned) tree stump was identified as Feature 1. It appeared as an irregularly shaped stain at the base of Zone 1 extending across the northern half of the unit. Upon excavation the pit revealed an uneven bottom defined by several root holes penetrating the subsoil. Many of these holes exhibited a brighter shade of orange than the surrounding clay subsoil. This discoloration was suggestive of burning. Several artifacts were recovered from Zone 1 and Feature 1, including sherds, brick fragments, and a hammer with a metal handle (Table 1). Although numerous artifacts were found on or near the ground surface, the results of the test pit suggest the likelihood of also finding buried subsurface cultural materials.

In sum, the fieldwork accomplished all three of its proposed goals. With only a modest amount of effort, we located and uncovered the stone foundation of a two-room structure. Based on the oral history of the property, this is the remains of the former home of Robert A. Davis. In addition, we recovered enough associated cultural material to confirm the late nineteenth century dating of the site and to assess its potential to contribute additional data pertaining to nineteenth century farmsteads in Orange County. The following artifact analyses demonstrate



Figure 1. Clearing foundation remains at the Davis cabin site. [substituted for original]



Figure 2. Cleared foundation remains of the Davis cabin.



Figure 3. Cast iron stove fragments outside the Davis cabin.



Figure 4. *In situ* artifacts at the Davis cabin. [substituted for original]

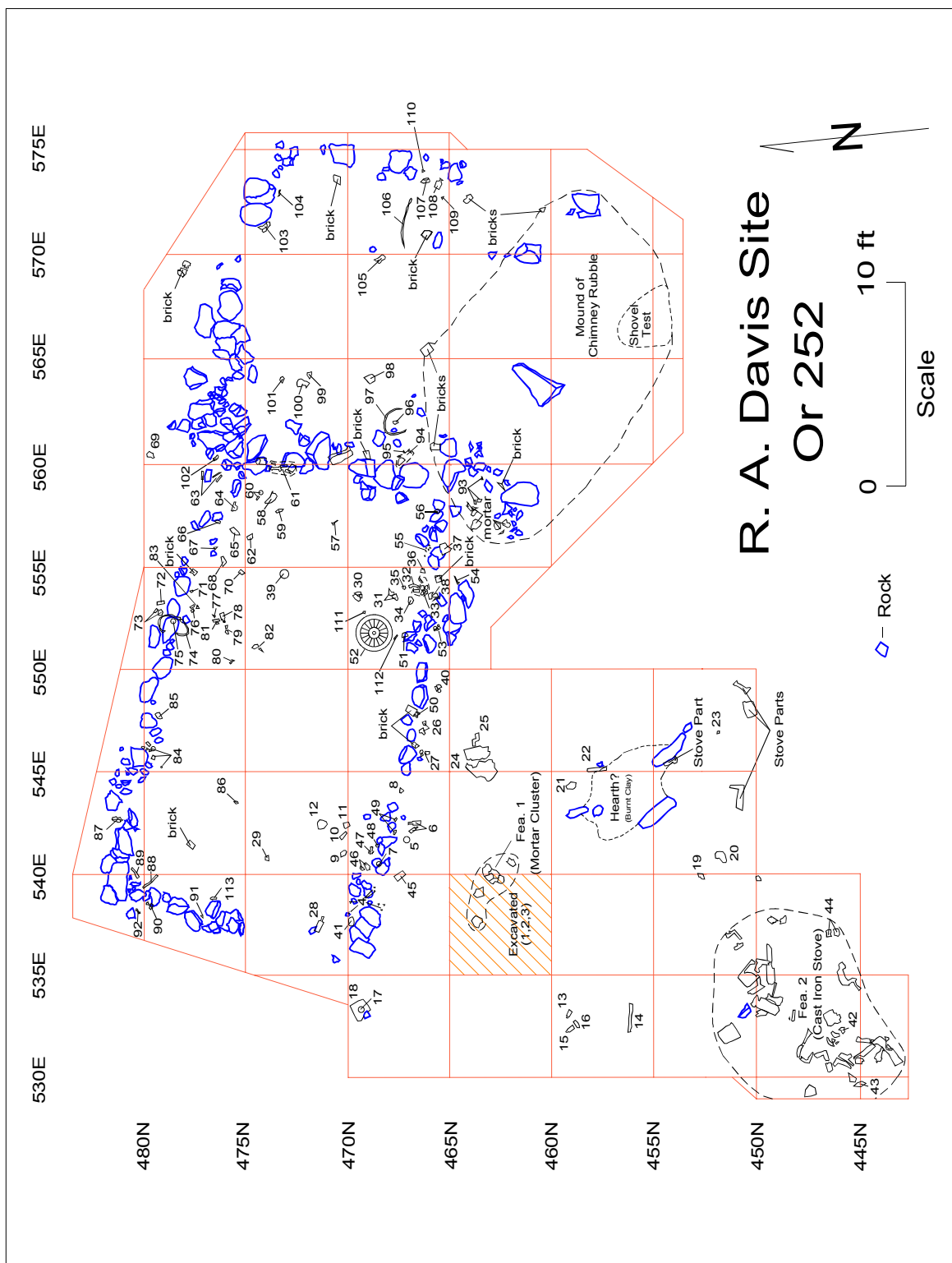


Figure 5. Scale drawing of the Davis cabin foundation with in situ artifacts plotted.

Key to Field Specimen Numbers in Figure 5.

| FS# | Description                           | FS# | Description                             |
|-----|---------------------------------------|-----|---|
| 1   | - 1 sherd                             | 58  | - 1 sherd                               |
| 2   | - 2 sherds                            | 59  | - 1 glass                               |
| 3   | - 1 sherd                             | 60  | - 1 pocket watch, 1 metal frag.         |
| 4   | - 22 glass, 1 nail                    | 61  | - 2 harmonicas, 1 knife tang?, 1 bottle |
| 5   | - 1 bottle base, 3 metal frags.       | 62  | - 1 sherd                               |
| 6   | - 2 bottles                           | 63  | - 2 metal objects, 1 spike              |
| 7   | - 1 Mason jar?                        | 64  | - 1 sherd                               |
| 8   | - 1 sherd                             | 65  | - 1 glass                               |
| 9   | - 1 sherd                             | 66  | - 1 chimney glass?                      |
| 10  | - 1 sherd                             | 67  | - 1 sherd                               |
| 11  | - 1 sherd                             | 68  | - 1 sherd                               |
| 12  | - 2 sherds, 1 ceramic leg             | 69  | - 1 sherd                               |
| 13  | - 1 medicine bottle                   | 70  | - 1 glass                               |
| 14  | - 1 metal strap                       | 71  | - 1 Mason jar frag.                     |
| 15  | - 1 medicine bottle                   | 72  | - 1 sherd                               |
| 16  | - 1 metal frag.                       | 73  | - 2 sherds                              |
| 17  | - 1 bottle base                       | 74  | - 1 metal strap                         |
| 18  | - 1 metal sheet                       | 75  | - 1 glass lid                           |
| 19  | - 1 bottle base                       | 76  | - 2 chimney glass                       |
| 20  | - 1 Mason jar base                    | 77  | - 1 marble                              |
| 21  | - 1 bottle base                       | 78  | - 1 broken bottle                       |
| 22  | - 2 glass, 1 metal strap              | 79  | - 2 sherds                              |
| 23  | - 1 glass                             | 80  | - 2 sherds                              |
| 24  | - 1 metal sheet                       | 81  | - 1 harmonica, 1 pocket knife           |
| 25  | - 1 metal hinge                       | 82  | - 2 glass, 1 nail, 1 sherd              |
| 26  | - 1 sherd                             | 83  | - 1 horseshoe                           |
| 27  | - 6 sherds, 1 shotgun shell           | 84  | - 7 sherds                              |
| 28  | - 1 medicine bottle, 1 glass frag.    | 85  | - 1 sheet metal                         |
| 29  | - 1 sherd (Sq. 470N545E, not plotted) | 86  | - 1 sherd                               |
| 30  | - 1 sherd                             | 87  | - 1 crock base                          |
| 31  | - 1 bottle base, 1 cut glass          | 88  | - 1 barrel hoop (not collected)         |
| 32  | - 3 nails, 3 glass                    | 89  | - 1 metal spoon frag.                   |
| 33  | - 13 sherds, 1 nail                   | 90  | - 1 panel bottle neck                   |
| 34  | - 1 broken bottle                     | 91  | - 1 glass                               |
| 35  | - 1 sherd                             | 92  | - 4 nails, 1 key                        |
| 36  | - 1 glass                             | 93  | - 3 sherds                              |
| 37  | - 1 sherd                             | 94  | - 5 sherds                              |
| 38  | - 6 sherds, 1 glass                   | 95  | - 2 glass, 2 tacks, 2 nails             |
| 39  | - 1 bottle base                       | 96  | - 2 glass                               |
| 40  | - 16 glass chimney frags.             | 97  | - 1 barrel hoop (not collected)         |
| 41  | - 4 glass                             | 98  | - 1 glass                               |
| 42  | - 1 sherd                             | 99  | - 1 glass                               |
| 43  | - 1 sherd                             | 100 | - 1 crock rim                           |
| 44  | - 10 mason jar frags.                 | 101 | - 1 glass                               |
| 45  | - 6 glass, 1 Mason jar frag.          | 102 | - 1 metal object                        |
| 46  | - 2 glass                             | 103 | - 1 sherd                               |
| 47  | - 1 medicine bottle neck              | 104 | - 1 metal hook?                         |
| 48  | - 1 sherd, 1 nail                     | 105 | - 1 bottle base, 1 glass                |
| 49  | - 1 glass, 1 broken file              | 106 | - 1 metal strap                         |
| 50  | - 4 sherds, 1 glass                   | 107 | - 1 sherd                               |
| 51  | - 1 Mason jar base                    | 108 | - 1 bottle                              |
| 52  | - 1 large metal gear (not collected)  | 109 | - 1 glass                               |
| 53  | - 1 chain                             | 110 | - 2 glass                               |
| 54  | - 1 spike                             | 111 | - 1 sherd                               |
| 55  | - 10 glass                            | 112 | - 1 glass                               |
| 56  | - 1 glass                             | 113 | - 1 threaded metal object               |
| 57  | - 1 spike                             |     |   |



