Archaeological Investigation of the Flat RunVeteran's Park, Cynthiana, Harrison County, Kentucky

By

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Kentucky Archaeological Survey
Jointly Administered By:
University of Kentucky
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Report Prepared for:

Alex Barnett, Harrison County Judge Executive
Harrison County Fiscal Court

and

John M. Keith, Jr., Mayor of Cynthiana
City of Cynthiana, Kentucky

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ABSTRACT

Between March 17-27, 2010, Kentucky Archaeological Survey (KAS) personnel conducted an archaeological survey of the Flat Run Veteran's Park in Cynthiana, Harrison County, Kentucky. Field investigations included surface inspection and shovel probing within areas of the park that had not been previously surveyed and revisiting previously identified archaeological sites (15Hr50, 15Hr53 [Handy House], 15Hr54, and 15Hr56) within the park's boundaries.

Site 15Hr50 had previously been determined to be not eligible for listing in the National Register of Historic Places and Site 15Hr56 had been destroyed during construction of the Harrison County Health Center. It also had been determined to be not eligible for listing in the National Register of Historic Places. Based on the results of the KAS investigation of Flat Run Veteran's Park Site 15Hr53 (Handy House site) was found to contain potentially significant archaeological deposits, and Site 15Hr54was determined to be eligible for listing in the National Register of Historic Places under Criterion D (scientific data content). The KAS investigation of Site 15Hr53 expanded the previously recorded site boundaries to include the Handy House, all extant outbuildings, outbuilding remains, and archaeological deposits associated with the Handy House. It is recommended that the side (north) and rear (east) yards of the Handy house and a 20 m area around the stone foundation at the southwest corner of the site be preserved and protected from disturbance. If this is not possible then the County and City should consult with the Kentucky Heritage Council to determine the nature and extent of additional archaeological studies that may need to be conducted at the Handy House.

Site 15Hr54 contains significant archaeological deposits associated with the Fort Ancient occupation of central Kentucky. Additional investigation of this site has the potential to contribute to our understanding of the intra-site spatial patterning and artifact distribution, chronology of occupation at the site, site function, and its relationship to other Fort Ancient sites within the region. It is recommended that Site 15Hr54 be preserved and protected from future disturbance and construction activities (disking of the plowzone or no-till agriculture is acceptable, but deep or chisel plowing should not be permitted). Prior to any planned ground disturbing activities, the County and City should consult with the Kentucky Heritage Council to determine the nature and extend of any additional archaeological work that may be needed.

ACKNOWLEDGEMENTS

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CHAPTER ONE:
INTRODUCTION

Between March 17-27, 2010, Kentucky Archaeological Survey personnel conducted an archaeological survey of the Flat Run Veteran's Park in Cynthiana, Harrison County, Kentucky (Figure 1.1). The survey was conducted for the Harrison County Fiscal Court and City of Cynthiana at the request of Mr. Alex Barnett, Harrison County Judge Executive and Mr. John M. Keith, Jr., Mayor of Cynthiana. Field investigations included surface inspection and shovel probing within areas of the park that had not been previously surveyed and revisiting previously identified archaeological sites within the park's boundaries.

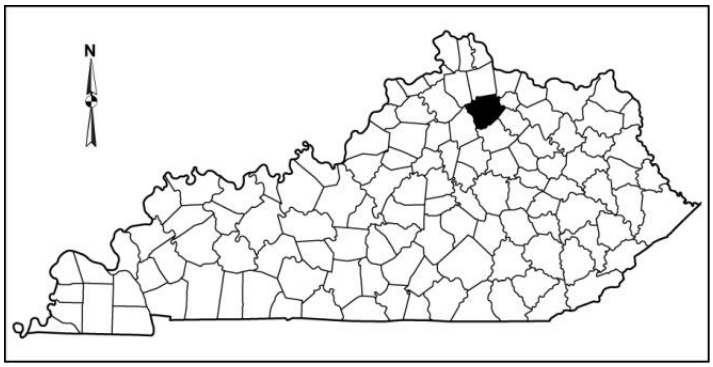

Figure 1.1. Location of Harrison County, Kentucky.

Flat Run Veteran's Park is located just north of the city of Cynthiana, KY in Harrison County. The park property encompasses 120 acres and is bounded to the west by Flat Run Creek, to the south by US 62, and to the north/northeast by Indian Creek (Figure 1.2). Both Indian Creek and Flat Run Creek are tributaries of the South Fork Licking River, which is located less than 1 km from the western portion of the park property. The terrain within the park encompasses both lowland floodplain and dissected upland ridge crests.

Prior to this survey, three separate archaeological investigations had taken place on Flat Run Veteran's Park property. These studies had identified four archaeological sites (15Hr50, 15Hr53, 15Hr54, and 15Hr56) (Figure 1.3). In 2003, Cultural Resource Analysts performed a Phase I survey in advance of the proposed West Cynthiana Bypass from US 27 to the junction of US 62 and KY 392 (Arnold 2003). As part of this project, a 60 m wide corridor crossing the northern and northeastern portion of Flat Run Veteran's Park was surveyed through visual inspection and shovel probing. Two previously unidentified archaeological sites (15Hr53 and 15Hr54) were recorded.

Site 15Hr53 consisted of a light to moderate density scatter of prehistoric and historic cultural materials located in a previously plowed field that was associated with three standing barns and the Handy House. The Handy House and barns were located outside of the bypass corridor and were not directly affected by the proposed

construction, so no further work was undertaken or recommended at that time (Arnold 2003:69-70). Site 15Hr53 also contained a light density scatter of prehistoric lithics and ceramics likely related to a Late Woodland/Fort Ancient occupation.

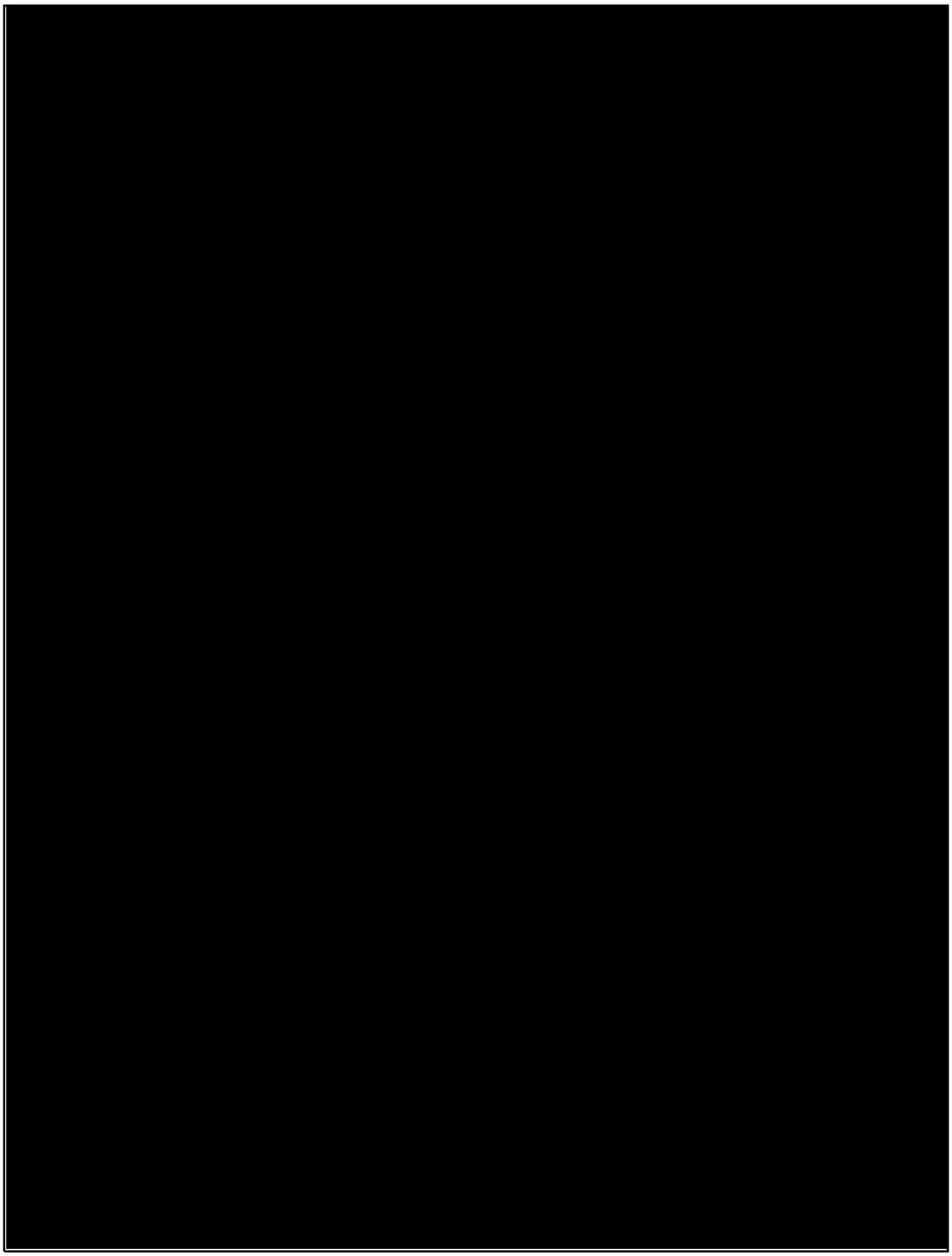

Figure 1.2. Location of the Flat Run Veteran's Park Project Area; Cynthiana, U.S.G.S Quadrangle Map (1961).

Figure 1.3. Previously conducted archaeological projects within the Flat Run Veteran's Park with location of identified archaeological sites (15Hr50, 15Hr53, 15Hr54, and 15Hr56).

Site 15Hr54 was identified by the presence of a light density scatter of prehistoric ceramics and lithic materials within previously plowed and standing tobacco fields. Materials recovered from Site 15Hr54, included a Late Woodland/Fort Ancient Triangular point, leached limestone tempered sherds, and lithic debitage (Arnold 2003:73). Shovel probing at the site did not identify any features or intact midden. However, the presence and size of the ceramics recovered from Site 15Hr54 led the investigators to recommend Phase II investigations in advance of the proposed highway construction project to better determine if intact subsurface deposits were present at this site (Arnold 2003:75).

Also in 2003, Cultural Resource Analysts performed a Phase I survey in advance of the proposed construction of the Harrison County Health Center (D'Ambruoso and Bundy 2003). The survey area covered 5.83 acres within the southern/southeastern portion of Flat Run Veteran's Park (Figure 1.3). As a result of this investigation, one archaeological site (15Hr56) was identified. The site consisted of a light lithic scatter that included a Fort Ancient Type 3 Coarsely Serrated Triangular point (D'Ambruoso and

Bundy 2003). All artifacts were recovered from the plowzone and no features or midden were identified. Given the limited amount of cultural materials and lack of intact subsurface deposits, no further work was recommended at the site. The subsequent construction of the Harrison County Health Center has completely destroyed Site 15Hr56.

In 2004, Wilbur Smith Associates conducted a Phase I survey in advance of the proposed construction of the West Cynthiana Extension Bypass and US 27 bridge realignment (Sandefur and Ball 2004) (Figure 1.3). As a result of this investigation, one previously unidentified archaeological site (15HR50) was located within the western portion of Flat Run Veteran's Park. Site 15Hr50 consisted of a large, very light scatter of prehistoric and historic cultural materials within a previously plowed lowland floodplain setting along Flat Run Creek. Given the light density and relatively low diversity of artifacts recovered from Site 15Hr50 and the absence of features or midden, the site was determined to be not be eligible for listing in the National Register of Historic Places (NHRP) and no further work was recommended.

All previously unsurveyed portions of the Flat Run Veteran's Park property were visually inspected, shovel probed, or both. A total of 273 shovel probes (160 positive) was excavated at Site 15Hr53 and a total of 22 shovel probes (11 positive) was excavated at Site 15Hr54. In addition to the shovel probes excavated at Site 15Hr54, a single 2 x 3 m test unit was excavated to sample a feature identified in a shovel provbe. Recovered cultural materials will be curated at the University of Kentucky William S. Webb Museum of Anthropology in Lexington, Kentucky.

The archaeological survey was conducted by Greg Maggard, Jay Stottman, Walker Cooper, Jeff Young, Marcie Venter, and Aaron Sierp and required 144 work hours to complete. Excavation of the test unit and feature was undertaken by Greg Maggard, David Pollack, and Rick Burdin, with assistance of Billy and Sharon Fowler, and required 30 work hours to complete. Historic artifacts were analyzed by Jay Stottman, lithic artifacts were analyzed by Greg Maggard, and the prehistoric ceramics were analyzed by A. Gwynn Henderson.

Based on the results of the KAS investigation of Flat Run Veteran's Park, recommendations for the significance and management of Site 15Hr53 (Handy House site), and Site 15Hr54 are presented (sites 15Hr50 and 15H56 have previously been determined to be not eligible for listing in the National Register of Historic Places, and thus warrant no additional protection). The KAS investigation of Site 15Hr53 expanded the previously recorded site boundaries to include the Handy House, all extant outbuildings, outbuilding remains, and archaeological deposits associated with the Handy House (see Figure 1.2), and determined that some of these deposits are potentially eligible for listing in the National Register of Historic Places.

The Handy House (15Hr53) site contains a significant artifact midden that is associated with the main house and the remains of domestic outbuildings (slave/tenant house, "carriage house", and "cellar house") located in the rear (east) and side (north)

yards of the main house, and the north wing of the main residence. Further archaeological investigations of these deposits and features could provide a better understanding of the site's chronology, the chronology of the outbuildings, their relationship to the main house, the function of these buildings, the modifications to the house in the 1880s, the construction and demolition of the north wing of the house, and insights into the daily lives of the residents of the property.

Although a relatively low density of artifacts was recovered from the stone foundation located at the southwest corner of the site and few stratified deposits identified, this area has the potential to contain significant archaeological deposits. Further archaeological investigations in this area could provide some insights into the chronology, construction, and function of this previously unknown structure.

It is recommended that the side (north) and rear (east) yards of the main house and a 20 m area around the stone foundation at the southwest corner of the site be preserved and protected from disturbance (see Figure 8.19). If this is not possible then the County and City should consult with the Kentucky Heritage Council to determine the nature and extent of additional archaeological studies that may need to be conducted at the Handy House. The Handy House site would be conducive to public interpretation and programming, such as participatory public archaeology field trips and camps, especially given its context on municipal land in a park setting. Any additional archaeological work planned for this property, should consider incorporating a public archaeology component. The remainder of the site may be developed without the need of any additional archaeological investigations.

Site 15Hr54 contains significant archaeological deposits associated with the Fort Ancient occupation of central Kentucky and is eligible for listing on the National Register of Historic Places (NRHP) under Criterion D (scientific data content). Additional investigation of this site has the potential to contribute to our understanding of the intra-site spatial patterning and artifact distribution, chronology of occupation at the site, site function, and its relationship to other Fort Ancient sites within the region. It is recommended that Site 15Hr54 be preserved and protected from future disturbance and construction activities (disking of the plowzone or no-till agriculture is acceptable, but deep or chisel plowing should not be permitted). Prior to any planned ground disturbing activities, the County and City should consult with the Kentucky Heritage Council to determine the nature and extend of any additional archaeological work that may be needed.

CHAPTER TWO:
ENVIRONMENTAL SETTING

This chapter summarizes the historical and environmental setting of the Flat Run Veteran's Park project area, including information on the physiography, geology, soils, climate, flora, and fauna.

PHYSIOGRAPHY

Encompassing 310 square miles, Harrison County is situated at the boundary of the Inner and Outer Bluegrass physiographic regions. The western and northern portions of Harrison County consist of highly dissected uplands with steeply sloping, narrow valleys that are characteristic of the Outer Bluegrass (Odor et al. 1968). The central and southern portions of the county are characterized by gently rolling, dissected uplands and wide, level valleys associated with the Inner Bluegrass region. The South Fork Licking River bisects the county and constitutes the primary drainage system (McGrain and Currens 1978:37). The Licking River traces much of the eastern boundary of Harrison County and drains the northeastern portion of the county (Odor et al. 1968). The lowest elevation in Harrison County (164.6 masl) is along the northeastern border where the North Fork Licking River joins the Licking River. The highest elevation (323.1 masl) is on the western boundary with Scott County (McGrain and Currens 1978:3).

GEOLOGY

The boundary of the Inner and Outer Bluegrass regions is characterized by thick-bedded limestones and shales of Ordovician age (McGrain 1983:38). The bedrock geology of the Cynthiana region is consists primarily of the Middle and Upper Ordovician-aged Lexington Limestone formation (Grier, Tanglewood, Millersburg, and Strodes Creek Members) (Wallace 1976). The Lexington Limestone members are inter-tongued with the Clays Ferry formation in southern Harrison County. Grier, Tanglewood, and Millersburg members are exposed along incised drainages, while the Clays Ferry Limestone comprises most of the dissected uplands (Wallace 1976). Upper Ordovician Kope Formation is also present in upland locations. Floodplains along the South Fork Licking River drainage are composed of Quaternary alluvium.

Although chert is present in both the Lexington and Clays Ferry Limestones, the region is not especially chert-rich. Grier and Brannon cherts outcrop within the Lexington Limestone formation and can be found in downcut stream exposures, and occasionally, as residual cobbles on eroded slopes. A wide variety of relatively high-quality chert gravels are also found in the Quaternary alluvial gravels along major drainages.

The Flat Run Veteran's Park project area is directly underlain by Clays Ferry Limestone that is inter-tongued with older Millersburg and Tanglewood members of the Lexington Limestone (Wallace 1976). Quaternary alluvial deposits are present along the

northern edge of the project area in the floodplain and channel of Indian Creek, a tributary of the South Fork Licking River.

SOILS

Soils within the Flat Run Veteran's Park project area are from the Faywood-Loradale and Elk-Ashton-Huntington associations. The Faywood-Loradale association is described as "deep and moderately deep, well-drained, gently sloping to moderately steep soils on uplands" (Odor et al. 1968:2). The Loradale silt loam series is predominantly located on ridge crests, while the Faywood series silt loam soils are found on the upper ridges and slopes. Elk-Ashton-Huntington soils are described as "deep, mostly well-drained, nearly level to sloping soils on terraces and flood plains along major streams" (Odor et al. 1968:2). Within the project area, the upland slope and ridge crest consist of Loradale and Faywood series soils, while the lower bottom land and floodplain along Flat Run Creek consist of Elk silt loam and Captina silt loam series soils.

CLIMATE

Harrison County has a continental, temperate climate creating warm humid summers and moderately cold winters. Average daily high temperatures are 67° F in the Spring, 89° F in the Summer, 70° F in the Fall, and 46° F during Winter (Elam 1968:55). Average daily humidity is 59 percent. Precipitation averages total approximately 87.36 mm montly, and is distributed relatively evenly throughout the year.

Since the Last Glacial Maximum (ca. 16,000 years ago), climate conditions within the region have changed substantially. The retreat of northern glaciers and outflow of cold meltwater caused substantial changes in wind patterns, climate cycles, and local physiography (Meltzer 2009). The warmer and drier conditions that appeared during the Late Pleistocene and generally characterize the Holocene epoch have been periodically punctuated by both cooling and warming trends. Between approximately 11,000-10,000 years ago the Younger Dryas cooling event brought a return of glacial-like conditions and general drying. This relatively short-lived episode was replaced by a warming trend that initiated around 10,000 years ago. Holocene warming intensified during the mid-Holocene (ca. 8,500-5,000 years ago) resulting in very warm and dry conditions that effected the availability of surface water and distributions of plant and animal communities (Jefferies 1990). After approximately 5,000 years ago the cooler and wetter conditions of the modern climate regime developed.

FLORA AND FAUNA

Situated along the boundary of the Inner and Outer Bluegrass regions, Harrison County provides access to an abundance of natural resources. Prior to European settlement, nearly all of Harrison County was forested (Odor et al. 1968:26). Deep upland soils supported northern red oak, white oak, black walnut, black locust, yellow poplar, and other hardwoods. Shallow soils on upland slopes supported black oak, chestnut oak, white oak, hickory, Virginia pine, and Eastern red cedar. Alluvial

floodplain soils supported pin oak, sweetgum, sycamore, cottonwood, hackberry, elm, ash, willow, box elder, and red maple (Odor 1968:27).

Habitat conditions in Harrison County are well suited for open land and woodland wildlife (Odor et al. 1968). Early European settlers in the region noted bison, elk, white-tailed deer, wild turkey, rabbit, raccoons, doves, ruffed grouse, beaver, and muskrat. Other species present within the region included red and gray fox, wolf, and black bear. However, since the European settlement of the region, several of the once-abundant terrestrial and aquatic mammal species have been extirpate, especially those that were either of economic importance as game animals (bison, elk, and beaver) or were considered unwanted predators (wolf and black bear).

CHAPTER THREE:
CULTURAL BACKGROUND AND PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

This chapter presents a general prehistoric background for central Kentucky. In addition, sections detailing the historical background of Harrison County, Cynthiana, and the Handy House farm also are presented. A final section provides the previous archaeological investigations that have taken place at the Flat Run Veteran's Park and within two kilometers of the project area.

PREHISTORIC BACKGROUND

Paleoindian Period (9,500-8,000 B.C.)