Table 1. Artifacts From the Excavation Unit at the Davis Site.

| Provenience | Class               | Count |
|-------------|---------------------|-------|
| Surface     | Mortar              | 9     |
| Zone 1      | Brick               | 1     |
|             | Glass               | 9     |
|             | Copper              | 1     |
|             | Ceramics            | 7     |
|             | Mortar              | 1     |
|             | Sardine Can Key     | 1     |
|             | Miscellaneous Metal | 2     |
| Feature 1   | Bottle Cap          | 1     |
|             | Brick               | 6     |
|             | Glass               | 11    |
|             | Iron Hammer         | 1     |
|             | Potsherds           | 17    |
|             | Panel Bottle        | 1     |
|             | Washer              | 1     |
|             | Nails               | 22    |
|             | Miscellaneous Metal | 29    |
| Total       |                     | 120   |

how we derived the chronology of the cabin's occupation, as well as provide some insights into the behavior of its occupants.

### Ceramic Analysis

The ceramic analysis presented here integrates three levels of classification: technology, form/function, and decoration (cf. Worthy 1982). Three basic ceramic wares were identified: earthenware, stoneware, and porcelain. Technologically, late nineteenth century ceramic wares follow a continuum of variation beginning with a low fired permeable body earthenware ending with a vitrified porcelain fired under high temperatures.

Briefly, earthenwares in this assemblage were identified on the basis of their permeable body (i.e., sherd edge sticks to the tongue) and their irregularly broken edges. Moreover, sherd cross-sections exhibited a distinct boundary between the body and glaze. Finally, all earthenwares here displayed a white glaze that tended to craze (i.e., tended to break into a network of fine cracks) (Figure 6).



Figure 6. Selected ceramics from the Davis site: refitted "ironstone" cup sherds (top left); porcelain cup (top right); and refitted whiteware plate sherds (bottom).

Two types of stoneware were identified in the assemblage—a white-bodied type and an earhtone-bodied type. The white bodied type is a fine-grained vitrified pottery (i.e., the sherd edge does not stick to the tongue), with a glaze that does not craze. Although a whiteware, this pottery displays a bluish pastel tint that is distinct in comparison with the white earthenwares. Consequently, we refer to this as "ironstone" to differentiate it from the white earthenwares. (This may be similar to the porcelaineous stoneware described by Worthy [1982:337]). The earhtone-bodied stone wares, on the other hand, are usually dense, granular, and very thick in cross-section. These are usually functionally distinct from whitewares as well. In this assemblage, they include crocks and a large bowl.

The final class, porcelain, is a pottery that is white and highly vitrified so that no boundary is present between the body and glaze when viewed in cross-section. It thus exhibits a hard, very close grained texture and breaks with a conchoidal fracture. Only an isolated example is present in the assemblage.

Additional divisions within each of these categories were made based on form/functional distinctions and decoration. This technological analysis allowed questions concerning site function, temporal placement, and socioeconomic status to be addressed.

The frequencies of body type and decoration type are presented in Tables 2 and 3, respectively. The total sherd count is relatively low ( $n=115$ ) and is even less after the total is adjusted for refitted specimens ( $n=70$ ). (This count is likely even smaller since some sherds

Table 2. Ceramic Wares From the Davis Site.

| Material         | Ware           | Count | Refitted Count |
|------------------|----------------|-------|----------------|
| Coarse Stoneware | Bristol-Glazed | 1     | 1              |
| Coarse Stoneware | Salt-Glazed    | 3     | 1 <sup>1</sup> |
| Earthenware      | Whiteware      | 96    | 59             |
| Porcelain        | —              | 1     | 1              |
| Stoneware        | Whiteware      | 2     | 1              |
| Stoneware        | Ironstone      | 12    | 7              |
| Totals           |                | 115   | 70             |

<sup>1</sup>Sherds likely from the same vessel although they do not refit.

Table 3. Ceramic Wares by Decoration Type From the Davis Site.

| Material         | Ware           | Decoration                   | Adjusted Count |
|------------------|----------------|------------------------------|----------------|
| Coarse Stoneware | Bristol-Glazed | Albany Slip                  | 1              |
|                  | Salt-Glazed    |                              | 1              |
| Stoneware        | Ironstone      | Plain                        | 3              |
|                  | Ironstone      | Plain, Raised                | 4              |
| Earthenware      | Whiteware      | Overglazed Floral Green Band | 1              |
|                  | Whiteware      | Overglazed Floral, Raised    | 1              |
|                  | Whiteware      | Plain                        | 35             |
|                  | Whiteware      | Plain-Gilded, Raised         | 1              |
|                  | Whiteware      | Plain, Raised                | 17             |
|                  | Whiteware      | Gray Transfer Print          | 1              |
|                  | Whiteware      | Purple Transfer Print        | 2              |
| Porcelain        | Overglazed     | Hand-Painted Floral          | 1              |
| Total            |                |                              | 70             |

appear to be from the same vessel although they do not refit.) The small number of sherds, however, is offset by their relatively large size which, after refitting, allow many individual functional categories to be readily identified.

The predominant type in the assemblage is earthenware which constitutes 84.3 percent of the total adjusted sherd count. It is followed by stoneware at 11.4 percent, coarse stoneware at 2.8 percent, and porcelain at 1.4 percent. The large amount of earthenware (86.4 percent of which were plain white or embossed white-on-white decoration categories) likely represents "everyday dishes", less stylish and more utilitarian. The small amount of porcelain, on the other hand, suggests that it was a "Sunday" ware—used less and broken less. Moreover, given that 10 percent of the assemblage is ironstone and 3.3 percent of the earthenware have gold decorations, it is suggested that these may also represent "Sunday" or "special occasion" wares as well.

This interpretation is based on the assumption that types of wares have basic cost differences and/or status distinctions. Essentially, relative cost distinctions can be made on the basis of body type and decoration type; the softer the body type and simpler the decoration, the cheaper the product (Worthy 1982:341). Earthenware, for example, would have been cheaper than porcelain. With regards to decorations, hand-painting is more labor intensive and thus more expensive than machine applied decorations or decals. Regarding the latter, a process of cheaply decorating pottery by the use of colored decalcomania transfers was developed around 1850 (Ramsay 1939:109). In contrast, the application of a gold design adds expense to the product (Worthy 1982:342). Thus, plain or embossed white-on-white decorated earthenware would be relatively inexpensive, while hand-painted porcelain would be much more so.

There also appears to be some evidence to suggest that during the last half of the nineteenth century that undecorated (unpainted?) ironstone wares came into the market at prices comparable to transfer printed earthenwares (Miller 1980:3–4). If true, then the small percentage of ironstone in the assemblage may have status indications as well. That all the ironstone and porcelain in the assemblage are cups may suggest that the tea/coffee ware functioned more in a role of status display than plates or bowls.