The Paleoindian period (ca. 9,500 to 8,000 B.C.) represents the initial documented colonization of all the major physiographic regions within Kentucky (Maggard and Stackelbeck 2008:113). Until the late 1990s, the view of Late Pleistocene hunter-gatherers in the Americas was largely dominated by the "Clovis-first" paradigm (Maggard and Stackelbeck 2008:109). However, new discoveries have resulted in a rather surprising amount of data that cannot be explained under the Clovis-first hypothesis. The discovery of the well-dated occupation of the Monte Verde site, located in southern Chile has made it clear that humans were in the Americas by at least 11,000 B.C. (Dillehay 1997, Maggard and Stackelbeck 2008). In addition, as more sites are documented in North America that contain cultural assemblages in depositional contexts that are stratigraphically below Clovis layers it is becoming increasingly clear that there are sites in North America that predate Clovis (Maggard and Stackelbeck 2008). Several of these pre-Clovis sites are located in regions close to Kentucky, such as Cactus Hill in Virginia, Topper in South Carolina, Big Eddy in Missouri, and Meadwocroft Rockshelter in Pennsylvania (Adovasio et al. 1999; Goodyear 1999; Lopinot et al. 2000; McAvoy and McAvoy 1997). Although people may have lived in what is now Kentucky before 9,500 B.C., the archaeological evidence of such utilization and occupation of this region has yet to be found (Pollack 2008:7). With the exception of a radiocarbon date (9,010 +/- 240 B.C.) and a retouched blade recovered below Late Paleoindian deposits from the Enoch Fork Shelter in Perry County, Archaeologists currently know very little about the timing of pre-Clovis occupations in Kentucky (Maggard and Stackelbeck 2008).

Based on projectile point styles, it is now relatively common across much of North America, including Kentucky, to refer to Paleoindian occupation in three distinct subperiods: Early, Middle, and Late Paleoindian. Kentucky's climate at 9,500 B.C. was much cooler and moister than today; however, a warming trend began around 8,500 B.C. This warming caused drastic changes in Kentucky's vegetation, and the composition of terrestrial resources (Tankersley 1996:21). The Early Paleoindian subperiod in Kentucky ranges from 9,500 to 9,000 B.C. and is associated with Clovis projectile points. These early inhabitants of Kentucky had a distinctive toolkit adapted to hunting and processing big game. The primary tools used by Paleoindian groups included fluted and finely

worked lanceolate projectile points (Maggard and Stackelbeck 2008). However, large bifaces, prismatic blades, chipped stone knives, side and end scrapers, gravers and bone, ivory or antler implements, such as awls and sewing needles also are well-known (Haynes 2002; Tankersley 1996:24).

Research across North America is revealing that Clovis peoples living in small, highly mobile hunter-gatherer groups, relied on subsistence strategies more closely resembling the broad-spectrum Early and Middle Archaic subsistence practices than that of big game hunting specialization (Maggard and Stackelbeck 2008). Although mastodon, mammoth, bison, horse, tapir, camel, and peccary are just a few of the big game mammals that Paleoindian groups hunted, they did not depend solely on mega-fauna resources but instead employed a mixed foraging strategy, exploiting small game, marine, and plant food resources.

The Middle Paleoindian subperiod (9,000-8,500 B.C.) is similar in most respects to the preceding Early Paleoindian Clovis subdivision; however, it is marked by technological changes, greater stylistic diversity of projectile points, and increased economic regionalization (Maggard and Stackelbeck 2008; Ray 2003). During the Middle Paleoindian subperiod Gainey and Cumberland replace Clovis points and a core and blade technology is replaced by a technique called bipolar lithic reduction. These technological changes most likely occurred in response to the use of a wider range of raw material resources, including some poorer quality materials. Changes in lithic technology also accompanied the increased use of locally available chert resources. The Middle Paleoindian subperiod witnessed noticeable climatic changes, including the retreat of the Pleistocene glaciers and the replacement of spruce and pine forest with hardwoods. These changes resulted in environmental instability and the apparent extinction of most species of Pleistocene mega-fauna (Maggard and Stackelbeck 2008). Environmental changes also appear to have resulted in a subsistence shift toward an increased reliance on regionally available plants and smaller game resources within a mixed foraging economy (Walker 2007).

The Late Paleoindian subperiod (8,500-8,000 B.C.) is once again marked by changes in Paleoindian toolkits. Like Early and Middle Paleoindian points, Late Paleoindian points are bifacially-flaked, lanceolate forms; however, they lack the characteristic flutes that are diagnostic of earlier projectile point types (Ray 2003; Tankersley 1996). The earlier point styles were replaced by unfluted point types, such as Lanceolate Plano points and Dalton Cluster points (Tankersley 1996:33). The toolkit became more diverse and included unifacial and bifacial tools, such as beveled and backed bifaces, unifacial and flake scrapers, adzes, retouched flakes, and drill/perforators (Goodyear 1999; Morse 1997; Tankersley 1996). As in earlier periods, a changing environment was the driving force behind the addition of new tool types. Ray (2003:46-50) suggests that four major changes in lithic technology occurred between the Late Paleoindian subperiod and their earlier predecessors: 1) a more intensive use of a wider range of locally available chert resources, as later points are often manufactured from lower quality materials; 2) channel fluting is replaced with basal thinning; 3) there is a marked reduction in the size of projectile points and; 4) more extensive resharpening of

projectile point blade margins. Clovis, Cumberland and Gainey points are usually resharpened only along the distal end of the point blade. Late Paleoindian points; however, are frequently resharpened along the lateral edges of the blade indicating substantial reuse.

By Late Paleoindian time, large herbivores, such as mammoth, mastodon, horse, moose, and elk, had become or were going extinct and open areas were most likely limited to karst barrens and sandy terraces along major streams (Maggard and Stackelbeck 2008). Game such as white-tail deer, bear, and turkey became important sources of food, and an extremely wide range of plants, including various nut species were collected.

Archaic Period (8,000 – 1,000 B.C.)

Retreating Pleistocene glaciers and the onset of the Hypsithermal climatic interval marked a shift in the climate of Kentucky and also in the lifeways of its inhabitants. The climatic changes that forced the northern migration/extinction of mega-fauna also changed the nature of Kentucky's forests. The once circum-glacial coniferous forests were replaced by mixed deciduous forests, thus allowing modern species of flora and fauna to expand. The Archaic period began around 8,000 B.C. with a slow shift from the exploitation of mega-fauna to a more varied subsistence strategy. Archaic groups began to exploit forest game like the white-tail deer as well as plant foods, especially nuts. Marine resources, such as freshwater mussels, also became important sources of food.

The Early Archaic subperiod (8,000-6,000 B.C.) is marked by numerous technological, social, and economic changes as hunting and gathering societies adapted to the climate change that occurred toward end of the last Pleistocene glaciation (Jefferies 2008:202). The appearance of corner and basal notched projectile points, such as the Kirk and LeCroy types, the relatively high percentage of projectile points made from high quality nonlocal cherts, and the lack of evidence for long-term occupation, suggested that mobile hunting groups continued to exploit relatively large territories much like their Paleoindian predecessors (Jefferies 2008:203). Early Archaic assemblages contain few tools related to collecting or processing plant food, and the paucity of these tool types indicates that these subsistence activities were of relatively minor importance compared with hunting activities (Jefferies 2008). The limited amount of Early Archaic material found at most sites, combined with a general absence of middens, features, and burials, suggests that most Early Archaic occupations were of short duration (Jefferies 2008:203).

The Hypsithermal climatic interval, which began around 7,000 B.C., caused the midcontinent to gradually become warmer and dryer than today (Jefferies 1996:47). This shift in climate affected the plants, animals, and people of Kentucky. The Middle Archaic subperiod (6,000-3,000 B.C.) was a time of increasing regionalization of cultures reflected by a variety of technological, settlement, subsistence, and social traits (Jefferies 2008:203). One of the most distinctive characteristics was the development of regional projectile point styles, such as Morrow Mountain, Matanzas, and Big Sandy II in eastern

and central Kentucky (Jefferies 2008:203). Point types, such as Eva, Cypress Creek, and Big Sandy are found in western Kentucky (Jefferies 1996:47).

During the Middle Archaic subperiod a variety of specialized tools appear in the archaeological record. Additions to the Archaic toolkit, include formal and informal groundstone tools, such as axes, pitted anvils, grinding stones, and pestles, which were used to process plant foods (Jefferies 2008). Another important tool that appears during this period is the atlatl, which extended the range to which a spear could be thrown (Jefferies 1996:48). In many parts of Kentucky, the ephemeral nature of most early Middle Archaic occupations suggests high group mobility, not unlike that found during the Early Archaic subperiod (Jefferies et al. 2005). In contrast with the early Middle Archaic, the presence of large late Middle Archaic sites containing deep middens, a high diversity of tool types, and burials indicates that some locations were intensively occupied on a long-term or year-round basis (Jefferies 2008:206).

The climate in the eastern United States began to become more moderate around 3,000 B.C. and Late Archaic (3,000-1,000 B.C.) groups remained largely mobile as represented by the numerous small sites dating to this subperiod. Differences in the size, number, and distribution of settlements are suggestive of changes in settlement systems and social organization from the Middle to Late Archaic (Jefferies 2008:209). In some parts of Kentucky, Late Archaic sites appear to be more dispersed and less intensively utilized than during the late Middle Archaic (Jefferies 2008:209).

Late Archaic subsistence focused on hunting white-tail deer and collecting hickory nuts. A wide variety of small animals, birds, and fish supplied dietary protein and fat and in certain areas, mussels obtained from streams were an important source of food. The presence of native and tropical cultigens at some Late Archaic sites suggests that groups were beginning to experiment with horticulture/gardening (Jefferies 1996:57). A wide range of flaked stone, groundstone, bone, and wood tools reflects this shift in subsistence (Jefferies 1996:55). Late Archaic projectile point types include an assortment of large straight, expanding, and contracting stem points, and smaller stemmed and side-notched types (Jefferies 2008:210). The presence of artifacts manufactured from nonlocal raw materials, such as copper and marine shell, at several sites along the Green River shows that some form of long distance exchange network existed during the Late Archaic (Jefferies 2008).

Woodland Period (1,000 B.C. – A.D. 900 Or 1,000)

Pottery technology is the defining characteristic of the Early Woodland subperiod; however, it was adopted at different times across Kentucky. While chronometric determinations place pottery in some parts of Kentucky at or before 1,000 B.C., there are few dates prior to 600 B.C. and many more after 400 B.C. (Applegate 2008). The oldest pottery in central and eastern Kentucky is typically thick-walled cordmarked, plain, or fabric-impressed vessels tempered with coarse grit and rocks. This type of pottery is known as Fayette Thick (Griffin 1943). Fayette Thick vessels were barrel-shaped jars and large, deep, basin-shaped jars or cauldrons (Railey 1996:81). The most common pot

was limestone or sandstone tempered jar of the type called Adena Plain (Haag 1940:75-79).

Early Woodland projectile point types mostly notched and stemmed forms, such as Wade, Gary, Turkeytail, and Camp Creek were used as knives, spears, or atlatl dart tips. Adena stemmed points became common after about 500 B.C. (Railey 1996). Pestles and nutting stones were utilized in plant processing, hunting tools included atlatl weights. Hammerstones and abraders were used in tool manufacturing (Applegate 2008:343).

Another archaeological characteristic of the Early Woodland is the appearance of social or ritual sites that are spatially segregated from domestic habitations (Applegate 2008:345). Among these, are burial mounds, "sacred circles," ditched earthworks, and other enclosures. By about 500-400 B.C., groups in some parts of Kentucky began to construct burial mounds and irregularly shaped enclosures; these sites were typically associated with Adena (Applegate 2008:345). An early Adena site in central Kentucky is Peter Village. Peter Village is a large oval structure that was originally surveyed and mapped by Constantine Rafinesque in 1820 (Schlarb 2005). The first large oval enclosure built at Peter Village was a wooden stockade; it was later replaced by a 2 m deep exterior ditch (Clay 1985a; 1985b). Artifacts collected from the surface of the site, include stemmed and other projectile points, drills, gravers, reamers, scrapers, knives, celts, hammerstones, sandstone tubular pipe fragments, worked pipestone, slate pendant fragments and gorgets, and hematite cones/hemispheres (Applegate 2008). Items produced from barite or galena, such as boatstones or atlatl weights, beads, and cones/hemispheres, as well as Fayette Thick and Adena Plain ceramics also were recovered from the surface at Peter Village (Griffin 1943; Webb 1941a). Despite its name, Peter Village did not function as a habitation site (Applegate 2008:461). According to Clay (1985b), the stockade and ditch-embankment features could have served defensive functions and/or defined "an area for secular or sacred purposes." Peter Village was a special activity site or "defensive resource exploitation center" where barite/galena was acquired from a nearby vein deposit and processed into rectangles and cones that commonly occur as grave goods at Adena mortuary sites (Clay 1985b:39). Food preparation and mortuary feasting, pottery manufacture, and chipped stone tool manufacture also occurred at the site (Applegate 2008:461).

Early Woodland (1,000-200 B.C.) subsistence patterns in Kentucky witnessed a slight change from Late Archaic times. Hunting and gathering continued as the main subsistence activities, with garden crops supplementing more of the diet (Applegate 2008). Animal protein was obtained from a variety of sources, including white-tail deer, box turtles, small mammals, birds, and in some areas, fish and mussels (Applegate 2008:344). Much like the Archaic period, nuts continued to be an important food source and they were gathered and stored for year-round consumption. However, an important development that occurred during Early Woodland times was the intensified utilization and cultivation of weedy plants and cucurbits (Applegate 2008). Indigenous plant cultigens of the Eastern Agricultural Complex (EAC) found at Early Woodland sites, include sunflower, sumpweed or marsh elder, chenopodium or goosefoot, erect

knotweed, giant ragweed, and maygrass. Gourd and squash, some species of which were indigenous cultivars, also are found in Early Woodland plant assemblages (Applegate 2008:344; Watson 1985:101)

Subsistence practices were seasonal. Planting, tending gardens, and fishing were spring and summer activities; while harvesting wild and domesticated plant species, as well as gathering and storing mast products, were autumn activities (Railey 1996). Hunting deer and other game was a late autumn and winter activity.

The aboriginal use of subterranean caves became popular for a relatively short time during the Early and Middle Woodland subperiods. Caves across Kentucky, Tennessee, Indiana, and Alabama have been identified, through radiocarbon dating, as having been explored by prehistoric humans during both subperiods. These people exploited caves to mine minerals, such as gypsum and mirabilite; to quarry chert for tools; to bury their dead; and to reach dark zones deep within caves for ritualistic purposes (Crothers et al. 2002). Bundles of river cane and/or small sticks were used for lighting and often dabbed on the wall to keep the torch burning at an even rate for longer light usage; woven fiber slippers provided added foot protection; small rocks were used for battering gypsum off cave walls; and river cane and/or larger wooden digging sticks were used to prospect for and retrieve selenite crystals from the floor and wall sediments within caves. While it is not exactly clear why minerals, like gypsum (hydrous calcium sulfate) and mirabilite (hydrous sodium sulfate), were mined so intensively during this period of prehistory, modern archaeological experiments with these minerals have determined that, with the addition of water or grease, gypsum powder makes a crude white plaster base similar to plaster of paris. Gypsum crystals (satin spar and selenite) could have been used in ritual or ceremonial purposes, and mirabilite and epsomite are both laxatives and have the additional medicinal properties of Glauber's salts and Epsom salts (Crothers et al. 2002). Mirabilite also tastes somewhat salty, hinting at its possible use in cooking and meat preservation (Crothers et al. 2002:512).

The use of exotic raw materials, first documented at the end of the Early Woodland, peaked during the early Middle Woodland and continued into the Middle Woodland (200 B.C.-500 A.D.) subperiod in Kentucky (Applegate 2008). Items, such as copper bracelets, breastplates and gorgets, copper and mica head ornaments, marine shell beads, and Vanport (Flint Ridge of Ohio) chert bladelets are among the types of artifacts found almost exclusively in mortuary-ritual contexts (Applegate 2008:346).

There is less information regarding Middle Woodland subsistence compared to earlier and later subperiods; however, faunal and floral assemblages indicate a generalized economy based on food collection and food production (Applegate 2008).

The Adena and Hopewell concepts, which emerged in the early part of the twentieth century, were based on research that focused on the burial practices of Woodland peoples. These two concepts are the synthesis of the excavation of several small burial mounds in Kentucky and southern Ohio (Railey 1996). Most Kentucky archaeologists concur that Adena spans the late Early Woodland to early Middle

Woodland (Clay 1985b; Henderson et al. 1988; Pollack et al. 2005; Railey 1996; Richmond and Kerr 2005; Schlarb 2005). The vast majority of Adena earthwork sites in Kentucky are thought to date from 500 B.C. to A.D. 250 (Anderson and Mainfort 2002a; Clay 1980, 1983; Fenton and Jefferies 1991; Seeman 1986). Adena burial mounds seldom represent a single event but instead contain several individual tombs, each tomb being covered with earth at the conclusion of the mortuary event (Railey 1996). Adena mortuary items include projectile points, stone gorgets, pipes, celts, simple and engraved tablets, galena, bone and shell tools, and beads (Railey 1996). Hopewell mounds differ from Adena mounds in that they tend to cover a single tomb (Railey 1990:254). Additional interments are distributed horizontally in Hopewell contexts instead of vertically, as in Adena contexts (Railey 1990:254). Whole ceramic vessels, mica cut-outs, obsidian artifacts, platform pipes, terra-cotta figurines, and copper celts are items that appear in Hopewell contexts and are absent or rare in Adena (Railey 1990:254).

Hopewell sites date from A.D. 1 - 500 and tend to be concentrated in southern Ohio. However, a number of Woodland sites showing Hopewell influence have been documented in Kentucky (Applegate 2008). Clay (1991:35) has interpreted "Hopewell as an extension of the complexity that developed in Adena." Railey (1996:100) concluded that "Adena should be viewed as an early regional expression of Hopewell rather than its predecessor." Applegate (2006) suggested a similar interpretation, stating that Adena developed during the late Early Woodland in Ohio and Kentucky. By the early Middle Woodland times in Ohio, the Adena mortuary-ritual complex morphed into or was superseded by Hopewell (Applegate 2008). In Kentucky; however, the predominate mortuary-ritual complex continued to be Adena with limited and irregular influences from Ohio Hopewell, Appalachian Summit Hopewell, Copena Hopewell, and to a lesser extent, Illinois Hopewell (Applegate 2008). In essence, the distinction between Adena and Hopewell in Kentucky is much less clear-cut than it is in Ohio. This is not surprising, because Kentucky is located in an area that was a "hinterland" or "periphery" to classic Hopewell (Applegate 2008).

The transition from Middle to Late Woodland (A.D. 500-1000) times in Kentucky does not appear to have been abrupt. Instead it was a gradual process, linked to changes in plant subsistence practices and hunting technology, a decline in long-distance trade networks, and changes in ritual expression (Pollack and Henderson 2000:615). In some parts of Kentucky, the Late Woodland was "a time of appreciable cultural change," including population increase, development of the bow-and-arrow technology, changes in the amount of mound construction, shifts in social organization, and subsistence change (Anderson and Mainfort 2002a). During the early Late Woodland wild plants and animals continued to be the foundation of the subsistence economy. Cultivation of native plants continued and may have intensified (Applegate 2008:348). Though small amounts of maize are present in Middle and early late Woodland contexts, it was not until the terminal Late Woodland (ca. A.D. 800) that it became a significant component of regional diets (Applegate 2008:348). Early Late Woodland ceramic assemblages are marked by a decrease in vessel wall thickness and a general increase in jar size relative to the Middle Woodland subperiod (Pollack and Henderson 2000). These larger vessels were used to cook nutrient rich starchy-oily seeded crops. Also during this period in

time, important technological changes appear with the replacement of notched and stemmed projectile points with smaller, finely knapped corner notched points of the Jacks Reef type and triangular points, marking the introduction of the bow-and-arrow into Kentucky.

Late Prehistoric Period (A.D. 900-1750)

The Late Prehistoric period in Kentucky is defined by two different cultural traditions: Mississippian and Fort Ancient. The Fort Ancient tradition flourished in central, northern, and eastern Kentucky, as well as southeastern Indiana, southwestern Ohio, and western West Virginia. Mississippian peoples occupied western Kentucky, as well as the extreme southern and southeastern portions of the state.

The Fort Ancient tradition is generally believed to be a response by local populations to increased reliance on agriculture, increased sedentism, and an accompanying rise in sociopolitical complexity (Sharp 1990:469). Fort Ancient subsistence practices and their environmental focus appear to have developed early and stabilized quickly, changing little over a time spanning 750 years (Henderson 2008). Maize, beans, squash, and sunflower were staples of the Fort Ancient diet, but gourds and tobacco, and to a lesser extent, sumac was grown (Henderson 2008). Relative to earlier Late Woodland peoples and contemporary Mississippian groups, there was much less emphasis on starchy-oily seeded crops, such as maygrass and marshelder (Rossen 1992a). The agricultural practices of Fort Ancient groups were supplemented by a variety of small mammals, reptiles, fish, and freshwater mussels. Fort Ancient peoples also depended on deer, elk, and wild turkey for subsistence (Henderson 2008). There is evidence for domesticated dogs and possibly the keeping, but not domesticating, of wild turkey (Henderson 2008:744).

Kentucky Fort Ancient settlements consisted of autonomous villages and small camps. Throughout much of the Fort Ancient culture area, settlements were located along floodplains or terraces of the Ohio River and its major tributaries; however, villages also were located on interior ridges within close proximity of a variety of drainage types and springs (Henderson 2008:745). These villages varied from circular/elliptical, to a linear arrangement of structures located along a ridge or terrace. Fort Ancient community size increased over time and early villages may have been occupied by no more than 40 or 50 people (Henderson 2008). During the Middle Fort Ancient (A.D. 1200-1400) subperiod, villages may have held 90 to 300 individuals and by the Late Fort Ancient (A.D. 1400-1750) subperiod villages are estimated at between 250 and 500 people (Henderson 2008). The development of circular villages and the construction of burial mounds during the Middle Fort Ancient subperiod provide evidence for long-term group planning and socio-political cooperation, and the formalized expression of social inequality (Henderson 2008:745). During the Late Fort Ancient, houses take on the shape of large rectangular structures and differ greatly from older Fort Ancient houses. Distinctive artifacts were small triangular projectile points, bifacial end scrapers, disk pipes, bone and shell beads, copper or brass tube beads or pendants, and shell gorgets. European trade goods also have been reported from Late

Fort Ancient sites. Copper tinkling cones and catlinite artifacts have been found in association with extended burials covered with shingled rock slabs (Henderson 2008).

Ceramics are the most common and diagnostic Fort Ancient artifact class. Fort Ancient ceramic vessels were made from locally available clays and are grit, limestone, sandstone, and/or shell tempered. Stylistic differences among Fort Ancient Jars have been used to define regional divisions e.g., (Anderson, Jessamine, and Manion) within the tradition prior to A.D. 1400 (Henderson 2008:741). After A.D. 1400 ceramic vessel types such as bowls and saltpans become common. Vessel rims and necks can be decorated with incising, punctations, or notching.

Fort Ancient chipped stone tools were made from locally available high- to medium-quality cherts (Henderson 2008:742). The lithic toolkit of Fort Ancient peoples included small, generally isosceles triangular arrow points as well as a variety of cutting, scraping, and drilling tools manufactured not only from stone but also animal bone (Railey 1992). Groundstone tools include sandstone abraders, manos, or nutting stones (Henderson 2008). Smoking pipes were manufactured from clay, sandstone, Ohio pipestone, limestone, and catlinite. Chipped limestone disks are diagnostic of the Middle Fort Ancient subperiod (Henderson 2008). Fort Ancient tools also were manufactured from shell and bone. Fort Ancient peoples produced shell or bone spoons and hoes, bone awls, needles, drifts, and beamers. Ornaments in the form of beads, plain or engraved gorgets, earrings, and bracelets, were made of animal teeth and bone, shell (both freshwater and marine), and cannel coal (Henderson 2008:743).

Mississippian society has been exemplified as that of a chiefdom in which leadership roles were ascribed, society was ranked, and the power of chiefs could be great but was usually not absolute (Lewis 1996; Pollack 2008). In addition, Mississippian groups shared a fundamental iconography (Pollack 2008). Mississippian groups throughout the Southeast, including those in Kentucky, shared an economy based on hunting; the cultivation of maize, squash and native plants; and the collection of wild plants (Pollack 2008:605). Gathered plants included hickory nuts, persimmons, and the seeds of goosefoot, erect knotweed, and maygrass. Animals commonly hunted for consumption, include white-tail deer, wild turkeys, turtles, and fish.

The Mississippian settlement system was made up of a hierarchy of habitation sites, most notably, administrative centers, that featured plazas flanked by buildings positioned on platform mounds and sizable populations (Lewis et al. 1998; Pollack 2008:605). The platform mounds constructed at these sites were home to elite members of society. Administrative centers were the social, political, and religious centers of Mississippian society. Other Mississippian site types consisted of large villages, small villages, hamlets, farmsteads, and cemeteries (Pollack 1998, 2008). Hamlets were larger than a farmstead, but smaller than villages.

Large hoes, adzes, abraders, gravers, and picks joined the bow-and-arrow as the main components of the Mississippian toolkit. Non-local materials, such as marine shell and copper, also have been recovered from Mississippian sites. Muller (1986:251) notes

that the appearance of these artifacts probably represents hand-to-hand exchange rather than the long-distance movements of traders. Ceramic assemblages consisted of jars, bowls, plates, and pans and the use of shell temper increased as the Mississippian period progressed. Most of the ceramics from lower Ohio Valley sites are plain wares, either fine or coarsely tempered (Muller 1986:238). Finely tempered ceramics were being used primarily for activities like eating, while coarsely tempered wares were being used for food storage and/or food preparation. Decorated ceramics, include incised or trailed designs often found on jars, and rarely negative painted and red slipped treatment found on bowls and bottles.

The centuries between A.D. 1300 and 1700 witnessed both the greatest development and the end of Mississippian culture in Kentucky and most Mississippian sites had been abandoned by A.D. 1400 (Lewis 1996). Changes in environmental conditions and the reduction of agricultural yields may have contributed to the downfall of a single chiefdom; however, disruption to Mississippian interaction spheres and access to prestige goods and esoteric knowledge may have undermined local elites' positions within their respective societies (Pollack 2008). Without the goods they needed to validate their positions in society, local elites may have been unable to withstand the challenges to their authority, which ultimately led to their demise (Pollack 2008:608). In the Caborn-Welborn region and in far southwestern Kentucky, Mississippian sites were occupied well into the 1600s (Pollack 2008:608). The recovery of objects associated with European manufacture, have been found at several Caborn-Welborn sites, further indicating occupation into the seventeenth century (Pollack 2008). Ultimately, the collapse of these societies and the subsequent abandonment of their respective settlements and regions are tied to Euro-American exploration and settlement of the Ohio and Mississippi river valleys, and the disruption of indigenous exchange networks (Pollack 2008:608).

HISTORICAL BACKGROUND

Harrison County

Harrison County was formed in 1793 from portions of Bourbon and Scott Counties. It was named for Benjamin Harrison an early settler in Bourbon County and a co-author of the Kentucky constitution. The first Euro-American settlers in the area of Harrison County was led by Capt. Joseph Hinkston from Pennsylvania in 1775 who established a settlement on the banks of the Licking River near present-day Cynthiana. This settlement was quickly abandoned and replaced with Ruddell's Station in 1779 built by Isaac Ruddell. The station was attacked and taken by British and Indian forces in 1780 (Kleber 1992).

During the early to mid-1800s, Harrison County became largely a farming community with many small farmsteads and larger plantations, focusing largely on raising cattle. During the Civil War, the county was occupied by both Confederate and Union forces, as the residents were deeply divided between the two sides. The county recovered from the war returning to its cattle industry, distilling, and diversified cash

crops. The Louisville and Nashville Railroad connected the county to the main railways by the 1890s. Harrison County has remained primarily agricultural throughout the twentieth century (Kleber 1992).

Cynthiana

Cynthiana is the county seat of Harrison County and was founded in 1793 near the location of Ruddell's Station. It was established on 150 acres of land along the Licking River owned by Robert Harrison and named after his two daughters Cynthia and Anna. The first courthouse was a log building erected in 1794, which was replaced by a brick building in 1816. The current courthouse was constructed in 1853 after fire destroyed the previous building in 1851. During the nineteenth century, Cynthiana was center of the extensive agricultural region of Harrison County, as a prosperous distilling and milling industry developed (Kleber 1992).

During the Civil War, Cynthiana was the location of military activity, as it served at the location of a Union encampment and Confederate attacks. The Union army established Camp Frazer on the north side of Cynthiana on land owned by Joel C. Frazer (which included the Handy House) in 1861 (Penn 1995). John Hunt Morgan, Colonel of the 2nd Kentucky Cavalry of the Confederate States of America, began what came to be known as the First Kentucky Raid. Morgan and his raiders entered Kentucky through Tennessee, advanced north toward Lexington, pausing briefly at Georgetown before moving on to Cynthiana on July 17, 1862, where fighting began at the covered bridge over the Licking River (Penn 1995). Morgan attacked and defeated 345 Union soldiers under the command of Lieutenant Colonel John J. Landram, which included the 18th Kentucky Volunteers, Home Guards, and several Cincinnati firefighters with his 875 raiders (Penn 1995). Camp Frazier was captured and destroyed. After the defeat, the Union's the 45th and 99th Ohio Volunteers and over 100 slaves seized from local slave owners rebuilt the camp and renamed it Camp Tod, after the Ohio Governor, in August of 1862. However, it was abandoned in September, as Confederate General Kirby P. Smith's forces advanced a major incursion into Kentucky (Penn 1995). Federal troops under General Stephen G. Burbridge defeated Confederate forces under command of General John Hunt Morgan in June of 1864, which became known as the second battle of Cynthiana.

After the war, Cynthiana recovered and continued to be a major center for the surrounding rich agricultural region. When the railroad was extended to Harrison County in the 1890s, Cynthiana became the main stop allowing it to develop an industrial base during the twentieth century. The town remained fairly stable as an agricultural and industrial center for Harrison County throughout the 1900s (Kleber 1992).

Handy House Farm

The Handy House farm was initially part of property owned by William Coleman and R. Naylor during the early 1800s. They sold the Handy House farm property to William Brown in 1816 (Deed Book 4:492; 5:45). William Brown was born in 1779 in

Frederick County, Virginia and moved to Bourbon County, Kentucky with his father in 1784. By 1795 he was living in the newly founded town of Cynthiana, where he become a prominent citizen. He studied and practiced law, was an officer during the War of 1812, helped oversee the planning for the second Harrison County courthouse, was a trustee of the first city school, and served in the State House of Representatives during the early 1800s (Fowler 2005). Brown owned several properties in Harrison County and established his residence and farm on the property that he purchased from Coleman and Taylor. He had the brick Federal Style house that forms the core of the Handy House built sometime before 1820, most likely between 1818 and 1819 based on a large increase in his taxes during that time (Fowler 2005). Brown established a small plantation on the property and owned between 10 and 27 enslaved African Americans during his tenure at the property, which would be considered a moderately sized holding amongst his contemporaries (Harrison County Tax Records; U.S. Census). Brown moved to Morgan County, Illinois in 1832, where he died in 1833 (Fowler 2005; Perrin 1968).

After William Brown's death, the property was held by his estate while it was divided amongst his heirs. Brown's estate sold the property, which contained approximately 291 acres, to Joel C. Frazer in 1848 (Table 3.1) (Deed Book 22:194). Joel C. Frazer was born in 1798 in Cynthiana, as his grandfather George had settled there having moved from Pennsylvania. By 1817, he began studying medicine with Dr. George W. Timberlake, who was a prominent physician in Cynthiana (Perrin 1882:309; Boyd 1894:95). During his studies he had brief two-month marriage to Ruth Warfield before her death in 1823. Following her death Frazer graduated with a medical degree from Transylvania University in 1824, and briefly moved to St. Charles, Missouri (Perrin 1882:309; Boyd 1894:95).

Table 3.1. Chain of Title for the Handy House Property.

Date	Grantor	Grantee	Description	Reference
1816	Coleman and Taylor	William Brown		DB 4:492; 5:45
1848	Estate of Wm. Brown	Joel C. Frazer	291 acres	DB 22:194
1863	Joel C. Frazer	Nancy Frazer	517 acres	WB H:465
1872	Estate of Frazer	Joel H. Frazer	517 acres	WB J:299; DB 35:454; 36:202
1883	Joel H. Frazer	William T. Handy	165.3 acres	DB 45:384
1916	William T. Handy	Charles LeBus	164.2 acres	DB 81:357
1932	Charles LeBus	R.H. Willis	161 acres	DB 96:310
1937	R.H. Willis	Peak and Florence	161 acres	DB 99:540
1945	Peak and Florence	Charles Swinford	123.85 acres	DB 107:376
1998	Charles Swinford	Handy Farm Inc.	120.99 acres	DB 224:39
2003	Handy Farm Inc.	Cynthiana, Harrison Co.	120.99 acres	DB 264:714

Joel C. Frazer returned to Cynthiana sometime between 1824 and 1825, and began his medical practice (Perrin 1882:309; Boyd 1894:95). He married his second wife, Nancy Williams Sanders, in 1826 (Perrin 1882:309; Boyd 1894:95). Joel C. and Nancy Frazer's only child, Hubbard Williams Frazer, was born in 1827 (Perrin 1882:309; Boyd 1894:96).

Joel C. Frazer first appeared in the tax assessment books in 1819, but the county only taxed him for a horse worth $100. In the years during his medical training, Frazer's wealth was meager, but it began to show growth by 1826 once he began to establish his medical practice in Cynthiana. His total value of property was assessed at $8,115 (Harrison County Tax Records 1835). Historical accounts state that he briefly relocated to Paris, Kentucky in 1833 in an attempt to improve his medical practice, but he returned to Cynthiana within a year (Perrin 1882:309; Boyd 1894:309). By 1840, he resided on a 40-acre farmstead near Sycamore Creek in northern Harrison County and had acquired several hundred acres near Flat Run (Harrison County Tax Records 1840). His household included himself and his wife, as well as one male child aged 5-10, and two male children aged 10-15. He also owned 13 slaves, and was taxed for 23 horses, 30 cattle, and one carriage (U. S. Census 1940; Harrison County Tax Records 1840). As his wealth increased during the 1840s, he purchased several more properties including the 226-acre James Finely farmstead from Hugh Fraizer in 1845 and the adjacent William Brown plantation (291 acres) known as Ridgeway in 1848 (Deed Book 20:276; 22:194). Under Frazer's ownership, the two properties were combined to form one large farm, although he established his residence at the former home of Brown. It is believed that Frazer's son Hubbard lived in the residence built by Finley (Fowler 2005).

During the Civil War, Frazer's property was associated with military activities. The property was used as an encampment by both Confederate and Union soldiers. Although he was a slave owner, he was a Union sympathizer and permitted the Union army to construct Camp Frazer on his property in 1861. However, the camp and other Civil War activities were located on the portion of Frazer's property that had previously belonged to Finley, which did not include the Handy House farm property.

Joel C. Frazer died in 1863 and his property was left to his widow Nancy (Will Book H:465). Nancy owned the property until her death in 1872, at which point it was divided amongst her grandchildren, the children of Hubbard Frazer (Will Book I:299; Deed Book 35:454; 36:202). The portion of the property containing the Handy House site went to Joel H. Frazer, who ran it as a farm according to the 1880 U.S. Census (Cromwell 2002). Joel H. Frazer was the owner of the property shown on the 1877 map of Harrison County (Figure 3.1). Frazer sold the property, including the residence, as a 165.3-acre parcel to William T. Handy in 1883 (Deed Book 45:384).

William Torrence Handy was born in 1855 in Cincinnati, Ohio to Robert and Eliza Handy of Maryland. In 1870, the U.S. Census indicated that he was a student at the Greenway Boarding School in Springfield, Ohio. Just prior to purchasing the Handy House farm, he was a stock grower in Colorado Springs, Colorado where he married Mary Welch in 1881 (1880 U.S. Census). Handy established a well-known horse farm on the property he purchased from Frazer in 1883 where he bred trotters. He renamed the farm from Ridgeway, which it had been known since Brown's ownership, to Chestnut Hill (Fowler 2005). Handy was responsible for making most of the changes that are today evident in the architecture of the main house and barns. During his tenure at the property, he enlarged the upper half story of the original brick Federal style main house into a full second story in the Victorian style and added a cupola above that (Figure 3.2).

Handy also added two large barns to the agricultural outbuildings north of the house near a pre 1850s English style barn and corn crib, including a breeding stable and a tobacco barn (Fowler 2005).

Figure 3.1. Map of Harrison County, Kentucky Showing the Handy House as Ridgeway (D.G. Beers Co. 1877).

According to the 1900 U.S. Census, Handy's household included himself (age 44), his wife Mary (age 42), his children Nancy B. (age 15), Pricilla W. (age 12), and Harriette W. (age 10). Nine other people were listed in the household including his in-laws, aunts, brother and sister in-law, and three black servants.

Handy died on April 19, 1909 in Cynthiana at which point the property passed to his wife Mary. She owned the property until her death on September 30, 1916. At that point 164.2 acres of the land was sold to Charles LeBus (Deed Book 81:357). LeBus owned the property until his death in 1931. His estate sold the property, which included 161 acres, to R.H. Willis in 1832 (Deed Book 96:310). Willis owned the property for only a few years before he sold it to Peak and Florence in 1937 (Deed Book 99:540).

The property, which contained around 120 acres, was owned by Charles Swinford for most of the twentieth century (Table 3.1).

Figure 3.2. The Handy House in 1905 (Courtesy Billy Fowler).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

As part of this project, a search of the Office of State Archaeology GIS database of archaeological sites and surveys was performed (FY10-6456). This search identified 22 previously recorded archaeological sites within a two kilometer buffer of the project area. Only four of these sites (15Hr50, 15Hr53, 15Hr54, and 15Hr56) are located directly within the boundaries of Flat Run Veteran's Park (see Figure 1.3). A total of 12 archaeological Phase I surveys have been conducted in the vicinity of the project area. Three of these projects (Arnold 2003; D'Ambruoso and Bundy 2003; Sandefur and Ball 2004) either occurred within or crossed Flat Run Veteran's Park.

Previous Archaeological Investigations within the Project Area

Prior to this survey, three separate archaeological investigations had taken place within or crossed the Flat Run Veteran's Park property. In 2003, Cultural Resource Analysts performed a Phase I survey in advance of the proposed construction of Alternate F of the West Cynthiana Bypass from US 27 to the junction of US 62 and KY 392 (Arnold 2003). As part of this project, a 60 m wide corridor crossing the northern and

northeastern portion of Flat Run Veteran's Park was surveyed through visual inspection and shovel probing at 20 m intervals. Three previously unidentified archaeological sites (15Hr53, 15Hr54 and 15Hr55) were identified during the survey, two of which (15Hr53 and 15Hr54) are located within the park.

Site 15Hr53 consisted of a light to moderate scatter of prehistoric and historic cultural materials located in a previously plowed field that was associated with three standing barns and the Handy House. The Handy House and barns were located outside of the bypass corridor and would not be directly affected by the proposed construction. The prehistoric component of Site 15Hr53 consisted of a light scatter of lithic debitage, a Type 5 Fine Triangular point, and sherds that were too small to be analyzed. It was determined that the prehistoric component likely represented a Late Woodland/Fort Ancient occupation. However, given the location within a plowed field, absence of features, and general light density of the cultural materials no further investigations were recommended at Site 15Hr53 (Arnold 2003:69-70).

Site 15Hr54 was identified by the presence of a light scatter of prehistoric ceramics and lithic materials within previously plowed and standing tobacco fields. Materials recovered from Site 15Hr54 included a Late Woodland/Fort Ancient Triangular point, leached limestone tempered sherds, and lithic debitage (Arnold 2003:73). Shovel probing at the site did not identify any features or intact midden. However, given the presence and size of the ceramics recovered, Phase II investigations were recommended to better determine if intact subsurface deposits were present at Site 15Hr53 (Arnold 2003:75).

Also in 2003, Cultural Resource Analysts performed a Phase I survey in advance of the proposed construction of the Harrison County Health Center (D'Ambruoso and Bundy 2003). The survey area covered 5.83 acres within the southern/southeastern portion of the Flat Run Veteran's Park (see Figure 1.3). As a result of this investigation, one previously unidentified archaeological site (15Hr56) was identified. Shovel probing of the proposed construction location resulted in the identification of a light density lithic scatter that included debitage, a biface fragment, and a Fort Ancient Type 3 Coarsely Serrated Triangular point (D'Ambruoso and Bundy 2003). All artifacts were recovered from the plowzone and no features or midden were identified. Given the limited amount of cultural materials and lack of intact subsurface deposits, no further work was recommended at the site. The subsequent construction of the Harrison County Health Center completely destroyed Site 15Hr56.

In 2004, Wilbur Smith Associates conducted a Phase I survey in advance of the proposed construction of the West Cynthiana Extension Bypass and US 27 bridge realignment (Sandefur and Ball 2004). As a result of this investigation, two previously unidentified archaeological sites (15HR50 and 15Hr51) were identified. Site 15Hr50 is located within the western portion of Flat Run Veteran's Park.

Site 15Hr50 consisted of a large, very light scatter of prehistoric and historic cultural materials within a previously plowed lowland floodplain setting along Flat Run

Creek (Sandfur and Ball 2004). Prehistoric materials recovered, included a possible Late Woodland Raccoon Notched point fragment, several biface fragements, cores, and lithic debitage. Historic materials, included ceramics, brick and window glass fragments (Sandefur and Ball 2004). Given the light density and relatively low diversity of artifacts recovered from Site 15Hr50, and the absence of features or midden, the site was not considered to be potentially eligible for listing in the National Register of Historic Places (NHRP). No further work was recommended.

Previously Identified Archaeological Sites within 2 km of the Project Area

A search of the Office of State Archaeology GIS database indicated that nine Phase I archaeological surveys and 18 previously identified archaeological sites (Table 3.2.) were located within 2 km of Flat Run Veteran's Park. Each of these projects is described below.