In addition to cups, other different vessel forms can be recognized in the assemblage. At least 10 different plate styles were identified based on rim shape and decoration. This includes two different plain wares (i.e., white, smooth, and unadorned), five different embossed wares, one purple overglazed floral design, one plain-gilded (i.e., a whiteware with a gold design), and one ware exhibiting both an embossed design and gilding.

Additional eating vessels identified in the assemblage include two medium (soup/cereal) bowls and one small (dessert/fruit bowl). One soup bowl is decorated with a floral decal and green banding around the rim while another is a grey floral transfer print. The fruit bowl has a plain embossed design. Two other bowls include a large serving bowl and a mixing bowl; the former has an embossed rim with a flower decal, the latter is a blue sponge ware.

Drinking vessels include portions of at least six cups of five different styles. Of these only two styles are decorated. These are the porcelain and ironstone cups mentioned above.

The ironstone cups have embossed bases, one of which has an embossed handle as well. The one porcelain specimen has an overglazed hand-painted floral design. Finally, portions of two earthenware saucers are also present.

Given the rather small sherd size we are struck by the diversity of vessel types and designs present in the assemblage—particularly the plates. Given the lack of comparative data to work with, we speculate that this may reflect the nearness of the household to their in-laws on the next hill. That is, the diversity of plate styles may represent a number of "hand-me-downs" for the newly married couple from their nearby relatives, rather than discarded specimens representative of complete dish sets.

The only other food vessels recovered were two storage crocks (Figure 7, bottom). One is a bristol-glazed, albany slip stoneware body sherd, while three large sherds representing portions of the rim, body, and base of a saltglazed stoneware form the other crock (Figure 7, top). (The latter three sherds do not refit but are likely from the same crock.) The salt-glazed crock appears to be of a type that was made in the Randolph and Moore County region during the late nineteenth century (Linda Carnes-McNaughton, personal communication 1992).

The presence of both traditional (i.e., hand-made) utilitarian and machine-made stonewares is interesting. This would indicate that the shift from a reliance on local to industrial manufacture was present, but not entirely complete, for inhabitants of late nineteenth century Orange County.

The last half of the nineteenth century saw a marked shift in consumption of white domestic tablewares, although imported English pottery was still very popular (Ramsay 1939:107–115). The improved nature of American ceramic manufacturing, however, finally began to rival imported English pottery and, with the rise of many new potteries in the late 1800s, the industry as we know it today was born. In addition to improvements in production, changes in marketing also had a significant effect on the domestic consumption of tablewares in post-bellum America. For example, by the end of the nineteenth century the operation of mail-order houses was well underway and these companies made a variety of goods available to otherwise isolated consumers (Worthy 1982:342).

The proliferation of industrial produced ceramics are uniquely reflected in the presence of maker's marks on many specimens. Moreover, the use of dates of manufacture obtained from makers' marks—when combined with other artifact groups and appropriate historical documentation—are particularly useful for providing a relatively narrow time range of site occupation. Thus, while the overwhelming presence of whitewares and the complete absence of any other earlier pottery type (e.g., pearlwares) indicates a late nineteenth or early twentieth century date for the Davis cabin, the presence of at least three identified trademarks suggests more of a late nineteenth occupation consistent with the oral history of the site.

A total of five makers' marks are present in the assemblage, three of which were identified by consulting several publications. A brief description of them follows.

*Saucer With a Shield Trademark*

Two individuals stand on either side of the shield and a bird with spread wings sits atop the shield. Both the shield and figures stand on a banner labeled in what appears to be latin. The words "IRONSTONE CHINA" appear below the banner. This is the trademark of D. F. Haynes and Company established in 1879 in Baltimore, Maryland. No ending date is given (Kovel and Kovel 1953:243).

*Plate With Circle and Sign Trademark*

"ETRURIA" is printed along the inside top of the circle and "MELLOR & CO." is printed along the bottom. This is the trademark of The Cook Pottery Co., established in 1894 in Trenton, New Jersey. No ending date is given (Barber 1971:33).

*Plate With Only a Portion of a Trademark*

The identifiable portion of the trademark is similar to another Mellor & Co. mark: a combination lion, unicorn, and circle and sign trademark. This is also a trademark of The Cook Pottery Co. in Trenton.

*Saucer With a Circle and Sign Trademark*

A portion of this mark is missing and it could not be identified. "EXCELSIOR" is written inside one portion of the circle. Although no specific trademark is given, a reference to Excelsior Works in Washington County, Pennsylvania dating circa 1870–1880 is present in Ramsay (1939:206, 228).

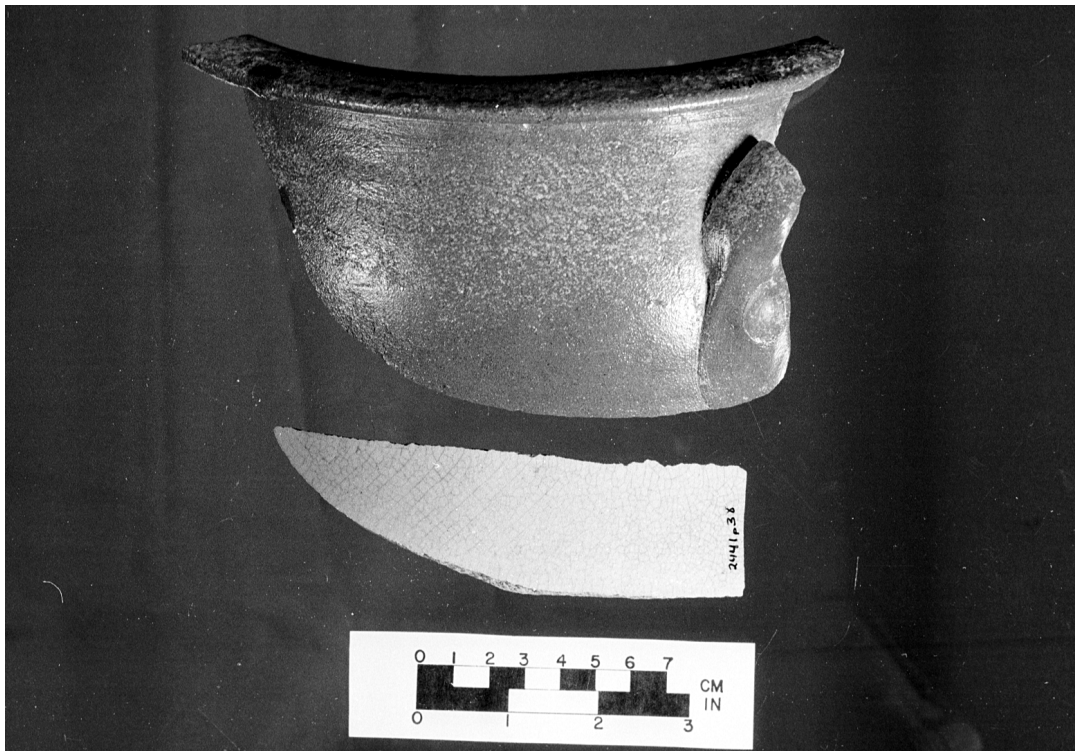


Figure 7. Stoneware crock sherds from the Davis site: salt-glazed stoneware (top) and Bristol-glazed stoneware (bottom).

### *Plate With a Portion of a Wreath (?)*

Under the wreath is a portion of a word that ends in "ANTED" (warranted?), underlain by the letter "M." Assuming, then, that there was a time lag between the manufacture and deposition of pottery, the above dates would suggest that the discard of ceramics probably began sometime after 1879 and ended sometime after 1894. (If the Excelsior trademark does represent the Pennsylvania company then a slightly earlier deposition date beginning in the 1870s may be indicated.) In sum, although only three marks provide beginning manufacturing dates, they are consistent with the presumed late nineteenth century dating of the site.

## **Glass Artifacts**

Numerous fragments of glass were recovered during the course of the excavation and cleaning operations at the Davis site. Most consist of fragments of containers of various sizes and shapes. Several specimens represent components of kerosene lamp fixtures, and a single flat piece of window glass, was recovered. Before analysis, all fitting pieces were reconstructed to gain insight into form and size characteristics of the sample. The resulting collection of more-or-less intact containers was then used to aid in interpreting the functional categories represented by the numerous isolated fragments.

Because many pieces were sometimes re-fitted to form single specimens and in some cases complete containers were found, comparing counts of various classes or categories is most informative when these numbers are weighed against the collection of whole specimens. First the entire sample, including fragments and complete specimens, is described and discussed. Then the complete or nearly complete objects are considered individually in detail. Finally, by combining the two analyses, chronological and behavior patterns should emerge that will aid in interpreting other late nineteenth-century piedmont farmsteads lacking the documentary record of the Davis site.

Initially the glass was sorted into broad functional classes including bottles, jars, lamp pieces, and miscellaneous containers. The latter category consists of non-flat glass that was obviously part of a bottle or jar but lacked attributes necessary to distinguish which kind of container was represented. Bottles are containers with definitive necks and shoulders, and small orifice diameters relative to body widths. Jars, on the other hand, are characterized by wide orifices, equal to or approaching body diameters. Necks and shoulders are poorly defined, if present. Lamp pieces represent chimney glass and bowl fragments from kerosene lighting devices. Two additional functional classes were represented by a single fragment each—window glass and electrical insulators.

Thickness and color were also noted for each specimen. It quickly became apparent that thickness often varied considerably on individual specimens. There were exceptions, however, and when thickness was considered in conjunction with color, it was sometimes possible to identify the parent artifact from a small glass fragment. Glass color varies considerably depending on the chemicals contained in the silica-alkaline mixture from which it is made. Natural colors range from green to amber; artificial colors may be produced by adding colorants such as copper, iron, manganese, arsenic, cobalt, and others. Natural colors were the rule until

after the middle of the nineteenth century when preserved foods began to be packaged in glass containers. Because of the need to see the contents of the containers, glass manufacturers began adding decolorizing agents such as manganese and selenium. When exposed to ultraviolet light for an extended period of time, glass containing manganese takes on a purple tint. Clear glass containing selenium becomes light amber in color. The degree of change is a function of the length of exposure to sunlight and the amount of decolorizing materials originally mixed with the silica and alkalines (Baugher-Perlin 1982:261; Jones and Sullivan 1985:13).

By combining attributes of form, thickness, and color, and comparing fragments with intact specimens, it was often possible to assign small glass pieces to specific functional categories. Most of the identifiable fragments fell within the bottle category which includes medicine, spice, food, spirit, and soda bottles. A large number of specimens also fell within the jar category represented primarily by preserving or canning jars. Excluding the unidentifiable specimens, the largest single functional category was lamp chimney glass. The categories containing the least number of specimens included confectionery dishes, cosmetic containers, window glass, and electrical insulators (Table 4).

In addition to the numerous glass fragments, several complete or nearly complete specimens were recovered whose specific functions could be determined. These are discussed below.

#### *Panel Bottles*

For purposes of establishing chronologies, the methods of glass container production provide the most sensitive temporal indicators. Before the twentieth century and the advent of machine mold-blown glass, all glass containers were either free-blown or mold-blown. Although mold-blown began to replace free-blown containers in the 1730s, some free-blown bottles continued to be made into the nineteenth century (Jones and Sullivan 1985:21). As a consequence, it is easier to date mold-blown specimens.

Molds were introduced to speed up and standardize the glass container industry. Bottles blown in molds usually display seams where molten glass seeped into the cracks between the mold components. These seams indicate the type of mold used and indirectly the general date of manufacture. Single and multi-piece molds were used during the nineteenth century. Molds allowed the introduction of embossed labels which gained in popularity as more and more manufacturers sought to standardize their product packaging. Although most of the bottle making process took place in molds, lips and collars (finishes) to accommodate various types of closures were often configured by hand. This process is indicated by the presence of mold seams on the body of a container and their absence in the area of the neck and lip (McKearin and Wilson 1978).

Throughout the nineteenth century patent or proprietary medicines enjoyed considerable popularity. Lydia E. Pinkham's Vegetable Compound "for all of those Painful Complaints and Weaknesses so common among Ladies" or Dr. Kilmer's Swamp-Root Kidney, Liver and Bladder Cure were the rage, just as today we enjoy the pain-killing power of extra-strength Anacin and the gentle, natural relief of Metamucil. Most of these cure-alls had one advantage over our contemporary over-the-counter products—they did make you feel good! They may not have



Table 4. Glass Artifacts From the Davis Site.

| Class     | Material     | Type          | Count |
|-----------|--------------|---------------|-------|
| Bottle    | Clear        | Food          | 3     |
| Bottle    | Clear        | Medicine      | 6     |
| Bottle    | Clear        | Misc. Panel   | 6     |
| Bottle    | Clear        | Misc. Unknown | 1     |
| Bottle    | Clear        | Spice         | 2     |
| Bottle    | Clear        | Spirit        | 1     |
| Bottle    | Light Green  | Soda          | 3     |
| Bottle    | Light Purple | Food          | 1     |
| Bottle    | Light Purple | Medicine      | 6     |
| Bottle    | Light Purple | Misc. Panel   | 7     |
| Container | Clear        | Misc. Kitchen | 6     |
| Container | Clear        | Misc. Unknown | 23    |
| Container | Dark Blue    | Misc. Panel   | 2     |
| Container | Light Green  | Food          | 3     |
| Container | Light Green  | Misc. Kitchen | 7     |
| Container | Light Green  | Misc. Unknown | 26    |
| Container | Light Purple | Confectionary | 2     |
| Container | Light Purple | Misc. Unknown | 7     |
| Container | Turquoise    | Misc. Unknown | 1     |
| Container | Turquoise    | Misc. Unknown | 1     |
| Electric  | Green        | Insulator     | 1     |
| Flat      | Clear        | Window        | 1     |
| Jar       | Light Blue   | Preserving    | 1     |
| Jar       | Light Green  | Preserving    | 33    |
| Jar       | Light Purple | Preserving    | 2     |
| Jar       | White        | Cosmetic      | 4     |
| Lamp      | Clear        | Base          | 1     |
| Lamp      | Clear        | Chimney       | 35    |
| Lamp      | Frosted      | Chimney       | 2     |
| Lamp      | Light Purple | Chimney       | 7     |
| Lamp      | Turquoise    | Chimney       | 9     |
| Total     |              |               | 210   |

cured anything, but because they contained copious amounts of alcohol, often laced with codeine, cocaine, morphine, heroin, and phenobarbital, not many customers complained (Beerchow 1973:79). By the end of the nineteenth century, over 50,000 of these products were being sold in the United States (Ketchum 1975:92).

The popularity of patent medicines created a boom in the glass bottle industry. Most were packaged in rectangular panel bottles that occur frequently on nineteenth-century archaeological sites. These containers usually had the manufacture's name embossed on the bottles and/or a paper label fitted to the front or back panels. In addition to medicines, panel bottles were also used to package extracts and spices.

At the Davis site, panel bottles (n=7) represent the largest number of complete or nearly complete specimens (Figure 8). In addition, four neck and shoulder pieces that belonged to panel bottles were also recovered. The complete specimens range in height from four to six inches and from one to two inches in width. Panels are recessed on the front and back of the bottles with mold seams running diagonally along the edges separating the ends and panels. This allowed embossing on the sides as well as the panels. All but one of the specimens has a ball neck characterized by a single ring encircling the lower portion of the neck. The exception, represented by the smallest bottle, had a plain straight neck. Six specimens exhibited patent lips characterized by a one-part finish with a narrow lip flat on the top and sides with a beveled underside. Three bottles have Davis lips defined by a two part finish with a rounded lip. One specimen has a simple rounded lip finish. All closures are stoppered (see Jones and Sullivan 1985:89-95).

The largest bottle has the label "Rawleigh's" written in cursive on the front panel and in block letters "W.T. RAWLEIGH MED. CO." on one side panel and "FREEPORT, ILL" on the other. Other labels are listed below. Parentheses indicate a label on a side panel.

McCORMICK & CO  
MANUFACTURING CHEMISTS  
BALTIMORE, MD

McCORMICK & CO  
BALTIMORE, MD

THE ALONZO O BLISS CO  
WASHINGTON KANSAS CITY  
CHICAGO SAN FRANCISCO  
(LONDON, ENG.)

WHOLESALE  
DRUGGISTS  
(BOYKIN CARMER & CO)

Most of the panel bottles probably contained patent medicines. Some also may have held spices and extracts, particularly the smaller bottles. Today the McCormick company is



Figure 8. Selected glass artifacts from the Davis site: (l-r) complete panel bottles; soda bottle neck (top); confectionery lid fragment (bottom); and canning jar base.

synonymous with spices, whereas the Rawleigh Co. still markets liniment and other home remedies. Also of note is fragmentary medicine bottle with a dosage scale along one edge. The scale is graduated in five centimeter increments with the maximum contents of the bottle being 150 cm. All the panel bottles date to the last third of the nineteenth century.