The Office of State Archaeology site forms for sites 15Hr2, 15Hr6, 15Hr9, 15Hr12, 15Hr13, and 15Hr17 were completed by Kentucky Heritage Council personnel based on fieldwork conducted primarily in the summer of 1980. No recommendations for future investigation were reported for any of the sites and potential eligibility of NRHP status was not assessed. Site 15Hr2 was a previously recorded site—an earthen mound—that was revisited. The 1980 revisit could not locate the mound and determined that it probably had either been destroyed or incorrectly located (Kryst 1980a). Site 15Hr6 was defined as an isolated find of a single biface (Kryst 1980b). Sites 15Hr9, 15Hr12, 15Hr13, and 15Hr17 are all lithic scatters located along the South Fork of the Licking River (Kryst 1980c-f). Among these, only Site 15Hr17 contained diagnostic cultural materials—a Triangular Cluster projectile point associated with the Late Woodland/Fort Ancient occupation of the region (Kryst 1980f).

Wilbur Smith Associates conducted a Phase I survey in advance of the proposed construction of the West Cynthiana Bypass that resulted in the identification of four previously unidentified sites within 2 km of Flat Run Veteran's Park (15Hr40, 15Hr41, 15Hr42, and 15Hr43) and revisited two previously identified sites (15Hr10 and 15Hr14) (Sandefur and Andrews 1997). Site 15Hr10 was identified as a possible Paleoindian/ Early Archaic lithic scatter in the floodplain of the South Fork of the Licking River. Shovel probing identified no buried deposits and no further work was recommended.

Site 15Hr14 was a large lithic scatter containing Early Archaic (Kirk Corner Notched) and Late Archaic (Brewerton Eared Notched) projectile points, also located in the floodplain of the South Fork of the Licking River. Shovel probing identified a buried zone directly beneath the plowzone. The site was identified as potentially eligible for listing in the NRHP and Phase II investigations were recommended prior to future construction activities (Sandefur and Andrews 1997). Phase II investigations of 15Hr14 were conducted by Cultural Resource Analysts in 2001 (Allgood et al. 2004). These investigations determined that the site did not meet the criteria for NRHP eligibility and no further work was recommended.

Table 3.2. Previously Identified Archaeological Sites within 2 km of the Flat Run Veteran's Park Project Area.

Site	Method of Investigation	Site Description	Results	NRHP Status	Report Date/Authors
15Hr2	Reconnaissance	earth mound	KHC attempted to relocate in 1980; either destroyed or located incorrectly	Not assessed	Kryst 1980a
15Hr6	Reconnaissance	isolated find	One unidentified biface	Not assessed	Kryst 1980b
15Hr9	Reconnaissance	open habitation	Large, dense lithic scatter	Not assessed	Kryst 1980c
15Hr10	Shovel probes	open habitation	Light possible Paleo/E. Archaic lithic scatter; no intact deposits	Not Eligible	Sandefur and Andrews 1997
15Hr11	Shovel probes	open habitation	Light lithic scatter; no diagnostic material	Not Eligible	Allgood and Hudson 2002
15Hr12	Reconnaissance	open habitation	Light lithic scatter; no diagnostic material	Not assessed	Kryst 1980d
15Hr13	Reconnaissance	open habitation	Light lithic scatter; no diagnostic material	Not assessed	Kryst 1980e
15Hr14	Shovel probes	open habitation	Large Early and Late Archaic lithic scatter; Phase II recommended	Not Eligible	Allgood et al. 2004; Sandefur and Andrews 1997
15Hr15	Shovel probes	open habitation	Light lithic scatter; no diagnostic material;	Not Eligible	Allgood and Hudson 2002
15Hr17	Reconnaisance	open habitation	Large lithic scatter; Late Prehistoric Triangular point and groundstone	Not assessed	Kryst 1980f
15Hr40	Shovel probes	open habitation	Light lithic scatter	Not Eligible	Sandefur and Andrews 1997
15hr41	Shovel probes	open habitation	Light lithic scatter	Not Eligible	Sandefur and Andrews 1997
15Hr42	Shovel probes	historic farm/ residence	Early to mid-19th Century farm/residence with possible intact midden; Phase II recommended	Eligible	Allgood et al. 2004; Sandefur and Andrews 1997
15Hr43	Shovel probes	open habitation	Early Archaic lithic scatter; Phase II recommended	Potentially Eligible	Sandefur and Andrews 1997
15Hr49	Shovel probes	historic farm/ residence	Late 19th-Early 20th Century farm/residence	Not Eligible	Garst and Murray 2002
15Hr51	Shovel probes	historic farm/ residence	19th-20th Century residence; may be location of a 19th Century toll house; monitoring recommended for future construction activities	Not Eligible	Sandefur and Ball 2004
15Hr52	Shovel probes	open habitation	Early Archaic and Early to Late Woodland scatter; Kirk Corner Notched and Adena Stemmed points, Grit tempered ceramics; Phase II recommended for future construction activities	Potentially Eligible	Keeney 2007
15Hr55	Shovel probes	open habitation	Light lithic scatter; no diagnostic material	Not Eligible	Arnold 2003

Sites 15Hr40 and 15Hr41 were identified as light lithic scatters (Sandefur and Andrews 1997). Neither site contained diagnostic cultural materials. Shovel probing at

both sites did not indicate the presence of buried cultural deposits. No further work was recommended at either site.

Site 15Hr42 was identified as an early to mid-nineteenth century farm/residence along the base of ridge in the floodplain of the South Fork of the Licking River. Shovel probing identified possible intact midden extending to depths of 50 cm at the site. The site was considered potentially eligible for the NRHP and Phase II investigations were recommended prior to future construction activities (Sandefur and Andrews 1997). Phase II testing of this site by Cultural Resource Analysts determined that it contained significant early to mid-nineteenth century deposits and was eligible for listing in the National Register of Historic Places (Allgood et al. 2004).

In 2006, Kentucky Archaeological Survey (KAS) personnel conducted Phase III investigations at Site 15Hr42 and identified intact early to mid-nineteenth century historic deposits and structural elements related to the Civil War Battle of Cynthiana (Mabeltini 2010, personal communication). KAS determined that the site was a farm/residence in the early nineteenth century, but was used as a militia and Union storage depot during the Civil War, and was known as Camp Frazier. During the Civil War, Confederate Gen. J. H. Morgan raided the town of Cynthiana and captured and burned Camp Frazier. A large amount of Civil War era supplies were historically reported to have been stored in the house and the KAS excavation identified quantities of uniform buttons and buckles, firearms parts and spent shells, and food remains (faunal and floral materials) within the structure's cellar (Brian Mabeltini, personal communication 2010).

Site 15Hr43 was an Early Archaic lithic scatter located on a bluff overlooking the the western floodplain of the South Fork Licking River (Sandefur and Andrews 1997). A diagnostic Early Archaic MacCorkle point was recovered from the site. Shovel probing did not identify any buried deposits, but the site was determined to be potentially eligible for inclusion in the NRHP. Phase II investigations were recommended prior to future construction activities (Sandefur and Andrews 1997).

In 2002, Cultural Resource Analysts performed a survey of 12.6 acres in advance of the proposed construction of the Cynthiana Wastewater Treatment Plant (Allgood and Hudson 2002). During this investigation, two previously identified sites (15Hr11 and 15Hr15) were revisited. Site 15Hr11 was a light lithic scatter located in an extensively plowed and eroded upland setting. Shovel probing recovered no diagnostic materials and no further work was recommended. Site 15Hr15 was similarly extensively plowed and eroded. Shovel probing produced only limited cultural materials and no diagnostics or buried deposits. No further work was recommended (Allgood and Hudson 2002).

In 2004 as part of the West Cynthiana Bypass and bridge realignment survey, Wilbur Smith Associates identified Site 15Hr51 (Sandefur and Ball 2004). Site 15Hr51 is located on the south side of US 62 near the junction with KY 392. The site consists of a 1930s standing brick residence and may have been the location for a nineteenth century toll house located along Republican Pike in Harrison County (Sandefur and Ball 2004). Shovel probing did not identify any intact deposits. The site is not considered eligible for

the NRHP, but monitoring for cultural materials was recommended during any future construction activities.

In 2002, Cultural Resource Analysts conducted a Phase I survey in advance of proposed cell tower construction (Garst and Murray 2002). This survey identified a late nineteenth-early twentieth century historic farm/residence (15Hr49). Standing structures are associated with the site, but were located outside of the proposed area of impact. Shovel probing recovered a variety of historic kitchen and architecture group artifacts, but did not identify intact buried deposits. No further work was recommended for Site 15hr49 (Garst and Murray 2002).

The Office of State Archaeology site form for Site 15Hr52 indicates that the site was recorded in 2007 by United State Army Corps of Engineers archaeologists (Keeney 2007). The site is situated in the dissected uplands overlooking the South Fork of the Licking River. Surface collection and shovel probing identified a large lithic scatter that contained diagnostic Early Archaic (Kirk Corner Notched), Early to Middle Woodland (Adena Stemmed), and Late Woodland (Grit tempered ceramics) cultural materials. The site was determined to be potentially eligible for inclusion in the NRHP. No recommendations for future investigation were provided.

As part of the West Cynthiana Bypass from US 27 to the junction of US 62/KY 392 survey, Cultural Resource Analysts identified Site 15Hr55 (Arnold 2003:76). This site is located just outside of the northeast boundary of Flat Run Veteran's Park. This site was identified by the presence of a light scatter of prehistoric cultural materials within an upland pasture and previously plowed fields. Recovered cultural materials, included lithic debitage and a single biface fragment (Arnold 2003:76). Due to the lack of diagnostic materials, lack of features or midden, and heavy erosion from agricultural activities the site was not considered potentially eligible for listing in the NRHP and no further archaeological investigation was recommended (Arnold 2003:76-79).

In addition to these previously recorded sites both within and adjacent to the Flat Run Veteran's Park property a total of six Phase I surveys were conducted that resulted in the identification of no new archaeological sites. The pertinent information for each of these projects is presented in Table 3.3.

Summary of Previous Archaeological Investigations

The preceding discussions of previous archaeological research conducted both within and in the vicinity (within 2 km) of the Flat Run Veteran's Park project area illustrate that a wide range of prehistoric and historic cultural materials have been documented. Within the project area boundary four previously identified sites have been recorded (15Hr50, 15Hr53, 15Hr54, and 15Hr56). Each of these sites is characterized by a light prehistoric scatter that contains diagnostic materials (either projectile points or ceramics) that are associated with the Late Woodland and Fort Ancient occupations of the region. Sites 15Hr50 and 15Hr53 also contain nineteenth and twentieth century historic components.

Table 3.3. No Find Archaeological Surveys within 2 km of the Flat Run Veteran's Park Project Area.

Date	Investigator(s)	Project	Result
1989	Arrow Enterprises	4 ac. Survey of the Cythiana Apartments	No sites identified
1989	Arrow Enterprises	2 ac. Survey for the Monticello Senior Apartments in Cynthiana	No sites identified
1990	Arrow Enterprises	3 ac. Survey for the Robinwood Heights Apartments in Cynthiana	No sites identified
1991	Janzen	Survey of the 3M Electrical Substation, Cynthiana	No sites identified
1993	Arrow Enterprises	1.6 ac Survey for the Cynthiana Community Service Center	No sites identified
1999	CRA	11.6 ac Survey for the Wastewater Treatment Facility, Cynthiana	No sites identified

None of the previous research projects identified any intact features or midden at the known archaeological sites within the Flat Run Veteran's Park boundary. Sites 15Hr50, 15Hr53 (only the portion within the proposed alternative), and 15Hr56 were considered not eligible for inclusion on the NRHP and no further archaeological work was recommended. At present, the western portion of Site 15Hr50 has been impacted/ destroyed by soccer field and parking construction within the park. The majority of the site, however, remains within the municipal park land. Site 15Hr56 was completely destroyed by the construction of the Harrison County Health Center.

Sites 15Hr53 and 15Hr54 were the focus of the current investigation. Although no further work was recommended for Site 15Hr53, the previous investigation did not include the standing historic residence (Handy House) or investigate the area immediately adjacent to the house. Phase II investigations were recommended for Site 15Hr54 in advance of the proposed bypass construction. The current investigation focused on refining the site boundaries and determining if intact subsurface deposits were present.

CHAPTER FOUR:
FIELD METHODS

The field methods employed during the 2010 investigation of the Flat Run Veterans Park project area were designed to: 1) determine if significant cultural resources were present in previously uninvestigated portions of the project area; 2) refine the boundaries of two previously identified sites that had been determined to be potentially eligible for listing in the National Register of Historic Places (Handy House [15Hr53] and 15Hr54 [sites 15Hr50 and 15Hr56 had previously been determined to be not eligible for listing in the National Register of Historic Places) within the project area (Arnold 2003; D'Ambruoso and Bundy 2003; Sandefur and Ball 2004); and 3) determine the nature and extent of intact, subplowzone deposits that might be present at sites 15Hr53 and 15Hr54. Accomplishment of these goals necessitated the use of several methods of data collection. First, visual surface inspection of the project area was undertaken to identify areas that had been disturbed by previous construction and determine the extent of disturbance. In addition, surface inspection was also used in areas that had previously been in crop (plowed) and good surface visibility was available. Second, shovel probes were excavated in areas that indicated little or no construction disturbance, and had not been previously surveyed. Lastly, a single test unit was hand excavated to expose and define a feature identified in a shovel probe.

SURFACE INSPECTION

Prior to the initiation of shovel probing, the entire project area was inspected for construction-related disturbances. Extensive land-leveling related to the construction of soccer fields and parking lots was identified in the lower (western) portion of the project area along Flat Run Creek (see Figure 1.2). The topsoil in this area has been stripped and then used to level the existing ground surface. In addition, an access road and parking lot also had been constructed and covered with chat gravel. The previously identified Site 15Hr50 (Sandefur and Ball 2004), which covers much of the western end of project area, has likely been impacted by the recent construction. However, the majority of Site 15Hr50 is positioned slightly upslope of the recent construction disturbances and appears unaffected. As a result of these disturbances, no further work was conducted in the lower (western) portion of the project area. This site was documented during an archaeological survey of proposed alternatives for the Cynthiana Bypass. At that time, Site 15Hr50 was determined to be not eligible for listing in the National Register of Historic Places.

A second area of disturbance within the project boundary is associated with the construction of the Harrison County Health Center. The area has been impacted by land-leveling and topsoil removal that extends well beyond the footprint of the actual building construction (see Figure 1.2). These activities have severely disturbed a large section of the southeastern portion of the project area. An archaeological site (15Hr56) was identified in this location during survey in advance of the Health Center construction. It was determined that Site 15Hr56 did not contain significant cultural resources (D'Ambruoso and Bundy 2003). As a result of the construction-related disturbance and

previous documentation of Site 15Hr56, no further work was conducted in this portion of the project area.

Surface inspection was also employed in the north and northeastern portions of the project area where previous agricultural plowing for tobacco fields had occurred. These fields were in crop as recently as 2009 and retained relatively good (60-70 percent) surface visibility. Much of this area was not included in any of the previous archaeological projects that have been conducted within the project boundaries. As a result, locations with good surface visibility were walked at close-interval spacing (10 m) to identify and collect artifacts. All identified artifacts were pin flagged and collected. The spatial distribution of artifacts identified during the surface inspection was used to refine the boundaries of the Handy House site and Site15Hr54, and to identify artifact concentrations within Site 15Hr54.

SHOVEL PROBES

Shovel probes were excavated in areas that: 1) had not been surveyed by previous archaeological investigations; 2) had not been severely disturbed by recent construction activities identified during the surface inspection of the project area; and 3) were not located on steep slopes. Following these criteria, the agricultural fields in the north/northeastern portion of the project area (near the previously documented location of Site 15Hr54), along with the central portion of the project area (encompassing the Handy House and yard [15Hr53]), required shovel probing.

Shovel probing around the Handy House (15Hr53) involved establishing a 5 m grid across the yard. A shovel probe was excavated at each 5 m point across the grid. Each shovel probe was excavated to sterile subsoil, unless impeded by rubble fill or an impassable object (e.g., stone or brick). Excavated soil was screened through 6.25 mm wire mesh to facilitate and standardize artifact collection. Recovered artifacts were bagged for each shovel probe and a stratigraphic profile was drawn.

Shovel probing in the agricultural fields to the north/northeast of the Handy House involved five transects spaced at 20 m intervals. Transects 1, 2, and 5 were positioned in areas that had not been previously surveyed and had no surface visibility (located outside of the plowed tobacco fields). Transects 3 and 4 were positioned to roughly bisect the longest plowed field and provide stratigraphic information across the north/northeast portion of the project area. Each shovel probe was excavated to sterile subsoil. Excavated soil was screened through 6.25 mm wire mesh to facilitate and standardize artifact collection. Recovered artifacts were bagged for each shovel probe and a stratigraphic profile was drawn.

The excavation of shovel probes provided a systematic sampling of artifacts from across the project area. Shovel probe excavation also provides information regarding the integrity of subsurface deposits and depositional history within the project area. The distribution of positive and negative shovel probes across the project area was also used to refine the boundaries of the Handy House and Site 15Hr54.

TEST EXCAVATION

A single 2 x 3 m test unit was excavated in the north/northeastern portion of the project area within the refined and expanded boundary of Site 15Hr54. During shovel probing (Transect 4, STP 9) a possible intact feature was identified. In order to gather as much information as possible regarding the possible feature and integrity of the deposits at Site 15Hr54, a hand excavated unit was positioned adjacent to the location of the shovel probe. The plowzone within the 2 x 3 m unit was removed by hand to expose the intact deposits. As a result, a large pit feature was identified, photographed, and mapped in planview. Following the mapping, the feature was bisected, photographed, and profiled. The remaining half of the feature was then excavated. All excavated feature fill was screened through 6.25 mm wire mesh to facilitate artifact recovery. All recovered artifacts were collected. Soil samples (12-15 liters) for flotation were collected from each half of the feature.

All artifacts collected during the surface inspection, shovel probing, and test unit excavation conducted as part of this investigation were washed, labeled, and catalogued at the University of Kentucky Archaeology Laboratory. All cultural materials and records documenting this investigation are curated at the University of Kentucky William S. Webb Museum of Anthropology in Lexington, Kentucky.

CHAPTER FIVE:
LITHIC ARTIFACTS

By
Greg Maggard

A total of 205 prehistoric lithic artifacts was recovered from shovel probes and surface collections conducted during the Handy House Park investigation (sites 15Hr53 and 15Hr54). The assemblage is comprised entirely of chipped stone materials, including tools (n=9) and debitage (n=196). The analysis and discussion of these materials is presented below.

LITHIC TOOL ANALYSIS

The identification of formal and informal tools can be useful for identifying reduction trajectories (e.g., bipolar, bifacial, or unifacial) (Andrefsky 1994; Odell 2003), investigating tool function and the potential activities represented (Odell 1981, 1996), and providing chronological correlates for site or context occupations (Justice 1987; Railey 1992). Formal technologies are typically defined by lithic tools manufactured in anticipation of repeated future use(s) and according to predetermined design considerations (Bleed 1986; Hayden et al. 1996; Nelson 1991). Formal tools frequently exhibit evidence of resharpening, maintenance, and recycling (Bamforth 1986; Binford 1979; Odell 2003; Torrence 1989) and may be multifunctional (Binford 1979; Kelly 1988; Shott 1989). The majority (n=8; 88.9 percent) of the tools recovered during this project are formal bifacial forms.

Informal technologies, in contrast, generally refer to those in which lithic tools are situationally produced for relatively immediate use in a variety of potential tasks(Andrefsky 1994; Odell 2003). Informal tools are typically made on flakes and may display intentional retouch along one or more margins. Informal tools may be discarded after the specific task is accomplished or upon becoming non-functional (e.g., broken or dulled edge). Examples that display multiple use episodes are uncommon (Andrefsky 1994; Odell 2003, 1996). Only one informal tool (n=1; 11.1 percent) was identified within the assemblage from sites15Hr53 and 15Hr54.

The specific methods used in this analysis included: 1) typological identification; and 2) measurement of selected metric variables to record variation in size (Odell 2003; Railey 1992). Individual tools (both formal and informal) were visually classified according to a general typological framework of potential tool forms based on previously conducted analyses (Justice 1987; Pollack and Schlarb 2009; Railey 1992). Tools identified from sites 15Hr53 and 15Hr54 included projectile points (n=4), projectile point fragments (n=2), a drill/perforator (n=1), a late-stage preform/knife (n=1), and an unifacial scraper fragment (n=1). These categories are not intended to represent perceived functional differences between tool classes (although this may be true in some cases). Rather, each category simply represents patterned morphological and technological distinctions between individual tools.

Upon completion of the typological classification, specifically defined metric attributes were measured. These attributes included length, width, thickness, and for some tools (specifically triangular projectile points), medial blade width measurements. Length was measured in millimeters as the longest dimension of a particular tool. Width was measured at the widest point perpendicular to the dimension of length. Thickness was measured at the thickest point on a tool that was perpendicular to both length and width, resulting in a three dimensional picture of an individual tool.

FORMAL LITHIC TOOLS

Projectile Points

A total of six projectile points (n=4) and projectile point fragments (n=2) were recovered from sites 15Hr53 and 15Hr54. If identifiable, projectile points were examined for size and shape, flaking characteristics, presence of basal or edge grinding, resharpening, and raw material. Three types of projectile points were identified in the assemblage and include: 1) Type 5 Fine Triangular points (n=2); 2) a Nodena Cluster Banks variety point (n=1); and 3) an unidentified stemmed (n=1) point.