#### *Miscellaneous Bottles*

One almost complete whiskey bottle was recovered. The quart container was made of clear glass in a three-piece mold. It has a down-tooled lip with a neck ring on the underside, a stopper closure, and dates to the last third of the nineteenth century. The only other nearly complete specimen is a light green soda water bottle with a crown closure. This style of finish was patented in the United States in 1892 and used primarily for soft drink, beer, and mineral water bottles (Jones and Sullivan 1985:79). The Davis Farm specimen was made in a three-piece mold and has the label, "DURHAM SODA WATER CO. DURHAM N.C." embossed on the side.

#### *Canning Jars*

The first canning jars were made by a Frenchman, Nicholas Appert, in 1810. Cork closures sealed with wax were used until the middle of the nineteenth century. Although Mason didn't invent the canning jar form, he did develop the zinc screw cap in 1858 which was refined in 1869 by Lewis Boyd. Boyd's contribution was a glass liner to prevent contact between the canned food and the zinc lids. This addition saved Mr. Mason's company which today has become synonymous with canning or preserving jars (Munsey 1970:145-147).

Although no complete specimens were found, several large fragments of Mason jars were recovered (see Table 4). Most of these are a light bluish green or purple color and are relatively thick, usually around 4 mm (Figure 8). Several had portions of Mason's label, "MASON'S PATENT NOV. 30TH 1858," embossed on the side. These jars date between 1870 and 1890 (Munsey 1970:147).

Usually an analysis of bottles from archaeological sites is helpful in establishing when the sites were occupied. In our case, the bottle analysis confirms the occupation span of the cabin as related by oral tradition. The value of the current study then is not so much establishing occupation dates for the site but as a starting point for developing patterns of artifact usage that can be applied to other sites lacking oral or written records.

Although the glass artifact sample is not complete, some trends are evident. Bottle and jar fragments occurred with similar frequencies, but the bottle category represented much more variety including medicine, spice, food, spirit, and soda bottles. Of these, patent medicine bottles were the most popular, no doubt reflecting the widespread popularity of these products during the late nineteenth century. The current data suggest that the Davis household spent more money on patent medicines than on any other commercial household product packaged in glass containers. The comparatively large number of canning jar fragments supports this assessment by pointing to the fact that growing, processing, and preserving foodstuffs were much more important to the family subsistence than trips to the grocery store. And when these trips were made, they were made to procure nonessentials such as cough medicine, spices, soft drinks, and face creams.

Lamp chimneys also seem to have been frequent purchases which is not surprising given their fragile construction. The virtual absence of window glass either indicates that the cabin and addition lacked framed glass windows or that glass panes from the windows were carefully salvaged and recycled. Given the late nineteenth century date of the cabin and the prosperity of the family, the latter possibility seems most likely.

The overall picture that emerges from the analysis of glass artifacts is one of self-sufficiency and minimal reliance outside purchases. This pattern was expected and fits the norm for piedmont North Carolina farmsteads during the latter half of the nineteenth century. What was not expected—at least from the authors' viewpoint—was the clarity in which this pattern was reflected by the distribution of glass artifacts.

## Nails

Nails occur with considerable frequency on historic sites. At the Davis site, more nails (n=176) were recovered than either sherds or glass fragments. Unfortunately nails are not as temporally sensitive as ceramics or glass containers. Although they can easily be divided into hand-wrought or machine-made types, the former were used throughout the seventeenth, most of the eighteenth, and into the nineteenth century. The first machine-cut nails, an American invention, were produced around 1790. Initially, the heads of cut nails continued to be shaped individually, by hand. However, after 1815, heads were machine-formed. Initially, this process

produced a slight "waisted" effect at the juncture of the head and the shaft. By 1830, this was no longer the case. The only other innovation in nail production took place around 1850 when wire nail-making machines were imported from Europe. The new wire nails did not become widespread and compete successfully with cut nails until the last quarter of the nineteenth century (Noel Hume 1982:252–254).

All of the nails recovered from the Davis site were machine cut, square or rectangular in cross-section, and had round or oblong heads. Size ranged from roofing-tack size to 16d. and above. Most were 6d. and only four were 16d. or larger (Table 5). Except for the square roofing tacks, all of the nails found at the site can still be found on hardware shelves today. Also of note is that fact that most of the nails were associated with the larger, room addition, not the original cabin structure.

Although the nails were not very helpful in dating the cabin, their sizes and distribution do provide some insights into the way it was built. It is not surprising that only a few of the specimens were found within the confines of the original one-room cabin foundation. Because the walls were constructed of logs, nails would have been used only in framing the roof, and securing the shingles and floor boards. Initially it was believed that the relatively large number of nails found while cleaning the walls of the additional room suggested that the addition was constructed using a sawed-lumber wall frame that was covered with plank siding. However, the sparsity of framing-sized nails (16d. and above), suggests that this was not the case. We now feel that the large number of relatively small nails associated with the added room may indicate that, although it was originally built of logs, the log walls were later covered with plank siding. The siding was attached using the same-sized nails as used in the roof construction and flooring.

The analysis of the nails suggests one other possible pattern that should be noted. Although the nail sample is large in comparison with other artifact categories, it is not large given the requirements of the construction techniques discussed above. This small sample size in conjunction with the fact that almost all of the unidentified fragments probably represent broken nails, suggest that the cabin was disassembled (as reported by oral tradition), and the nails were recycled along with the logs and lumber. Few of the nails were bent during removal simply because cut nails, unlike wire nails, generally break rather than bend (Table 5).

As with the other artifact analyses, the primary value in studying the nails at the Davis site lies in the identification of patterns that can be used to understand similar sites that may lack the preservation and oral history of the Davis site. These patterns in material culture can ultimately be linked to patterns in behavior and provide new insights into our unwritten past.

### **Other Artifacts**

The remaining artifacts listed in Table 6 are sorted into broad functional artifact groups adapted from South's (1977:92–102) artifact classification format. The Kitchen artifact group which includes the previously discussed ceramics, of course, dominates the assemblage. This would also include three non-ceramic artifacts: a bottle cap, a sardine can key, and a portion of a spoon.

Table 5. Distribution of Nails at the Davis Site.

| Context        | Straight Nails |     |     | Bent Nails |     |     | Tack | 16d.+ | Frag. | Total |
|----------------|----------------|-----|-----|------------|-----|-----|------|-------|-------|-------|
|                | 4d.            | 6d. | 8d. | 4d.        | 6d. | 8d. |      |       |       |       |
| Square/Feature | 11             | 3   | 2   | –          | –   | –   | 2    | 3     | 1     | 22    |
| Room 1         | 2              | 22  | 3   | –          | 2   | 3   | –    | 1     | 8     | 41    |
| Room 2         | 7              | 45  | 10  | 2          | 4   | 3   | 12   | 3     | 27    | 113   |
| Total          | 20             | 70  | 15  | 2          | 6   | 6   | 14   | 7     | 36    | 176   |

Excluding the Kitchen group, the two artifact groups that contain the highest frequency of artifacts are the Architectural and Activities groups. The former group describes those artifacts related to the architecture of any structure. At least three subgroups are included in the Davis assemblage: construction hardware, construction fasteners, and building materials. Construction hardware includes a metal hinge, metal latch, and portions of several metal straps. Construction fasteners include the numerous nails discussed above. Finally, building materials includes several bricks and pieces of mortar.

The Activities group comprises a number of artifact types that represent a wide range of cultural behaviors. Artifacts representing this group at the Davis site are toys (a marble and ceramic doll's head fragment), construction tools (a metal file, and a metal hammer), and stable and tack artifacts (harness rings and horseshoe). Various other hardware in the Activities group include barrel hoops, chain, a washer, and a bolt. A large metal gear belonging to some unknown piece of machinery is also included in this group.

The remaining artifact groups represent only a minor portion of the assemblage. These are the Arms/Ammunition, Furniture/Furnishings, Clothing, and Personal categories. The Arms/Ammunition group is represented by only a shotgun shell. The Furniture/Furnishings group include most of a disarticulated cast iron stove and a portion of a ceramic figurine. The latter artifact appears to be an animal leg and could be part of a toy, however. A buckle and a leather fragment are the only items among the Clothing group. Finally, the Personal group includes one key, a pocket watch, a pocket knife, and three harmonicas (Figure 9).

### Summary

Although only stones from the foundation and chimney rubble remain of the Davis cabin, we do have a fairly clear picture of what the original structure looked like. At first it was a square, single-pen cabin with a large chimney at the east gable end. A loft was probably also included. As Mr. Davis' family increased, a much larger room was added to the west side of the cabin to accommodate the growing family. The proximity of the iron stove remains to this

Table 6. Miscellaneous Artifact Groups From the Davis Site.

| Artifact Group                        | Description               | Count |
|---------------------------------------|---------------------------|-------|
| Architectural Group (n=209)           | Bricks                    | 7     |
|                                       | Metal Hinge               | 1     |
|                                       | Metal Latch               | 1     |
|                                       | Metal Strap               | 5     |
|                                       | Mortar                    | 14    |
|                                       | Sheet Metal               | 5     |
|                                       | Nails                     | 176   |
| Arms and Ammunition Group (n=1)       | Shotgun Shell             | 1     |
| Activities Group (n=18)               | Barrel Hoop               | 2     |
|                                       | Bolt                      | 1     |
|                                       | Ceramic Doll's Head Frag. | 1     |
|                                       | Chain                     | 1     |
|                                       | Chain Link                | 1     |
|                                       | Harrow Tines?             | 2     |
|                                       | Horseshoe                 | 1     |
|                                       | Large Metal Gear?         | 1     |
|                                       | Marble                    | 1     |
|                                       | Iron Hammer               | 1     |
|                                       | Metal File (broken)       | 1     |
|                                       | Metal Hook?               | 1     |
|                                       | Metal Rings               | 2     |
|                                       | Threaded Metal Object     | 1     |
|                                       | Washer                    | 1     |
| Clothing Group (n=2)                  | Buckle                    | 1     |
|                                       | Leather Fragment          | 1     |
| Furniture and Furnishings Group (n=2) | Ceramic Figurine Leg      | 1     |
|                                       | Cast Iron Stove           | 1     |
| Kitchen Group (n=3)                   | Bottle Cap?               | 1     |
|                                       | Sardine Can Key           | 1     |
|                                       | Spoon Fragment            | 1     |
| Miscellaneous Metal Group (n=46)      | Miscellaneous Metal       | 46    |
| Personal Group (n=6)                  | Harmonicas                | 3     |
|                                       | Key                       | 1     |
|                                       | Pocket Knife              | 1     |
|                                       | Pocket Watch              | 1     |

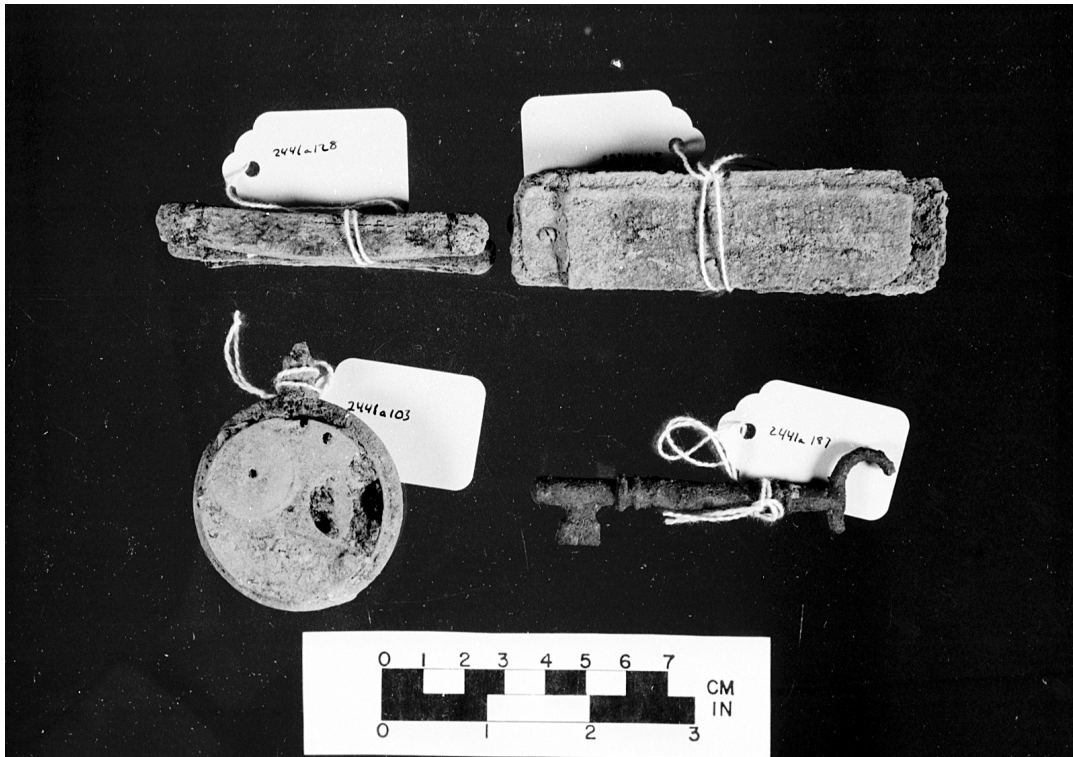


Figure 9. Miscellaneous artifacts from the Davis site: pocket knife (upper left); harmonica (upper right); pocket watch (lower left); and door key (lower right).

addition suggests that this room also served as a kitchen. The stove replaced the hearth of the first cabin as the primary food preparation facility and also provided an addition source of heat during the winter months.

The test excavations and clearing at the Davis site have literally only skimmed the surface of it's potential. Continued research within and around the foundation rubble would no doubt greatly increase the inventory of artifacts as well as further inform on the spatial organization of activities that took place here during the late nineteenth century. Also a careful survey of the immediate vicinity might also locate other structures and features that comprised the farmstead. A well, privy, and outbuildings were probably located nearby, and given the excellent state of preservation of the cabin site, the remains of these facilities are probably also preserved. But even without additional excavations, we can now independently verify the date of the cabin's occupation as reported by oral tradition. We also have sufficient data to begin to develop artifact and behavioral patterns that can be applied to late nineteenth-century farmsteads in the North Carolina Piedmont.



## CHAPTER 3

### EXCAVATIONS AT THE LLOYD-ANDREWS SITE

#### Background

The Lloyd-Andrews site consists of two log structures that have been heavily remodeled. One cabin currently serves as a residence, and has been expanded with a modern addition and covered on three sides with board-and-batten siding (Figure 10). The second log structure is located immediately northeast of the dwelling and currently serves as a storage building (Figure 11). According to the owners, Mr. and Mrs. John Earnhardt, this building was once a detached kitchen associated with the residence and was originally situated approximately 70 ft south of its present location. It was moved about 40 years ago. A portion of the original stone foundation of this cabin is still visible under several large shrubs (Figure 12).

The exact date of construction of both cabins is unknown, although the Earnhardt's believe that the cabin that now serves as a residence was built as early as the mid-eighteenth century. Based on its physical appearance, architectural historians have dated the building to the middle of the nineteenth century (Lally and Little 1992). One of the goals of our excavations was to obtain artifact samples that could possibly reconcile these disparate dates. Another goal was to determine if intact cultural deposits were present in the vicinity of the standing structures.

#### Methodology

In order to achieve these goals, we decided to focus our tests in the area of the original foundation stones associated with the kitchen before it was moved. The excavations consisted of an L-shaped trench, 15 ft by 5 ft located on the north side of the shrubs covering the foundation rubble. Datum was established by placing a pin at the northeast corner of a small cinder block pumphouse located to the east of the bushes. The southeast corner of the trench was located 21 feet west of datum (Figure 12).

The trench was excavated by hand and all soil sifted through a one-half inch wire mesh. Cultural material was present in a single soil zone (Zone 1)—a thin, (circa 0.4-ft thick) brown loam—overlying clay subsoil. In addition, a pit feature was present in the northeastern-most square of the trench. This small (circa 1.6 ft in diameter) pit was observed at the top of subsoil in the southwest corner of the square. Only the top 0.2 ft of the feature was excavated because of time constraints. This fill contained a brown loam heavily mottled with small-to-medium sized clay chunks. Two artifacts were recovered: a shell-edged pearlware sherd and a portion of a metal rod. A short segment of a cedar post (3–4 inches in diameter) was inserted in the subsoil adjacent to the feature. It could not be determined what relationship, if any, the post had with the pit.



Figure 10. Current residence at the Lloyd-Andrews site.



Figure 11. Storage building that once served as a kitchen at the Lloyd-Andrews site.