Type 5 Fine Triangular (n=2)

Type 5 Fine Triangular points have been recovered from early through late Fort Ancient sites (Henderson 2008; Railey 1992). Although initially believed to be principally diagnostic of the late Fort Ancient subperiod (after A.D. 1400) (Railey 1992:161-163), subsequent research indicates that Type 5 Fine Triangular points are more characteristic of middle Fort Ancient occupations (Henderson 2008). For instance, Type 5 points account for 68.8 and 46.7 percent, respectively, of the points recovered from the middle Fort Ancient Carpenter Farm (Franklin County) and Florence (Harrison County) sites (Pollack and Hockensmith 1992; Sharp and Pollack 1992). In comparison, Type 5 points account for only 33.8 percent of all points from the late Fort Ancient New Field (Bourbon County) site (Henderson and Pollack 1996). In Central Kentucky, Type 5 points have been recovered from the early Fort Ancient Dry Run (Scott County) and Muir (Jessamine County) sites (Sharp 1984), middle Fort Ancient components at Guilfoil (Fayette County), Dry Branch Creek (Mercer County), and Broaddus (Madison County) (Carmean 2003; Fassler 1987; Pope et al. 2005). Late Fort Ancient sites yielding Type 5 points include Capitol View (Franklin County) and Howard (Madison County) (Henderson 1992; Pollack and Schlarb 2009).

The two Type 5 points recovered from sites 15Hr53 (n=1) and 15Hr54 (n=1) were manufactured from St. Louis (n=1) and Boyle (n=1) cherts, respectively (Figure 5.1). Cross-sections are slightly bi-convex for both specimens. The metric attributes recorded are presented in Table 5.1. Length on the specimen from site 15Hr54 could not be recorded because the distal tip is broken and basal width on the other example could not be recorded due to a proximal break. Although this is a limited sample, the size of these

points is consistent with previously identified Type 5 points in central Kentucky (Railey 1992; Pollack and Schlarb 2009).

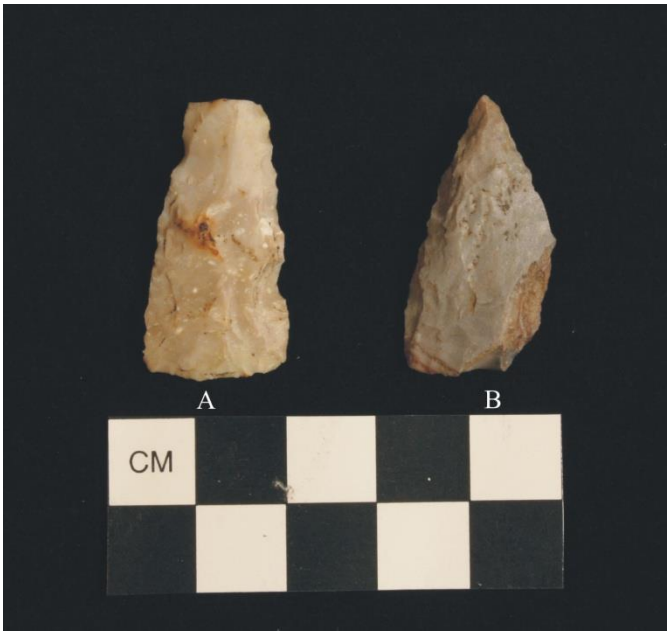

Figure 5.1. Type 5 Fort Ancient Triangular Points: a, Site 15Hr54; b, Site 15Hr53.

Table 5.1. Metric Attributes for Type 5 Fine Triangular Points.

Point Type	N	Raw Material	Length	Basal Width	Medial Blade Width	Thickness
Type 5 (15Hr54)	1	Boyle	n/a	15.2	13.6	4.9
Type 5 (15Hr53)	1	St. Louis	30.6	n/a	14.7	4.8

Nodena Cluster Banks Variety Point (n=1*)*

A single example of this point type was recovered from Site 15Hr54 (Figure 5.2). Nodena Banks Variety points are distinct from the more common elliptical Nodena points in that the haft element is more clearly demarcated and they typically have flat bases with parallel, convex lateral margins (Justice 1987: 230). Nodena points have a relatively wide distribution and typically relate to late Mississippian and Protohistoric contexts (Justice 1987; Pollack 2008).

The example from Site 15Hr54 is manufactured from St. Genevieve chert. A section of the lateral margin near the distal end has been broken, probably during thinning. Length is 46.5 mm, basal width is 16.9 mm, medial blade width is 20.8 mm, and thickness is 8.4 mm. No grinding of the base or lateral margins is present and it is possible that this point was not completed.

Unidentified Stemmed Point (n=1)

A small, unidentified stemmed point manufactured from Brannon chert was recovered from Site 15Hr54 (Figure 5.2). The point is broken near the distal end, contains a weak notch on one margin, and has a rounded stem base. Length could not be determined, but maximum width is 19.9 mm and thickness is 10 mm. The cross-section is strongly bi-convex. The quality of flaking on this specimen is, overall, relatively poor and it is possible that this point was abandoned prior to completion or was the work of a novice.

Figure 5.2. Additional Projectile Points from Site 15Hr54: a, Nodena Banks Variety; b, an Unidentified Stemmed Point.

Projectile Point Fragments (n=2)

Two projectile point fragments—both manufactured of Boyle chert—were recovered from sites 15Hr53 (n=1) and 15Hr54 (n=1). These fragments include a distal tip from an unknown point from Site 15Hr53 and a small medial fragment (probably from a triangular point) from Site 15Hr54. No metrics were recorded for these specimens.

Drills/Perforators

A single Y-shaped drill manufactured from Boyle chert was recovered from Site 15Hr54 (Figure 5.3). This specimen has a concave base with strongly projecting ears. The cross-section is bi-convex and the bit or blade is finely pressure flaked. Length is

39.7 mm, basal width is 21.9 mm, medial blade width is 9.2 mm, and thickness measured 6.7 mm. Drills/perforators were potentially used for boring and/or piercing a wide variety of materials, such as bone, shell, wood, stone, hide, and antler. Y-shaped drills are commonly encountered at Fort Ancient sites and often represent recycled triangular points (Railey 1992: 144). However, when compared with the two Type 5 Fine Triangular points discussed above, the thickness of the drill (6.7 mm and 4.9 and 4.8 mm, respectively) suggests that this was the intended form and not a recycled point.

Figure 5.3. 'Y' Shaped Drill from Site 15Hr54.

Late-stage Preform/Knife (n=1)

A late-stage preform or possible knife manufactured from St. Genevieve chert was recovered from the surface of Site 15Hr54 (Figure 5.4). This specimen is flat to slightly convex on the proximal end and has parallel, relatively straight lateral margins. One margin shows extensive, crude retouch that appears to post-date original manufacture—based on differential patination between the area of retouch and the rest of the tool. It is possible that this specimen was reworked by later occupants of the site. The tool measures 76.0 mm in length, 34.3 mm in width, and 9.8 mm in thickness. Lateral margins do not display any grinding and it does not appear that the tool was hafted.

Figure 5.4. Late-stage Preform/ Knife from Site 15Hr54.

INFORMAL LITHIC TOOLS

Unifacial Scraper fragment (n=1)

A small, distal section of a unifacial scraper fragment was recovered from Site 15Hr54 (Figure 5.5). The tool is manufactured from Paoli chert and is unworked on the ventral surface. The tool edge is steeply beveled and displays a series of small hinge and step fractures along the margin indicating use. Specific use(s) are unknown, but unifacial scrapers have been suggested to have functioned in a wide variety of potential activities, including the processing of both soft (plants, fresh meat, and fresh hides) and hard (wood, bone, shell, and dry hides) materials (Andrefsky 1998; Odell 2003; Pollack and Schlarb 2009; Railey 1992).

LITHIC DEBITAGE ANALYSIS

The process of lithic reduction is often conceived as a continuum of behavioral choices that begin with raw material selection and acquisition, continues with manufacture (technological strategy of reduction), use (edge damage and retouch), and reuse (retouch, curation and/or recycling), eventually culminating with the final discard of the implement (Andrefsky 1998; Bradley 1975; Grace 1993; Odell 2003). Deposition of lithic materials in the archaeological record may occur at any point along this continuum. Lithic debitage represents the by-products of this process and can provide insight into specific behavioral and technological choices represented in assemblages and/or archaeological contexts.

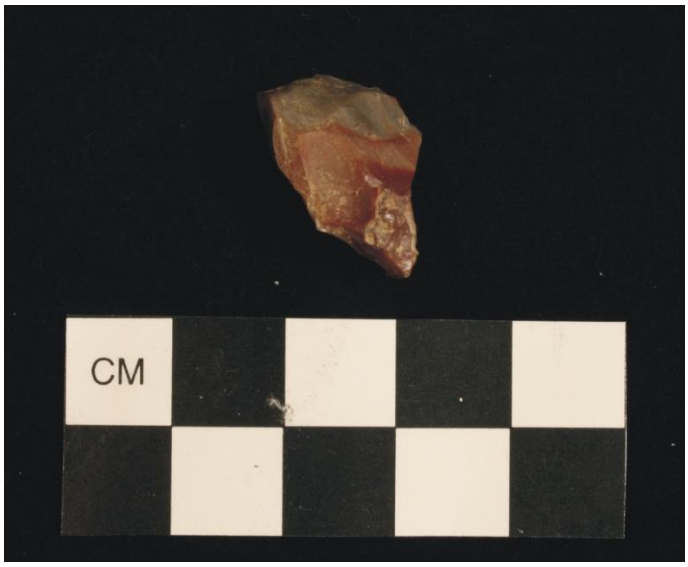

Figure 5.5. Unifacial Scraper fragment from Site 15Hr54.

Each piece of debitage recovered during the archaeological survey of the Handy House Park (n=196) was analyzed and classified according to a generalized debitage typology (Andrefsky 1998; Carr and Bradbury 2001; Grace 1993; Odell 2003; Ray and Lopinot 1998). Eight categories comprise the debitage typology used in this study and include: 1) cores and core fragments; 2) cortical flakes; 3) partial cortical flakes; 4) interior flakes; 5) biface thinning flakes; 6) blade-like flakes; 7) flake fragments; and 8) shatter. A description of each category is presented below.

Core/Core fragments – This category consists of non-tool nodules or chunks of raw material from which a flake or series of flakes has been detached, as evidenced by the presence of one or more flake scars on the surface of the core.

Cortical Flakes -- Cortical flakes are whole flakes (feather, hinge, or step termination present) that evidence: 1) identifiable platform, 2) bulb of force on the ventral surface, and 3) more than 50 percent coverage of the dorsal surface by the original raw material cortex.

Partial Cortical Flakes – Partial cortical flakes are whole flakes (feather, hinge, or step termination present) that evidence: 1) identifiable platform, 2) bulb of force on the ventral surface, and 3) less than 50 percent coverage of the dorsal surface by the original raw material cortex.

Interior Flakes – Interior flakes are whole flakes (feather, hinge, or step termination present) that evidence: 1) identifiable platform, 2) bulb of force on the ventral surface, and 3) an absence of cortex on the dorsal surface of the flake.

Biface Thinning Flakes – Biface Thinning flakes are whole flakes (feather, hinge, or step termination present) that evidence: 1) identifiable platform, 2) bulb of force on the ventral surface, 3) absence of cortex on the dorsal surface, 4) a high-angle platform (>60°) and 5) a lip, or "hook-like" protrusion, on the ventral edge of the platform.

Blade Flakes – Blade flakes are flakes that contain 1) an identifiable platform, and 2) a bulb of force (often diffuse) on the ventral surface. Blade flakes typically have a prominent central ridge on the dorsal surface formed by previous flake removals and are elongated and narrow.

Flake Fragments – Flake fragments are pieces of flakes that lack either an identifiable platform or a bulb of force. However, the specimen is still identifiable as a flake by the presence of either a platform or bulb.

Shatter – This category contains lithics that do not evidence: 1) an identifiable platform or, 2) a bulb of force. Because both of these two diagnostic features are absent these lithics cannot be assigned to any other debitage category.

Table 5.2. Lithic Debitage Recovered during the Flat Run Veteran's Park Survey.

Debitage Category	Frequency	Percentage
Cores and Core Fragments	4	2.0
Cortical Flakes	24	12.2
Partial Cortical Flakes	44	22.5
Interior Flakes	23	11.8
Biface Thinning Flakes	38	19.4
Blade-like Flakes	1	0.5
Flake Fragments	50	25.5
Shatter	12	6.1
Total	**196**	**100.0**

Analysis of the lithic debitage from the Handy House Park survey suggest that the full spectrum of reduction activities are represented in the assemblage (see Table 5.2). Flake fragments (n=50) are the most common type of debitage present and account for 25.5 percent of all debitage. Although the sample size is relatively small (n=196), debitage categories suggestive of earlier stages of lithic reduction are well-represented within the assemblage. Cores and core fragments (n=4; 2.0 percent), cortical flakes (n=24; 12.2 percent), and partial cortical flakes (n=44; 22.5 percent) are indicative of early stages of lithic reduction and comprise 39.7 percent of the assemblage. (Table 5.2). Bifacial thinning flakes (n=38; 19.4 percent) and interior flakes (n=23; 11.8 percent) are

also well-represented (31.2 percent of the assemblage when combined) and suggest that late-stage reduction and/or tool/bifacial blank preparation also occurred at sites 15Hr53 and 15Hr54.

The debitage assemblages for each site (15Hr53 and 15Hr54) are presented in Table 5.3. In general, the type and frequency of debitage is highly similar between the two sites. The debitage from both sites are indicative of the full reduction process. Early stage reduction debris (cores/core fragments, cortical flakes, and partial cortical flakes) account for a slightly higher percentage of the debitage at Site 15Hr54 (n=35; 40.7 percent) than Site 15Hr53 (n=37; 33.6 percent). In contrast, biface thinning flakes account for a slightly higher percentage of the total debitage at Site 15Hr53 (n=25; 22.7 percent) than at Site 15Hr54 (n=13; 15.1 percent) (Table 5.3). Variability in debitage type and frequency may indicate subtle differences in the emphasis of the reductive process between these two sites. However, the sample size for both sites is quite small and additional data would be required to more fully understand these patterns.

Table 5.3. Debitage Recovered from Sites 15Hr53 and 15Hr54.

	15Hr53		15Hr54		
Debitage Category	**Frequency**	**Percent**	**Frequency**	**Percent**	**Total**
Cores/Core fragments	2	1.8	2	2.3	4
Cortical flakes	10	9.1	14	16.3	24
Partial Cortical flakes	25	22.7	19	22.1	44
Interior flakes	11	10	12	14.0	23
Biface Thinning flakes	25	22.7	13	15.1	38
Blade-like flakes	1	0.9	0	0.0	1
Flake fragments	31	28.2	19	22.1	50
Shatter	5	4.6	7	8.1	12
Total	**110**	**100.0**	**86**	**100.0**	**196**

Evidence for the presence of the full reduction process is not unusual on prehistoric sites in Kentucky, but typically includes both large and small flakes (Carr and Bradbury 2001; Railey 1992). In terms of size, however, flakes in the Handy House Park assemblage are typically small (< 25 mm). Only 13 specimens (6.6 percent) of the total debitage assemblage (which includes cores and core fragments) were larger than 25 mm square. The presence of the full reduction process within an assemblage of generally small flakes may indicate that the available raw material types (i.e., small nodules or gravels) likely conditioned or limited flake size. Each of the four (n=4) cores and core fragments identified in the assemblage are relatively small and multidirectional. Two of the core/core fragments contain water-worn cortex and are suggestive of the exploitation of riverine gravels, which correlates well with the relatively small size of the debitage within the assemblage.

Analysis of the debitage also suggests that the occupants of sites 15Hr53 and 15Hr54 did not rely heavily on heat treatment (or annealing) of raw materials. Only 14.3 percent (n=28) of the debitage assemblage contained evidence for heat treatment (e.g., discoloration, potlidding, fire crazing) (Andrefsky 1998; Ray and Lopinot 1998).

RAW MATERIAL ANALYSIS

Raw material analysis was conducted on all prehistoric lithics, including tools and debitage. Specific varieties of raw materials used in lithic manufacture were identified based on the physical properties of the raw material (e.g., color, texture, fossil inclusions, and luster), reference to published descriptions (Burge 2003; Gatus 1987; Pollack and Schlarb 2009), and comparison with the chert reference collection housed at the William S. Webb Museum of Anthropology in Lexington. All specimens were visually identified with the aid of a 10X hand lens.

A relatively wide range of lithic raw materials were used in the manufacture of stone tools at sites 15Hr53 and 15Hr54. Chert types represented among the lithic tools and debitage in the assemblage included Boyle (n=94; 45.85 percent), St. Louis (n=48; 23.41 percent), St. Genevieve (n=48; 23.41 percent); Grier (n=5; 2.44 percent), Paoli (n=5; 2.44 percent), Haney (n=4; 1.95 percent), and Brannon (n=1; 0.49 percent) (see Table 5.4). Although a relatively wide range of raw materials is represented, the vast majority of the lithic assemblage is represented by Boyle, St. Louis, and St. Genevieve cherts (n=190; 92.67 percent). The remaining types (Grier, Paoli, Haney, and Brannon) represent only 7.33 percent (n=15) of the assemblage.

Table 5.4. Lithic Raw Material Types and Frequencies (includes both tools and debitage).

Raw Material	Frequency	Percent
Boyle	94	45.85
St. Louis	48	23.41
St. Genevieve	48	23.41
Grier	5	2.44
Paoli	5	2.44
Haney	4	1.95
Brannon	1	0.49
Total	**205**	**100.00**

Examination of the distribution of raw material types by site points to a similar pattern of chert exploitation at each site (see Table 5.5). Boyle chert is the most commonly used raw material at both sites. Slight differences exist in the frequencies of St. Louis and St. Genevieve cherts between Site 15Hr53 (n=22; 19.6 percent and n=32; 28.6 percent) and Site 15Hr54 (n=26; 28 percent and n=16; 17.2 percent). However, the

combined frequency of these two types is highly similar between the sites (n=54; 48.2 percent and n=42; 45.2 percent, respectively) (Table 5.5). The only potentially important difference between the two sites involves the exploitation of chert available in local geologic exposures (Grier and Brannon cherts).

Table 5.5. Lithic Raw Material Types and Frequencies for Sites 15Hr53 and 15Hr54 (includes both tools and debitage).

	15Hr53		15Hr54		
Raw Material	**Frequency**	**Percent**	**Frequency**	**Percent**	**Total**
Boyle	51	45.5	43	46.2	94
St. Louis	22	19.6	26	28.0	48
St. Genevieve	32	28.6	16	17.2	48
Grier	1	0.9	4	4.3	5
Paoli	4	3.6	1	1.1	5
Haney	2	1.8	2	2.1	4
Brannon	0	0.0	1	1.1	1
Total	**112**	**100.0**	**93**	**100.0**	**205**

In terms of geology, the boundary of the Inner Bluegrass and Outer Bluegrass physiographic provinces around Cynthiana—where the Middle Ordovician-aged Lexington Limestone formation (Grier, Tanglewood, Millersburg, and Strodes Creek Members) inter-tongues with the Clays Ferry formation—is not an especially chert-rich zone. Grier and Brannon cherts occur within the Lexington Limestone formation and can be found in downcut stream exposures, and occasionally, as residual cobbles on eroded slopes. Interestingly, local cherts are more frequently represented at Site 15Hr54. However, these two raw material types were only infrequently used at sites 15Hr53 and 15Hr54, and represent a combined total of 0.9 percent and 5.4 percent, respectively (Table 5.5). Although this may indicate a difference in chert procurement between the two sites, it is equally likely that this pattern is simply a product of small sample size.

The prevalence of chert materials not associated with the local geologic sequence (i.e., 'exotic' or extra-local)—which includes Boyle, St. Louis, St. Genevieve, Haney, and Paoli—is often taken as an indicator of relatively high mobility between regions or exchange (Andrefsky 1994; Bamforth 1986; Goodyear 1979). However, given the small size of cores and core fragments identified in the assemblage (see previous discussion), typically small size of flakes, and prevalence of water-worn (fluvial) cortex it is more likely that the non-local chert types present in the assemblage were procured from nearby alluvial and fluvial gravel deposits associated with the North Fork of the Licking River, rather than through high mobility or exchange.

DISCUSSION

A total of 205 lithic artifacts was recovered from sites 15Hr53 (n=112) and 15Hr54 (n=93). A relatively small number of tools were recovered from each site (n=2, 15Hr53) and (n=7, 15Hr54). Diagnostic projectile points, including Fort Ancient Type 5 Triangular points recovered at sites 15Hr53 and 15Hr54, and a single Late Prehistoric Nodena point from Site 15Hr54 indicate that both sites contain Fort Ancient components.

Other identified tool types included a late-stage preform/knife, a hafted drill, a small unifacial scraper fragment, and an unidentified stemmed point. Given the small sample of tools that were recovered, little can be said regarding the specific activities that were pursued at these sites. However, the presence of a suite of different tool types likely suggests that a relatively wide range of activities probably took place, especially at Site 15Hr54 (which contained the highest number of different tool types).

The results of the debitage and raw material analyses further highlight the similarities between the Site 15Hr53 and Site 15Hr54 assemblages. Both assemblages contain evidence for the full reduction process and are characterized by small sized flakes. Raw material exploitation was apparently focused on cherts available in nearby fluvial and alluvial gravels. Although the use of a relatively wide range of different raw material types is present, Boyle, St. Louis, and St. Genevieve cherts dominate the assemblages from both sites.