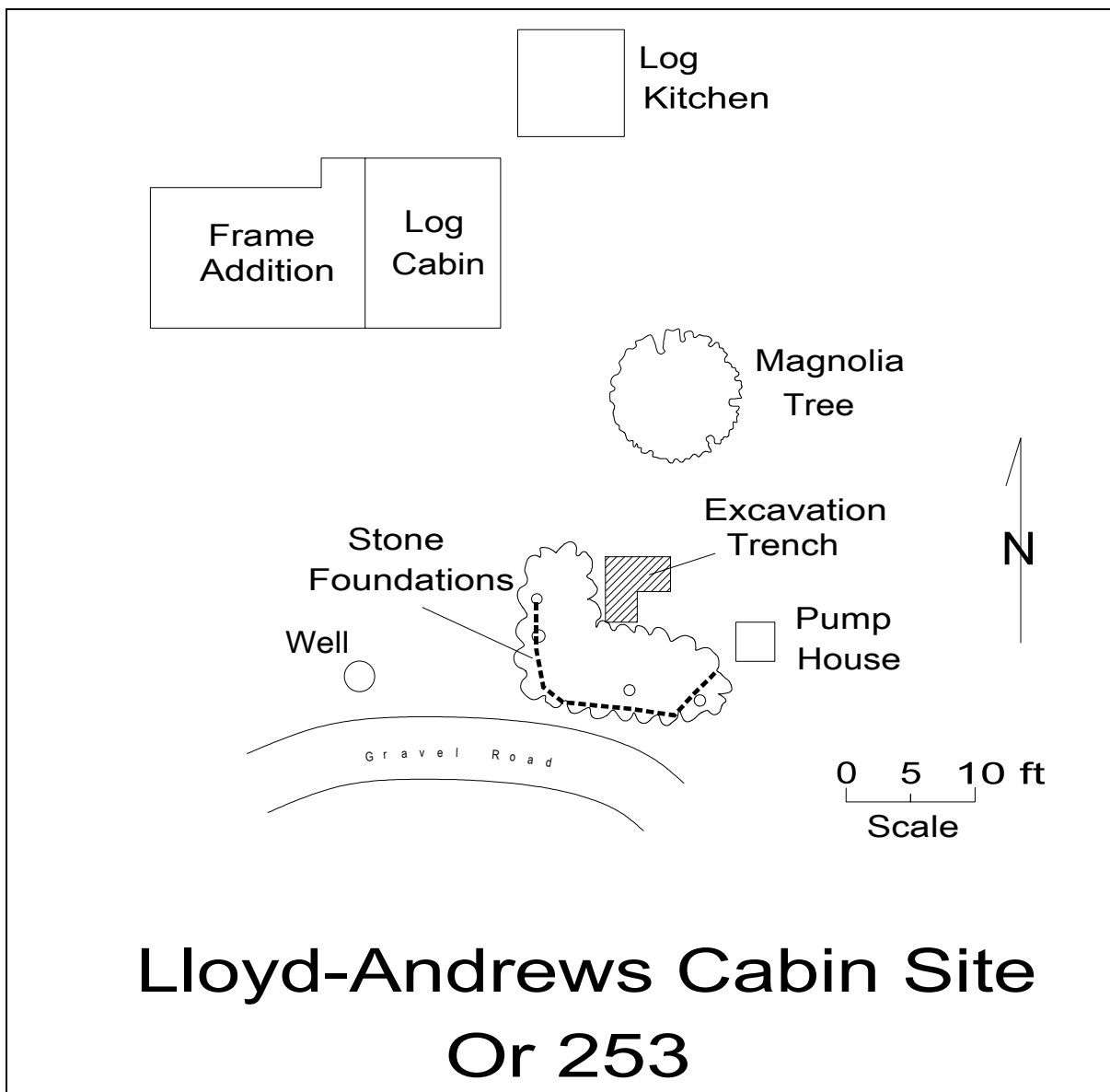


Figure 12. Map of the Lloyd-Andrews Cabin site.

### Ceramic Analysis

The ceramics were particularly informative and provide a date for the area sampled adjacent to the rubble. Most of the sherds were small, thumbnail sized, but could be classified using South's (1972; 1977) summary of Noel Hume's (1970) typology. These consisted primarily of "refined earthenwares" which were further classified into temporally diagnostic types summarized below (Table 7). Applying Stanley South's mean ceramic date formula to the sample yielded a date of 1818.7.

Table 7. Summary of Ceramics From the Lloyd-Andrews House.

| Ware                           | Type                    | Count | Temporal Range | Median Date |
|--------------------------------|-------------------------|-------|----------------|-------------|
| Pearlware                      |                         |       |                |             |
|                                | Plain                   | 35    | 1780–1830      | 1805        |
|                                | Blue Shell-Edged        | 6     | 1780–1830      | 1805        |
|                                | Green Shell-Edged       | 3     | 1780–1830      | 1805        |
|                                | Polychrome Hand-Painted | 5     | 1790–1820      | 1805        |
|                                | "Annular" Ware          | 4     | 1790–1820      | 1805        |
|                                | Blue Hand-Painted       | 5     | 1780–1820      | 1800        |
| Whiteware                      |                         |       |                |             |
|                                | Plain                   | 24    | 1820–1900      | 1860        |
|                                | Brown Stencil-Printed   | 1     | post–1810      |             |
|                                | Red Stencil-Printed     | 1     | post–1810      |             |
|                                | Blue Splatter Ware      | 1     | post–1825      |             |
|                                | Red Splatter Ware       | 1     | post–1825      |             |
| Creamware                      |                         |       |                |             |
|                                | Plain                   | 4     | 1762–1820      | 1791        |
| Tortoiseshell Ware             |                         |       |                |             |
|                                |                         | 1     | 1740–1770      | 1755        |
| White Porcelain                |                         |       |                |             |
|                                |                         | 3     | post-1820      |             |
| Unrefined Earthenware          |                         |       |                |             |
|                                |                         | 8     |                |             |
| MEAN CERAMIC DATE <sup>1</sup> |                         |       |                | 1818.7      |

<sup>1</sup>South's mean ceramic date is calculated by first producing a column that sums the frequencies of all ceramic types that occur on a site. Next, the sherd count for each type is multiplied by the type's median date and these products are summed to produce a second column. Finally, the sum of the frequency column is divided into the sum of the product column to obtain the mean ceramic date for the sherd sample (South 1977:217–218).

#### *Pearlware Plain*

This type occurred with the greatest frequency. It is often difficult to distinguish pearlware plain from whiteware unless ring bases or junctures are present. The angles created by junctures often caused the glaze to "puddle" which creates a distinctive blue band or zone. Unfortunately in the present sample only a few sherds exhibited this type of construction, and the less reliable criteria of color and glaze fracture patterns were used to classify the ceramics. The pearlware sherds normally displayed fine cracks which formed parallel, perpendicular lines. These lines separated the surfaces into rectangular blocks. Also, if examined carefully, a faint bluish tint was also noticeable. Many of these sherds probably formed the interior of shell-edged

plates discussed below. Undecorated pearlware was in common use from about 1780 until 1830. A median date of 1805 has been established by South (1977:212).

#### *Decorated Pearlware*

Blue and green shell-edged sherds comprised the most popular types of decorated pearlware. These represent dinner plates with scalloped, painted edges. According to Noel Hume (1970), edged pearlware was in use from 1780 until 1830, and during this period, there was considerable variation in how the decoration was applied to the edge. On earlier types, the brush was drawn inward toward the center of the plate over a band of grooves oriented in the same direction. On later specimens the brush was simply placed on the edge and the plate rotated. This process created a fairly uniform strip that lacks the feathery effect created by drawing the brush inward (Noel Hume 1970:131). The median date for edged pearlware is 1805 (South 1977:212).

More recently, Miller and Hunter (1990) have refined the shell edge chronology and demonstrated a peak in popularity between 1824 and 1830. They have also shown that shell-edged tablewares continued to be frequently used until 1858 (Miller and Hunter 1990:109). This study would appear to make South's median date a bit too early. We used the 1805 date in the calculations of the mean ceramic date presented in Table 7, because a different median date has not been calculated using Miller and Hunter's data.

Polychrome and blue hand-painted pearlwares were also popular. The former consists of pastel greens, reds, blues, and yellows used to create a floral pattern, whereas the latter motifs were usually copies of designs found on Chinese porcelain. None of the sherds in the present sample were large enough to present a recognizable pattern. The median date for polychrome hand-painted ware is 1805. Blue hand-painted ware was introduced a little earlier and has a median date of 1800 (South 1977:212).

"Annular ware" refers to bowls, mugs, or small jugs with banded decorations of black, brown, green, or light blue. These might be applied to the entire body of the vessel in alternating fashion or consist of single bands around the rim (Hume 1969:131). The temporal range of "annular ware" is between 1795 and 1815 with a median date of 1805 (South 1977:212).