In sum, the lithic materials from Site 15Hr53are suggestive of a relatively limited range of activities that probably relate to an ephemeral Fort Ancient occupation of this part of the ridge. The assemblage from Site 15Hr54 is indicative of the pursuit of a slightly wider range of activities, but is also related to a Fort Ancient occupation. The presence of an intact middle Fort Ancient pit feature at Site 15Hr54 suggests that this occupation was more substantial and possibly longer-term than occurred at Site 15HR53.

CHAPTER SIX:
PREHISTORIC CERAMICS

by

A. Gwynn Henderson

INTRODUCTION

The process of making ceramic containers is an additive one, in contrast to the reductive manufacture of stone tools. Ceramic analysis focuses on identifying attributes of paste (the clay used to make the vessels), temper (particles added to the clay to aid in drying and firing), surface treatment, decoration, and form (shape, size and other attributes that can be inferred about the complete vessel). Temper and surface treatment/decoration are major attributes used to classify ceramics in Kentucky.

The analysis of the prehistoric ceramics recovered from Site 15Hr53 and Site 15Hr54 consisted of describing their salient characteristics and comparing them to ceramics previously recovered from the sites (Kerr 2003) and to previously described ceramics in the region in order to infer when the sites were occupied.

ANALYTICAL PARAMETERS AND METHODOLOGY

A total of one body sherd and 13 body sherds was recovered from dry-screened, shovel probe contexts at Site 15Hr53 and Site 15Hr54, respectively. Due to the limited number of specimens of any size recovered from these two sites, all complete body sherds measuring greater than 2 square cm, rather than the standard 4 square cm, were analyzed. Sherds measuring less than 2 square cm and spalled sherds missing their exteriors were not analyzed. They were simply lotted and counted. Sherds that glued together were considered a single sherd in analysis. These selection criteria produced an analyzed sample of one body sherd from Site 15Hr53 and five body sherds from Site 15Hr54 (Table 6.1).

Analyzed specimens were examined using a Fisher Scientific Stereomaster II binocular microscope at 15x magnification. Information recorded for each sherd, where germane, consisted of temper; paste inclusions; exterior and interior surface treatment and color; cordage twist; vessel fragment type (i.e., whether base, body, neck, or rim), maximum body wall thickness; and sherd size.

Each analyzed specimen was examined to collect information on the identity, abundance, size, and shape of each kind of temper particle and on the abundance, size, and shape of each type of naturally occurring paste inclusion.

Surface treatments reflected a continuum in smoothing. For cordmarked sherds, this continuum was divided into cordmarked (clear or faint impression) and smoothed-over cordmarked (specimens that showed evidence of some obliteration of cord impressions). In order to determine cordage twist, impressions from the exteriors of all

cordmarked sherds were taken with Sculpey (a modeling clay that can be reused repeatedly and hardened by baking in an oven). Twist was then ascertained from the cast.

Table 6.1. Prehistoric Ceramics from Sites 15Hr53 and 15Hr54 by Temper Ware Group.

Ware Groups/Ceramic Categories	Frequency	Percent
Site 15Hr53		
Mixed Leached Limestone Tempered and Leached Shell Tempered		
Cordmarked	1	100.0
Total Analyzed	**1**	**100.0**
Grand Total	**1**	**100.0**
Site 15Hr54		
Leached Limestone Tempered		
Cordmarked	1	20.00
Plain	2	40.00
Total	**3**	**60.00**
Mixed Leached Limestone Tempered and Leached Shell Tempered		
Cordmarked	1	20.00
Plain	1	20.00
Total	**2**	**40.00**
Total Analyzed	**5**	**100.0**
Unanalyzed Sherds (<2 square cm)	**8**	
Grand Total	**13**	

For plain matte surfaces, the continuum was divided into smoothed, poorly smoothed, and well-smoothed. Poorly smoothed surfaces were lumpy and irregular. Well-smoothed surfaces were clear and even.

Specimens with weathered or worn areas on their exteriors, but that otherwise had identifiable surface treatments, were considered eroded cordmarked or eroded plain, respectively. Sherd surfaces were considered eroded in cases where the exterior surface was still present, but was weathered or otherwise damaged beyond conclusive identification.

Surface color was determined by visual inspection relative to this assemblage; no reference was made to Munsell soil color charts (Munsell Color 1975). Sherd thickness was taken at the thickest spot using Helios needle-nosed calipers. Measurements were taken to the nearest .1 mm. Sherd size was estimated by placing each specimen on a 1 cm grid template and counting the number of squares the specimen covered.

ARTIFACT DESCRIPTIONS

The ceramics from these two sites were assigned to two ware groups on the basis of temper attributes and to four ceramic categories on the basis of exterior surface treatment (Table 6.1). They are described below.

Leached Limestone Tempered Ware Group
(n=3: 3 body sherds)
Not Illustrated

Sherds assigned to this ware group were moderately tempered with medium to large, angular to subangular voids in the paste, suggesting that some kind of calcareous rock, undoubtedly limestone, had been present but had leached away over time. Natural inclusions in the paste consisted of small, rounded to subrounded hematite/manganese particles and occasionally a small, quartz sand particle. The quantity of natural inclusions varied from very few to many. It is worth noting that no "fossils" (actually steinkerns [cf. Henderson 2009:160]) often found in the paste of ceramics recovered from Fort Ancient sites in central Kentucky were noted for these specimens. Sherd size ranged from 2 to 4 square cm.

Exterior surface treatment consisted of smoothed-over cordmarked (n=1) and smoothed plain matte (n=2). The cordmarked sherd was marked with S-twist cordage. Exterior surface color was light brown, brown, or medium gray.

Two interiors were plain matte, with smoothed (n=1) and eroded plain (n=1) examples represented. One specimen was missing its interior. Interior surface color was light brown or grey. Body sherd thickness was 6.7 mm or 8.2 mm.

Mixed Leached Limestone and Leached Shell Tempered Ware Group
(n=3: 3 body sherds)
Not Illustrated

Specimens in this ware group exhibited mainly medium to large, angular to subangular voids within the paste, suggesting that limestone had been present but had leached away over time. In addition, the paste exhibited small to large, distinctive platey holes in the paste, clear evidence that fragments of crushed freshwater mussel shell also had leached away over time in Kentucky's acidic soils. Temper density ranged from sparse to dense. In two instances, angular holes outnumbered platey holes, while in the third, the reverse was true. Paste inclusions in this ware group are the same as those described for the other ware group. Sherd size ranged from 2 to 20 square cm.

Exterior surfaces were smoothed-over cordmarked (n=2) or smooth plain matte (n=1). Twist could not be determined for the cordmarked specimens. Exterior surface color was medium brown, buff, or orange.

Interior surface treatment was smoothed plain matte (n=1), poorly smoothed plain matte (n=1), or eroded plain (n=1). Interior surface color was medium brown, grey brown, or buff. Body sherd thickness ranged from 6.5 mm to 9.2 mm, with a mean of 8.0 mm.

Summary

Investigations at Site 15Hr53 recovered only one analyzable sherd. It was a Mixed Leached Limestone and Leached Shell Tempered smoothed-over cordmarked body sherd that contained more limestone temper than shell temper and few hematite/manganese inclusions. Its vessel wall thickness measured 8.3 mm.

A total of five sherds recovered from Site 15Hr54 was large enough to analyze. (Note: The largest specimen was subsequently determined to have come from a large, pit feature. Additional investigation of the feature yielded a large quantity of middle Fort Ancient ceramics. These materials are currently being processed and will be reported in an addendum to this report). These specimens were tempered with leached limestone exclusively (n=3) or with leached limestone and varying amounts of leached shell temper (n=2). Paste inclusions were common and consisted of small, rounded to subrounded quartz and hematite/manganese particles.

Exterior surfaces were plain, matte (n=3) or cordmarked (n=2). S-twist cordage was the only type represented. Exterior color ranged from buff to brown to grey, with brown the most common. Interior surfaces were mainly smoothed plain mate and exhibit the same color range as exteriors. Body sherd thickness for the assemblage ranged from 6.5 mm to 9.2 mm, with a mean of 7.7 mm.

COMPARISON

Regional Ceramic Ware Groups

The Site 15Hr53 and Site 15Hr54 ceramic assemblages lack many temporally sensitive attributes. Fortunately, given the documented temporal affiliation in central Kentucky of ceramics manufactured with a mixture of limestone and shell temper, specimens assigned to the Mixed Leached Limestone and Leached Shell Tempered ware group can be considered Fort Ancient ceramics manufactured sometime before A.D. 1400 (Henderson 2008:741-742). For sites in Harrison County, ceramics with this temper profile are assignable to the Jessamine Series (see Sharp and Pollack 1992; Turnbow 1988).

It is less clear when the specimens assigned to the Leached Limestone Tempered ware group were made, since the use of limestone as temper in regional prehistoric ceramics has a long history (Applegate 2008:455-475; Henderson 2008:741-742). Certainly the most parsimonious explanation would be to consider this ware group contemporary to the Mixed Leached Limestone and Leached Shell Tempered ware group, and assign it to the Late Prehistoric period. However, these specimens could just as easily represent vessels manufactured during the Middle Woodland or Late Woodland subperiods. These specimens do not appear to be examples of thick limestone tempered Early Woodland wares or examples of Adena ceramics with their finely crushed limestone temper (Applegate 2008:460).

OTHER SAMPLES RECOVERED FROM THE SITES

Sherds were recovered from both sites during a previous survey (Kerr 2003). All three specimens recovered from Site 15Hr53 measured less than 1 square cm, and so were too small to analyze.

Seven of nine specimens recovered from Site 15Hr54 were large enough to analyze. Six were plain body sherds with generally well-smoothed exteriors (Kerr 2003:48-49). They were tempered with low to moderate amounts of small fragments of leached-away limestone. No mention was made of the kind of paste inclusions they exhibited or their surface color. Sherd wall thickness ranged from 6.1 to 7.9 mm, with an average of 6.9 mm.

One specimen, a well-smoothed plain rim, did not contain any observable temper (Kerr 2003:49). No mention was made of the kind of paste inclusions present or its surface color. The rim could not be oriented. Its lip was rounded and beveled to either the interior or exterior. Rim thickness was 8.6 mm.

Kerr's (2003:49-51) sample from Site 15Hr54 lacked any distinctive attributes that permitted him to make a meaningful temporal assignment. He concluded that the recovery of a triangular projectile point from Site 15Hr54 could suggest that the sherds might be examples of Jessamine and McAfee series ceramics, but the lack of cordmarked specimens made this association less positive. From his descriptions, Kerr's specimens do not appear to closely resemble the sherds recovered during the KAS investigations.

Temper, exterior surface treatment, and paste characteristics of the specimens Kerr analyzed from Site 15Hr54, curated at the William S. Webb Museum of Anthropology, were reexamined by the author using the methods previously outlined in this report. With respect to the six sherds Kerr assigned to the Leached Limestone Tempered Group, reanalysis revealed that although two specimens had cordmarked, not plain, exteriors, they were otherwise similar to those recovered during this project; and that although one (and perhaps another) Leached Limestone Tempered plain specimens also contained evidence of leached shell temper, they, too, resemble their counterparts recovered during this project. All have hematite/manganese inclusions in the paste and no steinkerns.

Two Leached Limestone Tempered plain specimens are different from those recovered during this project. One specimen, Cat. #18, has a relatively inclusion-free paste that contains very sparse amounts of hematite/manganese and tiny white mica flecks. The other specimen, Cat. #15, is tempered with a mixture of mainly fired clay temper and lesser amounts of leached limestone temper, although otherwise, attributes of this sherd are the same as those of specimens recovered during this project.

No examples of Kerr's Untempered Group were recovered during these investigations. Kerr's (2003:50-51) assessment that this specimen likely is McAfee Plain seems warranted.

On the basis of this reanalysis, then, the characteristics of the ceramics recovered during KAS's work at Site 15Hr54 support Kerr's inference that they likely are examples of Jessamine and McAfee series ceramics. This complements the characterization of the assemblage made as a result of this analysis: that the ceramics recovered from Site 15Hr54 during these investigations are mainly Late Prehistoric in age.

Summary and Conclusions

KAS's investigations at sites 15Hr53 and 15Hr54 produced a small sample of prehistoric ceramics from screened shovel probes.

The single sherd recovered from Site 15Hr53 appears to have been manufactured during the Late Prehistoric (Fort Ancient) period, sometime before A.D. 1400, given that it is tempered with a mixture of leached-away limestone and shell. No other attributes of this sherd were temporally distinctive.

The analyzed sample from Site 15Hr54 also likely was manufactured during the Late Prehistoric (Fort Ancient) period, given that 40 percent of it was tempered with leached-away limestone and shell. The exclusively leached-away limestone tempered specimens from the site could represent another, earlier Middle or Late Woodland subperiod occupation, but taking into consideration the middle Fort Ancient pit feature at this site, it is entirely likely that the ceramic assemblage from this site was manufactured during the Late Prehistoric period by Fort Ancient potters.

CHAPTER SEVEN:
HISTORIC MATERIALS RECOVERED

By
Jay Stottman

A total of 1,145 historic artifacts and 127 animal bones was recovered from the project area. The historic period artifacts and faunal remain are described below, based on material type. Within each material category, artifacts were further subdivided into functional categories. Functional groups represented included the activities, architecture, arms, furniture, kitchen, and personal groups.

Overall, most of the artifacts were assigned to the kitchen and architecture functional groups, which comprised 49.4 percent and 41.0 percent of the historic artifact assemblage, respectively (Table 7.1). Other functional groups are minimally represented (Table 7.1). A description of the artifacts by material type and an assessment of the historic assemblage related to functional groups is presented below.

Table 7.1. Functional Groups*.

Functional Group	Frequency	Percent
Activities	35	3.0
Architecture	469	41.0
Arms	1	0.1
Furniture	56	4.9
Kitchen	566	49.4
Personal	18	1.6
Total	**1,145**	**100.0**
***Does not include faunal remains (n=127).**		

CERAMICS

A total of 282 ceramics was recovered from the project area. Ceramics are initially classified by paste type: refined or coarse. Refined ceramics (n=201) were used in the manufacture of fine dishes and delicate objects, most of which were made outside the United States in the nineteenth century. Coarse ceramics (n=70) were locally made and were generally used in the manufacture of utilitarian wares.

Refined Ceramics

The refined ceramics group includes several chronologically significant types based on the paste type or clay used (Table 7.1). With few exceptions, refined ceramics were finished with a clear glaze most commonly made from lead. As refined ceramic technology improved over time, less porous and whiter bodies were produced. The most prominent ceramic type produced during Kentucky's early historic settlement was creamware, so called because of its creamy yellowish-green tinted glaze. Josiah Wedgewood developed creamware in the 1760s, after several years of experimentation

(Noel Hume 1969). This ware represents one of many attempts by Staffordshire potters in England to produce an inexpensive version of the fine Asian hard white porcelain they sought to emulate. Throughout the late 1700s, creamware was the most popular English made china in America (Miller 1991; Noel Hume 1969). Production of creamware continued into the 1810s, but was most prominent prior to 1800 (South 1977).

By the 1780s, the utilization of better clays and new glazes allowed potters to create a whiter English ceramic called pearlware. Although a blue tinted body characterizes this type of ceramic, it has a whiter appearance than the yellowish green tinted creamware (Miller 1991; Noel Hume 1969). Pearlware (n=8) was most popular in America in the early 1800s, although production lasted into the 1830s (South 1977). No creamware was recovered from the project area. By 1830, English potters had developed an even whiter colored ceramic, known as whiteware (Miller 1991). It was the predominant ceramic type produced throughout the mid to late 1800s. Nearly one third of the refined ceramics recovered from the project area were whiteware sherds (n=106) (Table 7.2).

Table 7.2. Refined Ceramic Types and Decorations.

Paste Type/ Decoration	Pearlware	Porcelain	Whiteware	White Granite	TOTAL
Banded	0	0	3	1	4
Decal	0	1	9	0	10
Flow	0	0	3	0	3
Gilt	0	1	0	0	1
Hand painted	0	0	1	1	2
Transfer print	1	0	17	1	19
Undecorated	7	35	73	46	161
Unidentified	0	1	0	0	1
Total	**8**	**38**	**106**	**49**	**201**

Although whiteware lacked the hardness of porcelain, it was almost as white and proved to be a popular substitute. By the time whiteware was being produced, the American appetite for imported refined ceramics had grown. The British dominated the whiteware market throughout most of the 1800s. Shortly after the initial development of whiteware, a harder paste whiteware known by a variety of names, mostly commonly white granite, ironstone, and semi-porcelain, was developed. All of these names refer to brand names for hard paste whiteware developed by the different potters. In this report, these types of ceramics were classified as white granite (n=49) (Miller 1991). Although some English potters had produced what they called ironstone and semi-porcelain by 1805 or 1815, white granite types of ceramics were not in wide spread production until 1845 (Noel Hume 1969; Miller 1991).

While both whiteware and white granite ceramics were manufactured throughout the mid-1800s, by the 1870s white granite had become much more common than the older and softer whiteware (Miller 1991; Smith 1983). Because it is very difficult to distinguish whiteware from white granite, some archaeologists do not attempt to make a distinction. However, distinguishing between the softer paste whiteware and the harder

paste white granite can provide some chronological information, as whiteware is more indicative of the 1830s-1850s and white granite more indicative of the post-1850s period.

By the 1880s American potteries began to cut into the English dominance of the American ceramic market. Major ceramic producing regions began in the Midwest and East, and became centered in the Ohio Valley, particularly Ohio and West Virginia (DeBolt 1994). White granite ceramics were, at the turn of the twentieth century, mass-produced by both English and American potters, making them affordable to most of the country's population. By the 1900s, white granite was more like porcelain than whiteware and American potteries frequently used terms like semi-porcelain, semi-vitreous, and vitreous to describe their wares (DeBolt 1994). Typical porcelain has a very refined paste that is almost smooth like glass. While semi-porcelain or late white granite is quite like porcelain, it is not as refined and has a grainy texture.

Some porcelain was manufactured in England and Europe in the 1700s, but it was very expensive to produce, thus beginning the quest for an inexpensive substitute as described above (Noel Hume 1969). Most porcelain during the 1700s and 1800s was produced in Asia, but some was produced in Europe. Although English and Asian porcelain was exported to America in the 1700s and early 1800s, it was generally only accessible to the very wealthy. By the mid-to late-1800s, porcelain was more accessible to wealthy Americans and became popular for even moderately wealthy families. Because of the expense, most porcelain was probably purchased in the form of tea sets rather than complete dinner sets. It is difficult to establish a date for porcelain without maker's marks or specific decorations because it has been manufactured for such a long time. Porcelain (n=38) accounts for around 20 percent of the refined ceramics recovered from the project area (Table 7.2).

Although refined ceramics were most often undecorated, as were most recovered from the project area (n=165), a wide variety of decorative types were used throughout history (Table 7.2). Several decorative types were represented in the assemblage from the project area, including mostly hand painted (n=2) and transfer printed (n=19). Other decorative types present included banded (n=4), gilted (n=1), flow (n=3), colored glaze (n=5), and decal (n=10) (Figure 7.1). Hand painted designs are common on ceramic vessels throughout the historic period as are many banded designs, which involves the application of slip or painted bands around the edges and body of a vessel. Hand painted decorations typically reflected floral motifs in a variety of colors. Blue handpainted vessels were common, as were polychrome designs that utilized green, gold, blue, and red.

Transfer prints (n=19) were transferred from copper engravings to plain dishes and then overglazed. The patterns were usually very elaborate, depicting scenes or having geometric or floral motifs that were available in several colors: black, brown, blue, red, cranberry, purple, and green (Samford 1997). Transfer printed decorations had been developed in 1756, but were not frequently used until the end of the 1700s (Noel Hume 1969). This technique was most popular from the 1830s to the 1850s, with a small resurgence in the 1870s and 1880s (Miller 1991).

Similar to transfer prints are flowed decorations (n=3), which have the appearance of a smeared transfer print where the coloring runs together. During the firing of transfer printed wares, a volating solution was added, which created the flowed effect (Samford 1997). Flowed decoration usually occurs in the color blue or black and was used throughout the 1800s.

Mocha style decoration initially referred to a brown dendritic fern-like design concocted from a mixture of tobacco juice and urine (Noel Hume 1969). However, this term has come to include several different decorative types, most notably annular banded wares that utilized colored glaze, often a brown, a pale green, or blue glaze, into which ceramic vessels were dipped. This is also referred to as "dipped" decoration (Miller 1991). These banded mocha wares often included an impressed design within the banding referred to as engine turned decoration. A worm pattern or cable design is also often associated with dipped mocha wares. It refers to the worm-like circular designs created on the ceramic vessel, also known as finger-painted wares. Mocha decoration styles were common from the 1795 to 1840 (Miller 1991). Only the banded type of mocha decoration was recovered from the Handy House site (n=5).