#### *Whiteware*

This type was almost as popular as pearlware plain. As the name implies, whiteware sherds are whiter and lack the faint bluish tint characteristic of pearlware. Whiteware also seems to be a bit harder, and there is no discoloration due to glaze puddling. Glaze fracture patterns are also more irregular. Whiteware replaced pearlware in popularity around 1820, and various forms of whiteware were still being manufactured well into this century. Given its longevity, this ceramic type is virtually impossible to date with precision without factory seals. However, a median date of 1860 is normally accepted (South 1977:212).

#### *Decorated Whiteware*

Only four whiteware sherds were recovered that displayed any decorative treatment. These consisted of brown and red stencil printed motifs and blue and red splatter ware. Stencil

printed decorations became popular after 1810 and splatter ware after 1825. No median dates have been derived for these types. Consequently, they were excluded in the calculation of the mean ceramic date for the site.

### *Miscellaneous Types*

The remainder of the ceramic sample is comprised of four creamware sherds, the precursor of pearlware, with a median date of 1791; one cream-bodied tortoise shell sherd, the earliest type recovered, with a median date of 1755; three white porcelain pieces which date sometime after 1820; and 8 fragments of unrefined earthenware. These latter sherds represent jugs, crocks, and other crude containers that were locally made and cannot be reliably dated.

## **Glass Artifacts**

Although numerous glass fragments were recovered from the excavation, most were very small and lacked attributes necessary for functional analysis. About all that could be done was to break the sample down into flat glass pieces or container glass—bottles, jars, etc. The container fragments consisted of 102 pieces of mostly clear glass with a few light blue and green pieces. The latter probably came from canning jars. The only identifiable specimens were a soft drink bottle lip, a stoppered panel bottle lip, and a panel bottle corner. Of the 10 pieces of flat glass, three were light green in color and may have come from window panes. The remainder of the glass sample consisted of three white face cream jar fragments. Although not as temporally sensitive as the ceramics, all the glass appears to date to the late nineteenth and twentieth centuries, making it later than most of the ceramics.

## **Nails and Iron**

Several nails were also recovered. Unfortunately most consisted of "blobs" of rust that could not be classified. Of the 52 specimens, only nine could be separated into "cut" or "wire" categories. There were six of the former and three of the latter. Other iron artifacts recovered were five small, badly eroded bolts, one iron harness (?) ring, a washer, and an unidentified iron fragment. Although badly eroded, the nails and iron pieces also seem to post-date most of the ceramics.

## **Other Artifacts**

Other artifacts recovered included a scallop shell, a large (approximately 50 calibre) Civil War-vintage musket ball, a two-hole bakelite button, a fragment of leather, and a dark grey glass fragment that displayed chipping similar to that of a gun flint. The button dates to the twentieth century. Although the glass piece had edge chipping reminiscence of a used gun flint, it is doubtful it was used in this manner, given the brittleness of glass.

In addition to the sample of Euroamerican artifacts, four aboriginal specimens also were recovered. These included a milky quartz, Early Archaic Palmer end scraper (ca. 8,000 B.C.),

a Middle Archaic Guilford projectile point (ca. 4,000 B.C.), and two unmodified felsic flakes. These artifacts probably represent the remains of small seasonal campsites that are common throughout the Piedmont. Because of erosion and other disturbances, it is highly unlikely that *in situ* deposits dating to the Early Archaic or Middle Archaic periods are present.

### Summary

Excavations at the Lloyd-Andrews site proved productive from two standpoints: (1) they provided sufficient data to obtain a date for the area adjacent to the original cabin foundation; and (2) the discovery of a small pit intrusive into the subsoil is clear evidence that other undisturbed archaeological features are likely to be present. Although the mean ceramic date of 1818.7 is not as early as oral tradition would have the cabin occupied, it does provide a more precise chronological assessment than was possible relying strictly on architectural information. It should also be pointed out that this date does not necessarily gainsay a mid-to-late eighteenth century date for the cabin site. It simply means that major activities involving ceramic disposal took place in the area we sampled during the early nineteenth century. Additional data collected from other areas around the foundation might alter this date. Further, the present of an intact pit feature suggests that sealed deposits dating to earlier and later time periods are probably located in the immediate vicinity. Such deposits could provide artifact samples that may be dated more accurately than the sample we recovered from the disturbed topsoil layer of the test trench.

## CHAPTER 4

### EXPLORATIONS AT THE NEVILLE SITE

#### Background

The Neville or Drew site was chosen for investigation because it was the only log cabin recorded in the architectural survey of Chapel Hill Township that was considered potentially eligible for the National Register of Historic Places (Lally and Little 1992). Because of its architectural and historical significance, we wanted to examine its archaeological potential as well. Unfortunately, the results of both an auger and surface survey indicate that there are few, if any, archaeological remains associated with this structure.

The cabin sits along NC 86 approximately five miles south of Hillsborough. It is a single room structure about 20 ft square with a stone chimney and loft; it was built by the Neville family probably in the mid-nineteenth century. Today the cabin is owned by Mr. and Mrs. Clarence Drew. Mrs. Drew's ancestors built the original cabin, and she has a number of photographs taken during in the mid-to-late 1960s which show two dilapidated frame additions attached to the north and south ends of the log cabin. These two rooms were torn down by Mr. Drew sometime shortly after the pictures were taken. The cabin is no longer inhabited, and although it still stands on its original location, the yard around the cabin has been graded and landscaped as a result of the recent construction of the nearby Davis residence.

#### Methodology and Results

Fieldwork, consisting of an auger and surface survey, was conducted in late May and early June, 1992. The augering focused on two areas: one located in the yard around the cabin and the other in a field just southeast of the cabin. Mr. Drew remembered the field once having been the location of a barn associated with the log structure. Here, a 50-ft square area was auger tested at 2.5-ft intervals in hopes of locating subsurface evidence of the barn or other outbuildings. However, neither the auger testing nor an intensive surface survey revealed any evidence to indicate the barn or other structures in the area.

Auger tests also were placed in the yard just north and south of the log cabin in the approximate locations of the two former additions. These were spaced at one-foot intervals; however, no evidence of structural remains or cultural features were located. Finally, numerous auger tests were judgmentally placed around the yard, also with negative results.

A surface survey was more productive and resulted in the recovery of a small number of artifacts—primarily pottery sherds—just south of the cabin (Table 8). With the exception of the three possible pearlware sherds, the ceramics suggests a mid-to-late nineteenth century date for the cabin.



Table 8. Surface Collection From the Neville Site.

| Description                | Count |
|----------------------------|-------|
| Cobalt Blue Glass          | 1     |
| Porcelain Sherds           | 3     |
| Yellowware Sherd           | 1     |
| Whiteware Sherds           | 20    |
| Pearlware(?) Sherds        | 3     |
| Blue-edged Whiteware Sherd | 1     |
| Annular Whiteware Sherd    | 1     |
| Total                      | 30    |

### Summary

Unless intact features are present beneath the floor of the cabin, there appears to be little likelihood that significant archaeological remains are associated with the structure. Any such evidence, if it ever existed, was probably destroyed by recent grading and landscaping activities carried out during the construction of the nearby Drew residence.

## CHAPTER 5

### CONCLUSIONS

In the introduction, we stated that tests and excavations at the three sites were designed as an experiment to demonstrate the usefulness of archaeological techniques in providing an added dimension to the documentary and architectural assessment of historic structures. In particular, we feel that in many cases buried cultural deposits might be present that could inform on the history and lifeways of the inhabitants of these structures, although the buildings themselves might be totally lacking in architectural significance. In fact, the building may no longer even be standing. Also, the written historical record is notoriously biased in favor of the wealthy and powerful, whereas comparatively little attention is devoted to reconstructing and understanding the past of the poor and working classes, the ordinary citizens that form the backbone of our society. Documents pertaining to the history these people are often not preserved, and if they are, they're to be found in family bibles or in bundles tucked away in a relative's closet—not cataloged and indexed in government and museum archives where historians are likely to lurk. Often we only learn about the mainstream of our past from the memories of living ancestors who have handed down family traditions and history from generation to generation.

But there are also buried crucibles of information represented by the material remains that were discarded, lost, or left behind as people lived, worked, worshiped, and died. This is the record that can be retrieved and reconstructed by archaeologists and anthropologists through careful excavations and thoughtful interpretations. Though certainly not exhaustive, we hope the present study demonstrates the importance of this part of the record of our past, and the necessity to preserve it and to study it whenever the opportunity arises.

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