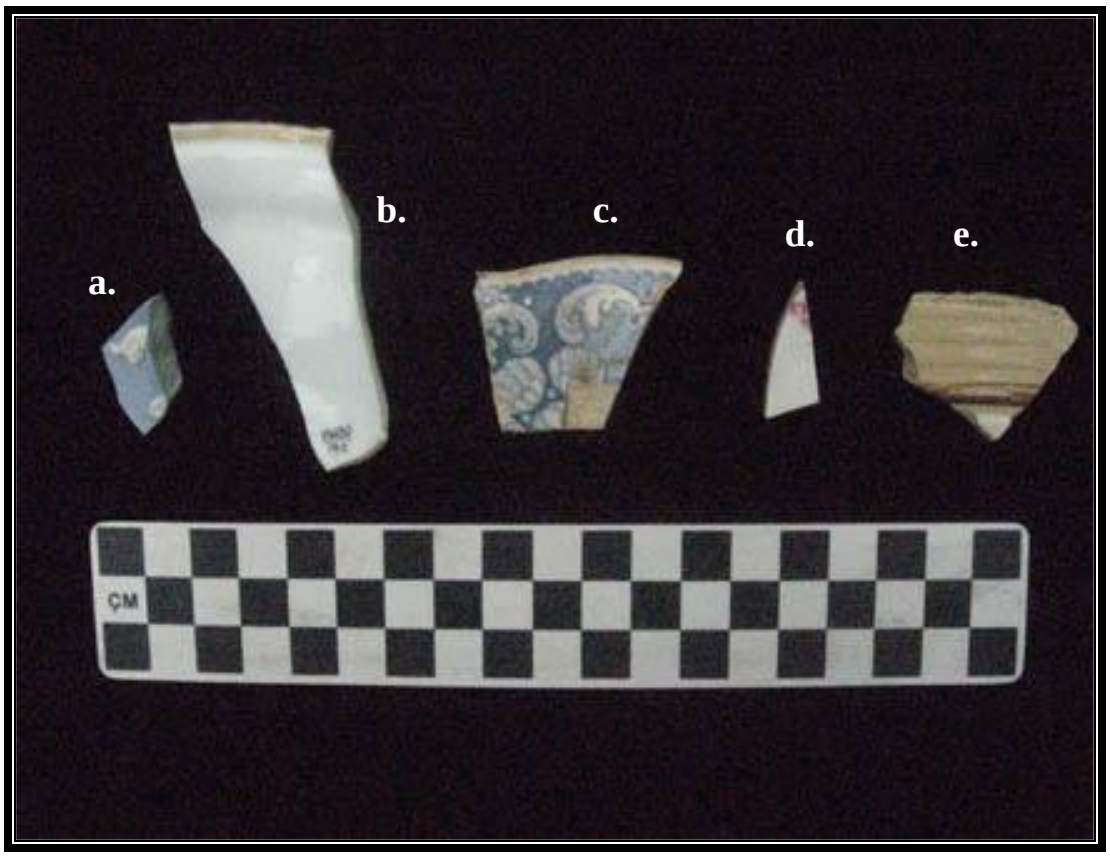

Figure 7.1. Ceramics: a, Jasperware; b, Gilted Porcelain; c, Transfer Printed Whiteware; d, Decal Whiteware; e, Banded Yellowware.

Decal decorations (n=10) simply consist of a decal applied to a ceramic vessel, usually prior to glazing. This development allowed more intricate designs to be used on table wares and reduced the cost of highly decorated ceramics that would otherwise have to be handpainted or transfer printed. Decal decorations were first introduced in the 1890s, but did not become fully mass-produced until 1900 (Adams 1980). Decal decorations are still widely used today.

Some decoration types (n=1) were unidentified due to the condition of the sherd, which was either burned or missing its glaze.

Coarse Ceramics

Coarse ceramics (n=75) consist primarily of redware, stoneware, yellowware, and terra cotta, which were not typically used in the production of dinnerwares (Table 7.3). Rather they were used for utilitarian vessels, such as crocks, bowls, and jars. Redwares (n=13), so called because of their distinctive chalky red paste, were the predominant coarse ceramic from the 1750s to the 1850s, but continued to be manufactured into the 1900s. They were fired at a relatively low temperature, which limited the types of glazes that could be used. They are usually undecorated, exhibiting a simple clear or slip glaze in brown or black (n=10). However, some redwares were highly decorated with slip-trailed designs in a variety of colors. Although these wares were rarely unglazed because they were fired at low temperatures and could not hold liquid without a glaze, examples were recovered from the project area (n=3).

Stonewares (n=31) were fired at a higher temperature than redwares, which made them more durable (Table 7.3). They became popular by the 1850s and lasted into the 1900s (Ketchum 1983). These ceramics usually have a gray (n=5) or buff (n=26) body color, which ranged from a reddish buff brown to almost white in color. Because stonewares were fired at a high temperature, they could and often were salt glazed (n=20) or glazed in an Albany brown slip (n=1) or alkaline slip (n=4) of various shades of brown, gray, or green (Greer 1981). Six sherds of buff stoneware exhibited a clear glaze (Table 7.3).

Yellowware (n=7) was manufactured from a yellowish colored clay, which gave it a yellow hue when a clear glaze was added, hence its name. It began to be produced in the 1830s and found its greatest popularity in the late 1800s and early 1900s (Gallo 1985). Yellowware was decorated a variety of ways, including pattern molding, annular banding, or mocha designs. However, most yellowwares were undecorated with a clear glaze (n=3). Some of the yellowware recovered from the project area were unglazed (n=4).

Other coarse ceramics identified at the Handy House site included Jasperware (n=1), white clay (n=1), and earthenware (see Figure 7.1). Although not utilitarian like most coarse ceramics, Jasperware was made of unglazed stoneware that has a pale blue or green body with white relief or appliqué decoration. It was developed by Josiah Wedgewood as he experimented with the techniques for making porcelain in an effort to

produce a suitable durable porcelain. Jasperware was developed in 1775 and used to make mostly furnishings and decorative items, such as vases, cameos, plaques, busts, and figurines until around 1830 before a resurgence in production after the 1860s (http://www.thepotteries.org/types/jasper.htm).

White clay, also known as Kaolin, which is a type of white clay, was usually unglazed and used in the manufacture of smoking pipes and marbles. Four earthenware fireplace tile fragments were recovered from the Handy House site. They consisted of a polychrome slip glaze on one side and match the tile around a fireplace in a second floor bedroom of the main house.

Table 7.3. Coarse Ceramic Types and Exterior Glazes.

Ceramic Type	Exterior Glaze Type					Total
	Albany (Slip)	Alkaline (Slip)	Clear	Salt	Unglazed	
Buff Stoneware	1	3	6	16	0	26
Earthenware	0	4	0	0	0	4
Gray Stoneware	0	0	0	4	1	5
Jasperware	0	0	0	0	1	1
Redware	0	10	0	0	3	13
Terra cotta	0	0	0	0	18	18
Yellowware	0	0	3	0	4	7
White clay (Kaolin)	0	0	0	0	1	1
Total	**1**	**18**	**9**	**20**	**28**	**75**

Vessel Forms/Objects

A majority of the ceramics could not be assigned a specific vessel/object form and were unidentifiable (n=221), of these, most were probably kitchen related vessels (Table 7.4). Of the identified ceramic vessels/object forms most were terra cotta flower pots (n=20) or sherds of bric-a-brac, representing the furniture group. Also classified in the furniture group was a Jasperware vase fragments. Identified kitchen group ceramic vessel form/objects included tableware such as bowls (n=7) and plates (n=4), teaware cups (n=3) and a saucer (n=1) (Table 7.4). Utilitarian kitchen group vessels included sherds of an unidentified crock/storage jar (n=2) and jug (n=2). Ceramic architecture group artifacts included fireplace tiles (n=4) (Table 7.4). Ceramic personal group artifacts included porcelain prosser buttons (n=2), including four hole and two hole types, and a stoneware smoking pipe bowl fragment.

GLASS

A total of 557 glass artifacts was recovered from the project area. Most were fragments of window glass (n=220) or could not be assigned to a specific vessel/object form (n=247). Other identified vessel/object forms (n=90) included table glass (n=13) representing the furniture group, kitchen group glass artifacts such as unidentified bottles (n=3), beer bottle (n=48), liquor bottle (n=16), medicine bottles (n=2), soft drink bottle

fragments (n=4), tumblers (n=2), and a shaker (n=1) (Table 7.5). The only other functional group represented was the personal group, which included a fragment of a cosmetic bottle (Figure 7.2).

Table 7.4. Ceramic Vessel Forms/Objects.

Functional Group/ Vessel Form/ Object	Frequency
Architecture	
Fireplace tile	4
Furniture	
Bric-a-brac	14
Flower pot	20
Vase	1
Kitchen	
Bowl	7
Cup	3
Jug	2
Plate	4
Saucer	1
Storage Jar	2
Unidentified	221
Personal	
Button-four hole	1
Button-two hole	1
Smoking pipe bowl fragment	1
Total	**282**

Table 7.5. Glass Vessel Forms/Objects.

Functional Group/ Glass Vessel Form/ Object	Frequency
Architecture	
Window Glass	220
Furniture	
Table glass	13
Kitchen	
Bottle, unidentified	3
Bottle, beer	48
Bottle, liquor	16
Bottle, medicine	2
Bottle, soft drink	4
Shaker	1
Tumbler	2
Unidentified	247
Personal	
Bottle, cosmetic	1
TOTAL	**557**

Like ceramics, glass-manufacturing technology evolved over the years. Prior to the nineteenth century, glass containers were either hand blown or blown into molds. Great innovations in glass manufacture occurred in the nineteenth century with such

developments as the three-piece or Rickets mold (1810-1890) and the two-piece mold (1845-1913) (Jones and Sullivan 1989; Newman 1970).

Bottle lips and bases also went through an evolutionary process as technology progressed. Lips were first applied as a separate piece of the bottle and then tooled. Applied lips generally date from the 1840s to 1913 (Newman 1970). By 1875, glass was no longer applied to form a lip. A tool was used to make lips directly from the neck of the bottle, which resulted in an improved tooled lip (Deiss 1981).

Early in the manufacture of bottles, they could only be made with the aid of a pontil, a long iron rod that was attached to the molten glass of the bottle to hold it in place for shaping. The pontil was typically attached to the base of the bottle. Once the bottle was finished, it would be removed from the pontil, leaving a mark of rough glass on the base (Jones and Sullivan 1989). This technique was used primarily from 1810 to 1870 (Newman 1970). One pontil marked bottle base was recovered from the project area (Figure 7.2). Sometimes pontil marks were improved by grounding them down. This process, which left a smoothed base, dates from 1840 to 1880 (Newman 1970). In some cases, the base of the bottle was molded as part of the body in a process known as dip molding. This process involved dipping molten glass into a mold. This was a common practice in the 1800s and is still in use today. Some bottle bases were molded as a separate piece in plate bottom molding, which dates from 1821 to 1920 (Jones and Sullivan 1989).

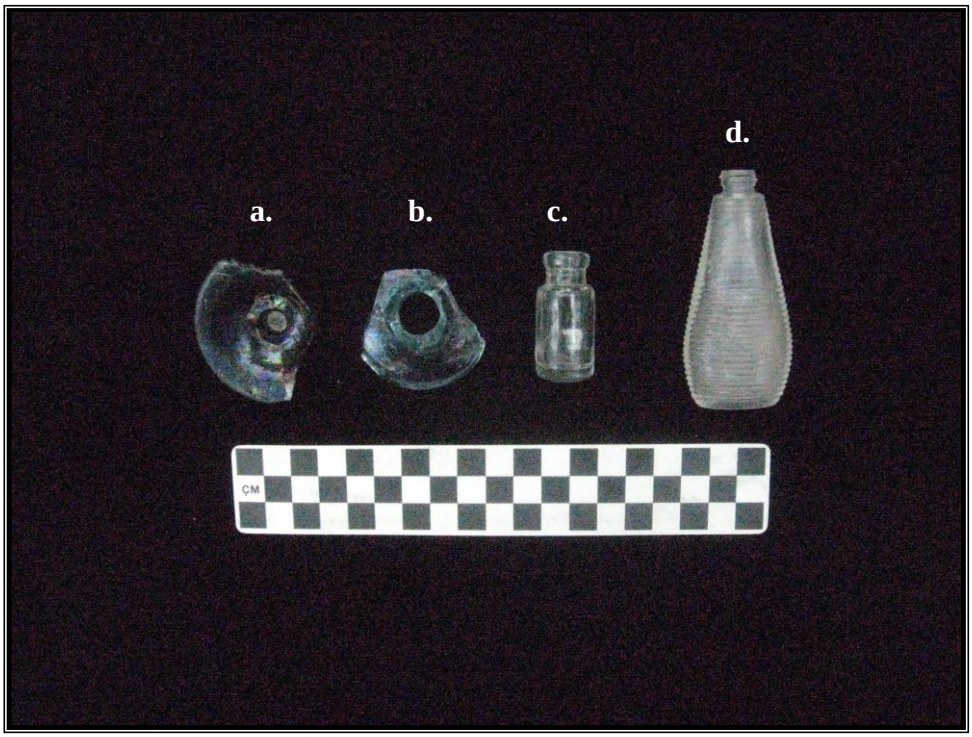

Figure 7.2. Glass Artifacts: a, Olive Colored Pontil Marked Base; b, Aqua Colored Bottle Neck; c, Clear Machine-Made Medicine Bottle; d, Clear Machine-Made Cosmetic Bottle.

By the 1880s machines were developed to make bottles, but some elements of the bottle were still completed by hand. Bottle-making machines were not fully automated until 1903 with the development of the Owens process, after which most containers were machine made. Machine-made bottle lips/rims (n=2) and a base (n=1) were recovered from the project area.

The development of glass jars is directly related to the evolutionary process of bottles. However, a major development in glass jar production was the invention of the metal screw cap for preserving jars in the 1850s (Sives 1991). Other technological advancements in glass production consisted of the development of new colors of glass (Table 7.6). Glass is naturally blue or green tinted (n=115) and adding chemicals changes its color. Brown colored glass (n=47) became popular in the late nineteenth century after being developed in the 1860s and was typically used in the manufacture of beer, cleaning fluid, and medicine bottles from the early 1900s to present day (Fike 1987). Cobalt was used to manufacture blue colored glass prior to the 1800s, and after the 1860s it also was used to make an aqua colored glass, which was used in the production of canning jars and electrical insulators. The cobalt blue glass was then mass-produced for medicine bottles with popular products like "Phillips Milk of Magnesia" and "Bromo Seltzer."

Clear or colorless glass (n=210) had been produced prior to the 1800s through the manufacture of soda-lime and lead glass (Table 7.6) (Jones and Sullivan 1989). More and more consumers wanted to see the contents of the bottles they were buying, thus creating a demand for transparent colorless glass (Kendrick 1964; Lockhart 2006). Tablewares typically made of colorless glass, also became popular at this time. However, an inexpensive and dependable means to achieve clear glass required the addition of chemicals to remove contaminants that altered color. By 1875 clear glass had attained widespread use in the production of bottles (Fike 1987).

Table 7.6. Glass Colors.

Color	Frequency
Amethyst	6
Aqua	12
Blue Tint	129
Bright Green	5
Brown	47
Clear	210
Frosted	3
Green	4
Green Tint	115
Milk Glass, white	7
Olive	18
Orange	1
Total	**557**

Attempts to make clear glass coupled with the lack of the necessary chemicals to make it created two very distinct glass colors. Amethyst colored or solarized glass (n=6) is a byproduct of attempts to make clear glass by adding manganese to the glass in order

to bleach-out the natural impurities. Although amethyst glass was clear at the time of manufacture, when exposed to the sun the glass turned a purple color due to the manganese. This glass was only made for a short time from the 1870s to 1920s (Kendrick 1964; Lockhart 2006; Newman 1970; Jones and Sullivan 1989).

Other glass colors recovered from the project area, included aqua, milk glass, green, olive green, orange and frosted. Milk glass (n=7) was most often opaque white in color. It was most popular after the 1860s and was used for a wide variety of vessels and objects. Although some bottles were made of it, milk glass was used mostly for decorative dishes in the early 1900s. Milk glass also was extensively used for buttons and canning jar lid liners, replacing more expensive porcelain ceramics. Lid liners were being used to line the inside of zinc metal canning jar lids by the 1870s and their use continued into the 1910s.

Flat glass fragments (n=220) also were recovered from the project area. It is likely that most of the flat glass represents broken windowpanes. Most of the window glass was blue tinted (n=115). Green or green tinted (n=93) and clear (n=12) window glass also was found. The window glass ranges in thickness from 0.8 to 3.5 mm.

METAL

A total of 295 metal artifacts was recovered from the project area (Table 7.7). Most were assigned to the architecture group (n=245). Other functional groups represented; included the activities (n=31), arms (n=1), furniture (n=8), personal (n=9), and kitchen (n=1) groups (Table 7.7).

Nails are a common artifact at historic archaeological sites and comprise most of the architecture group (Figure 7.3). Prior to 1800, nails had to be forged by hand. At the turn of the nineteenth century, machine-cut nails were in production but were not widely used until the 1830s (Nelson 1968). Machine-cut nails are cut from sheets of metal, giving the nail a squared or rectangular shape. Advancements in the technology of machine-cut nails allow distinctions between early and late manufacture (Nelson 1968). By 1890, wire nails became the preferred option for construction, although some machine cut nails continued to be made into the 1890s (Adams 2002; Preiss 1973; Smith 1975; Wells 1998). Wire nails are cut from a linear wire and are still produced today. Most of the nails recovered from the project area were late machine cut (n=183), or unidentified machine cut (n=5). Lesser amounts of wire (n=39) and nails unidentified for type (n=5) were found. Some nails were identified for function, but not for type, including roofing (n=10) and finishing nails (n=1). Other architecture group artifacts included a bolt (n=1) and a drain cover (n=1).

Activities artifacts included mainly unidentified fragments of flat metal (n=27), including iron (n=27) and lead (n=1). Furniture artifacts consisted mainly of furniture hardware, such as decorative hardware, including a possible base for a candleholder and a curtain rod hook. Other furniture hardware was either unidentified or consisted of a small bolt and a washer. Metal personal artifacts consisted primarily of clothing items

such as buttons, buckle, snap, and zipper (Table 7.7) (Figure 7.3). Other personal artifacts included a pencil part and a 1963 penny. Arms artifacts included a brass percussion cap (Table 7.7). Transportation artifacts included a horseshoes, bridle parts, and a hitch. One metal kitchen group artifact was recovered; it consisted of a metal cap.

Figure 7.3. Metal Artifacts: a, Brass Buckle; b, Wire Nail; c, Late Machine Cut Nails.

OTHER MATERIALS

Other materials recovered from the project area, included bone (n=131), synthetics (n=4), and earth/stone based materials (n=1) (Table 7.8). Most of the bone was faunal remains (n=127), while four were buttons assigned to the personal group. The synthetic artifacts represented unidentified plastic, which was assigned to the activities (n=2) and kitchen (n=1) groups. Earth/stone-based artifact was assigned to the activities group and was an unidentified piece of burned clay. A carbon rod was assigned to the activities group and was part of a battery.

Table 7.7. Metal Forms/Objects.

Functional Group Metal Form/ Object	Frequency
Activities	
Flat metal	27
Unidentified	1
Wire	3
Architecture	
Bolt/nut	1
Drain cover	1
Nail-Machine Cut	5
Nail-Late Machine Cut	183
Nail-Unidentified	5
Nail-Wire	39
Nail-Finishing	1
Nail-Roofing	10
Arms	
Percussion Cap	1
Furniture	
Bolt/nut	1
Hardware-decorative	2
Hardware-unidentified	4
Hardware-washer	1
Kitchen	
Cap/lid	1
Personal	
Buckle	1
Button	3
Coin	2
Pencil part	1
Snap	1
Zipper	1
TOTAL	**295**

Table 7.8. Other Materials Form/Object.

Functional Group Metal Form/ Object	Frequency
Activities	
Carbon rod	1
Fired clay	1
Synthetic, unidentified plastic	2
Kitchen	
Synthetic, unidentified plastic	1
Personal	
Bone, button	2
Bone, button-three hole	2
Synthetic, plastic button	1
Bone, faunal remains	127
Total	**137**

DISCUSSION

Most of the diagnostic historic artifacts were manufactured from the mid-1800s to late 1800s. They include whiteware, white granite, redware, and yellowware ceramics, pontil marked bottle base, and late machine cut nails. Few of the artifacts date from the late 1700s to early 1800s, such as pearlware, and Jasperware ceramics. Some of the artifacts date from the late 1800s to early 1900s. They include plastic, a carbon rod, a penny, clear bottle glass, wire nails, amethyst glass, and machine made bottle glass. Most of the artifacts are representative of the mid to late nineteenth century and indicate that the site was primarily occupied during that time, but the presence of some artifacts from the early nineteenth century indicates that occupation of the site during the historic period likely began at that time.

Although the historic artifacts recovered from the project area were assigned to a variety of functional groups, the architecture and kitchen groups dominate the assemblage. Such a distribution indicates that the structural remains at the site are likely residential buildings and representative of the domestic activities and refuse disposal associated with them, as would be expected in the yards and domestic outbuilding complex of a large residence. The architecture group artifacts, such as window glass and nails indicate that the remains of buildings are located at the site, likely associated with modifications to the main house during the 1880s and the demolition of several outbuildings known to have been located around the main house. Based on the large amount of machine cut nails, the buildings located at the site were primarily constructed during the nineteenth-century.

Identified ceramic and glass vessels such as table and tea wares like plates, bowls, saucers, and cups and food preparation and storage vessels from the kitchen group indicate a variety of domestic activities, such as those common to farms, were undertaken at the site.

Overall, the artifact assemblage recovered generally confirms what is known about the site historically, that a mid to late nineteenth century plantation/farmstead was located at there. Further analysis of these artifacts and their context can identify intact archaeological deposits associated with events and activities that took place as the site and help answer specific questions about the chronology of the farm, architectural changes, and the organization and layout of the domestic outbuilding complex.

CHAPTER EIGHT:
SITE DESCRIPTIONS

HANDY HOUSE SITE (15Hr53)

Site Type:	Historic Period Farm and Fort Ancient Open Habitation
UTM Coordinates:	N4253293 E737190
Elevation:	820 ft AMSL
Physiography:	Dissected uplands
Aspect:	flat
Slope:	2-6 percent
Soil Types:	Loradale silt loam
Vegetation:	Mowed grass, trees, and scrub brush
Visibility:	0-10%
Size:	23,500 m²
Disturbances:	Demolition and construction of buildings; installation of utilities; plowed fields

As part of this project, additional work was conducted at the previously recorded Handy House site (15Hr53) (see Figure 1.3). This work resulted in the expansion of the site's boundaries to include the primary residences and side yards. (The initial investigation of the site was limited to an area in the vicinity of the barns that would have been impacted by the proposed bypass right-of-way [Arnold 2003].) The site is situated on a broad ridge between Flat Run and Indian Creek, tributaries of the Licking River (Figure 1.3). It primarily consists of structures and mowed lawn and pasture, with trees and brush along fence lines except for the northeastern portion, which is in a cultivated field. The site measures 200 m east/west extending from the existing barns at its western edge to the stone foundation at the east end of the site, and 115 m from the gravel drive at its south end to an artifact scatter in the cultivated field at the north end of the site. This area encompasses 23,000 m² (Figure 8.1). The site's boundaries were determined by the distribution of cultural materials and previous disturbances. The latter consist of a cultivated field at the north end of the site, a disturbed area adjacent to the gravel drive along its southern boundary, and an area to the north of the barns that was disturbed by installation of water lines.

The site contains several existing buildings, including an early nineteenth century brick Federal style house with late nineteenth century Victorian frame additions and modifications (Figures 8.2 and 8.3) and three late nineteenth to early twentieth century frame barns (Figure 8.4). It also includes a portion of a stone foundation south of the house and several water cisterns. A mounded area just behind the northeast corner of the house is reported to be the location of a former icehouse. A gravel driveway extends from a small gravel parking area at the southwest end of the site towards Highway 62 (Figure 8.5). Two large steel plates are located near the northeast corner of the main house and cover the remains of two water cisterns (Figure 8.6).

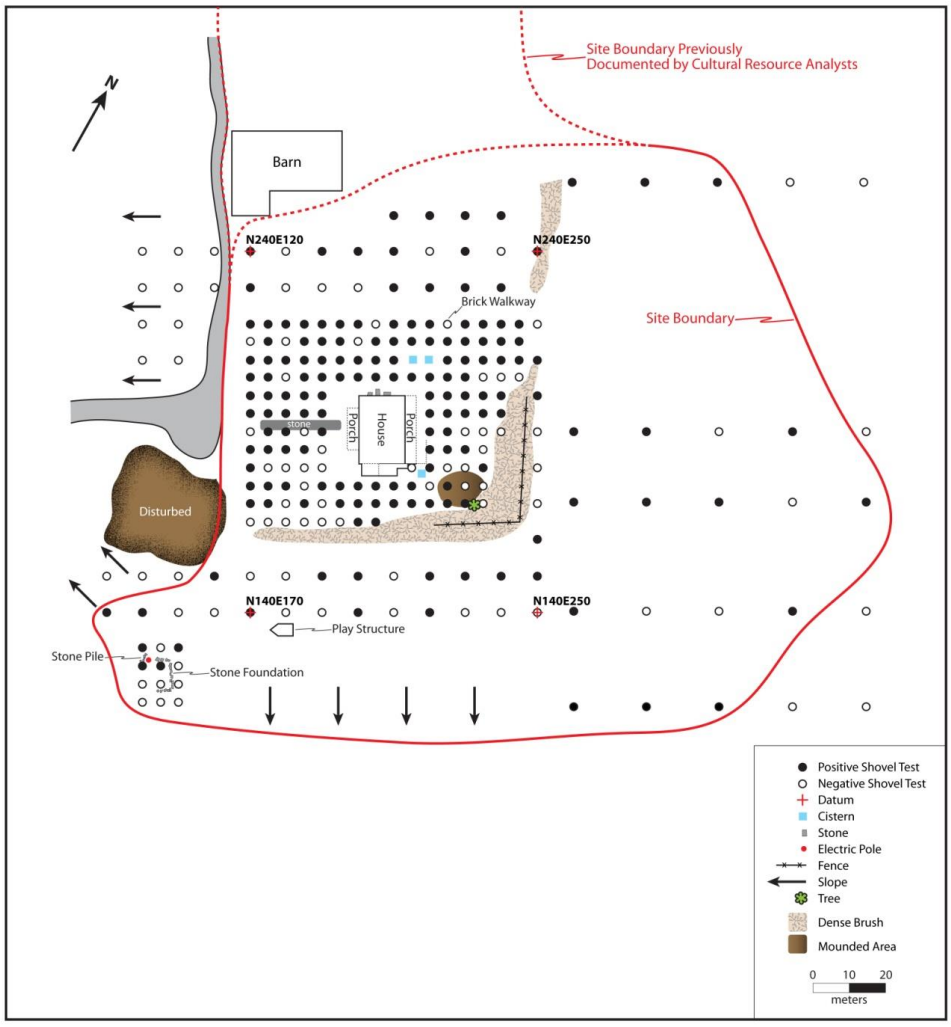

Figure 8.1. Map of shovel probes excavated at the Handy House Site (15Hr53) during the current project.

Archaeological investigations at the site included the excavation of shovel probes on a 5 to 10 m grid around the main house and extant buildings, as well as in 20 m transects in the cultivated field (Figure 8.1).

Of the 273 shovel probes excavated at the Handy House site, 160 were positive for artifacts (Figure 8.1). Five basic soil profiles were identified at the Handy House site. The soil profile identified in most of the site, including the front (west), south side and north side yards of the house, and the area between the house and barns generally consisted of a 15 to 40 cm thick slightly mottled dark brown and yellow brown silt loam topsoil and a yellow brown silt clay subsoil (Figure 8.7). This profile occasionally was overlaid with a 5 cm thick dark brown silt loam humus. While the mottled topsoil may represent plowzone in portions of the yard, particularly in the areas furthest from the main house and in the front yard, this layer is mainly a topsoil midden. In the immediate vicinity of the main house this midden yielded a large amount of historic artifacts.

Figure 8.2. The Front of the Handy House from the Southwest.

Figure 8.3. The Rear of the Handy House from the Southeast.

Figure 8.4. Barns Located North of the Main House.

Figure 8.5. The Gravel Drive Towards the South from the Barns.

Figure 8.6. The Location of Cisterns on the North Side of the Main House.

Within the north side yard and in close proximity to the main house the basic soil profile consisted of a 10 to 30 cm thick dark brown silt loam topsoil that occasionally included brick, stone, gravel, coal, and cinder, a 10 to 30 cm thick mottled dark brown silt loam and yellow brown silt clay with brick, stone, gravel, coal, and cinder, a 5 to 10 cm thick mottled yellow gray brown silt clay transition to subsoil, and a yellow brown silt clay subsoil (Figure 8.8). This profile was often interrupted by the presence of large pieces of limestone, which were likely associated with foundations for outbuildings and/or walkways, particularly in the rear (east) yard (see Figure 8.11). It also occasionally contained additional 5 to 15 cm thick layers of ash, coal, or cinder. The soil profiles identified in the north side and rear (east) yards immediately around the main house indicate that extensive construction and demolition of structures took place in the area. These structures include the north wing of the house and several former outbuilding locations, such as the ice house, a possible slave/tenant house, and a carriage house.

The soil profile documented within and around a stone foundation located in the southwest portion of the site consisted of an 18 to 60 cm thick brown silt clay loam with brick, stone, and gravel inclusions, and a yellow brown silt clay subsoil (Figure 8.9). In some locations near the foundation, the stone and gravel were too dense to penetrate. In the cultivated field the soil profile consisted of a 20 to 35 cm thick slightly mottled yellow and brown silt clay loam plowzone, and a yellow brown subsoil (Figure 8.10).

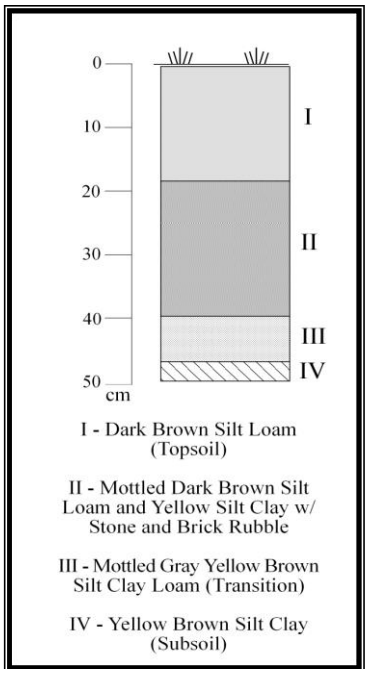

Figure 8.7. Soil Profile of N175 E175.

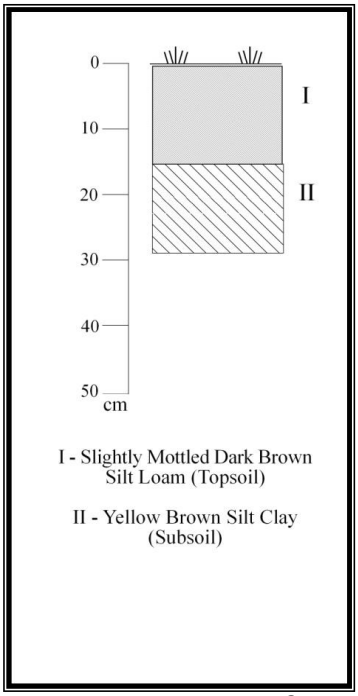

Figure 8.8. Soil Profile of Shovel Probe N205 E230.

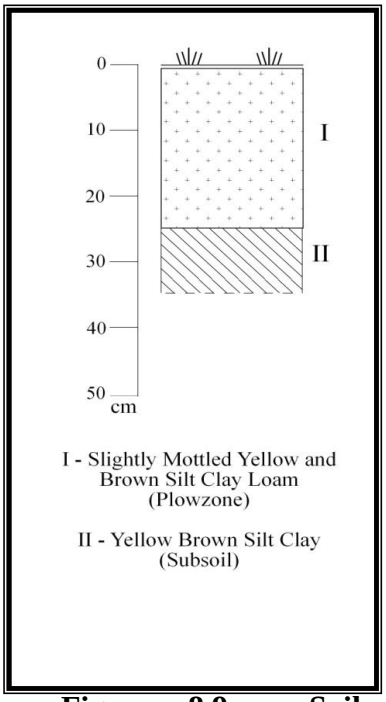

Figure 8.9. Soil Profile of Shovel Probe N120 E150.

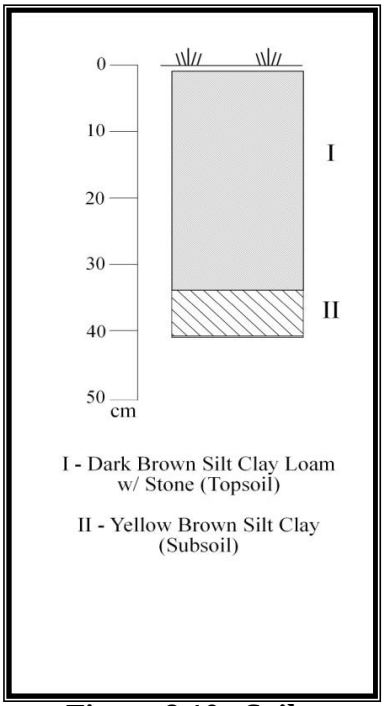

Figure 8.10. Soil Profile of Shovel Probe N280 E190.

Three features (remnants of a stone foundation, a brick walkway, and a possible builder's trench) were identified during the Handy House investigations. The stone foundation is located at the southwestern portion of the site adjacent to a power pole and was identified on the surface. The foundation consisted of the entire east wall, and a portion of the north and south walls of the structure and was made of dry laid limestone. The east wall measured 8.5 m in length, which is consistent with a residential structure or large agricultural outbuilding. The brick walkway was identified in shovel probe N220 E225 in the side (north) yard (Figure 8.11). It was found just below the topsoil, and consisted of whole and half handmade brick laid in a common bond. It is possible that this walkway provided access to outbuildings and nearby cisterns from the main house.

Figure 8.11. A Brick Walkway Identified in Shovel Probe N220 E225.

A possible builder's trench was identified in shovel probe N205 E210 in the side (north) yard area. It consisted of a 20 cm thick slightly mottled brown silt clay loam overlaid by a 10 cm dark brown silt loam topsoil, a 10 cm thick dark brown silt clay loam with brick and stone, and a 12 cm thick mottled yellow/brown silt clay loam with brick and stone (Figure 8.12). This deposit is likely associated with the construction of the foundation for the north wing of the main house, which falls in line with the feature.

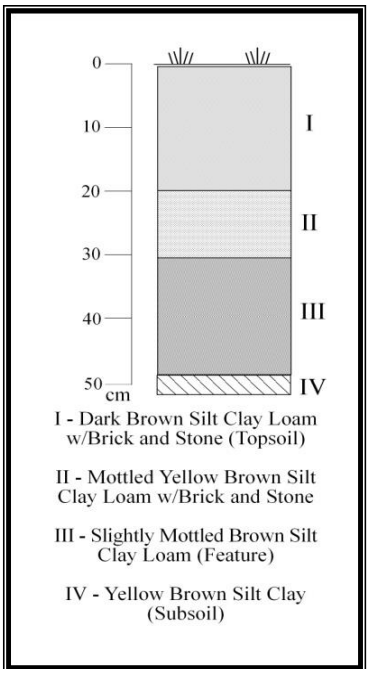

Figure 8.12. Soil Profile of Shovel Profile N205 E210.

Several possible features were identified, mainly in the rear yard (east) immediately around the main house. They consisted of a concentration of stone that may represent remnants of outbuilding foundations or walkways. A 1973 aerial photograph shows that several building were located behind the main house (Figure 8.13). Buildings known to have been located in the area include a slave/tenant house, the "carriage house," and a "cellar" house. Photographs show three buildings in the area where large amounts of stone and brick were encountered in the rear yard. The slave/tenant house was located directly behind (east of) the main house (Figure 8.14). It was a brick residential structure with a porch that faced the rear of the main house. Based on its architectural style and the configuration of the windows, this structure appears to date to the nineteenth century. It was either constructed during renovations to the main house in the 1880s or was an earlier building that was modified along with the main house. The date of the photograph indicates that this building was demolished sometime after 1992.

The "carriage house" was located northeast of the main house at the edge of the cultivated field (Figures 8.13 and 8.15). It was a one and a half story wood board and batten style structure with a porch and Craftsman style window. The overall appearance of this structure is suggestive of a residential building rather than a carriage house and the presence of the Craftsman windows suggests it dates to the early twentieth century. It is possible that this structure was originally been constructed as a carriage house and was converted to a residential structure in the early 1900s. Based on the date of the photograph, it appears that the building was demolished sometime after 1997.

The remnants of the "cellar house" are visible in a circa 1950s photograph where it is depicted as being located between the slave/tenant house and the "carriage house" (Figure 8.16). At that time, it consisted of stone walls situated near the north wing and northeast corner of the house.

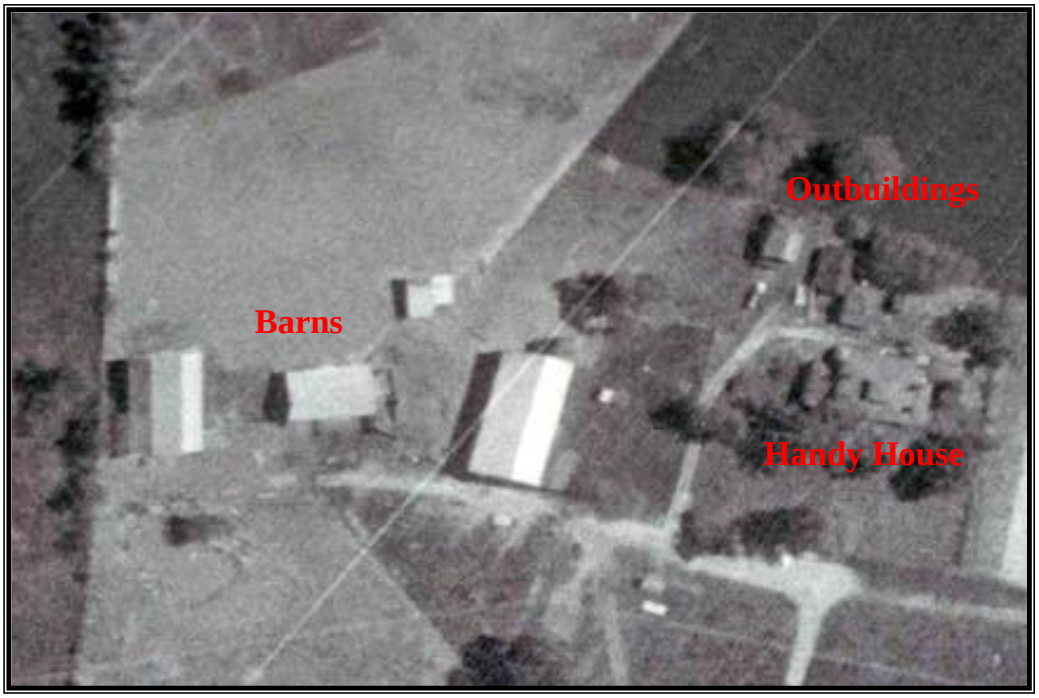

Figure 8.13. 1973 Aerial Photograph Showing Outbuildings Northeast and East of the Main House (Courtesy of Billy Fowler).

Figure 8.14. 1992 Photograph Showing the Slave/Tenant House in the rear yard of the Main House (Courtesy of Billy Fowler.

Figure 8.15. 1997 Photograph Showing the "Carriage House" Northeast of the Main House (Courtesy of Billy Fowler).

Figure 8.16. 1950s Photograph Showing the Remnants of the "Cellar House" Next to the North Wing of the House (Courtesy of Billy Fowler).

A total of 1,141 artifacts was recovered from the Handy House site. They include nearly all of the historic period artifacts and slightly more than fifty percent of the prehistoric artifacts (n=113) recovered from the project area (Table 8.1). Most were recovered from shovel probes excavated around the main house (Table 8.1). The remaining artifacts recovered from the Handy House site were collected from the surface of the cultivated field (Table 8.2).

Prehistoric artifacts recovered from the Handy House site consist of a ceramic sherd (n=1), chipped stone tools (n=2) and debitage (n=110) (Table 8.3). The prehistoric sherd has a smoothed-over cordmarked surface and was tempered with leached limestone and leached shell. The prehistoric tools, included a Type 5 Fine Triangular projectile point and the distal tip of a point/drill. Chipped stone debris from the site indicate that the full range of lithic production likely occurred in this location. Cultural Resource Analysts also recovered a Type 5 Fine triangular point from the site, as well as three small analyzable sherds (Arnold 2003). The presence of Type 5 Fine Triangular points and a cordmarked limestone and shell tempered sherd is suggestive of an middle Fort Ancient period occupation that is contemporary with the occupation documented at Site 15Hr54 (see below).

Historic materials consist mainly of architecture and kitchen related artifacts. These types of artifacts are found around residences and domestic outbuildings. (Similar types of artifacts were recovered by Cultural Resource Analysts [Arnold 2003]). These materails date primarily from the the mid- to late nineteenth to the early to mid-twentieth centuries. This date range coincides with the primary occupation and use of the property as a farm and residence. Some examples of late eighteenth to early nineteenth century artifacts, such as creamware, pearlware, and jasperware, confirm that the earliest historic occupation of the property occurred when the main residence was constructed in 1816. Most of the diagnostic historic artifacts, however, were manufactured from the mid-1800s to late 1800s. They include whiteware, white granite, redware, and yellowware ceramics, pontil marked bottle base, and late machine cut nails. That a large amount of twentieth century artifacts, such as modern glass soft drink, beer, and liquor bottle fragments, also were found points to extensive late twentieth century trash disposal.

Many of the historic period artifacts, and in particular architectural related materials, reflect the construction, demolition, and modification of buildings at the site. They consist of the current residence and barns as well as former outbuildings known to have been in existence, such as an icehouse, carriage house, a residence used as a slave or tenant house, and a previously unknown building located southwest of the main house. Based on the presence of a large amount of late machine cut nails, it is likely that most of the outbuildings were constructed during the mid- to late nineteenth century. The presence of a large number of wire nails indicates that these structures and/or the main house were modified or repaired during the twentieth century. The lack of wrought and early machine cut nails is somewhat surprising, as the main residence is thought to have been constructed in the early nineteenth century. It is possible, however, that most of the architectural debris recovered during the survey originated from outbuildings that were

Table 8.1. Historic Artifacts Recovered from Shovel Probes.

Provenience	Artifact Description	N=
N120 E260	Glass, container, clear	1
N120 E280	Glass, container, clear	1
N120 E300	Ceramic, whiteware, undecorated, plate	2
	Glass, window, green tint	1
N125 E140	Metal, late machine cut nail	1
N125 E145	Metal, unidentified nail	5
N130 E140	Ceramic, white granite, undecorated, unidentified	1
	Metal, late machine cut nail	1
N130 E150	Glass, window, green tint	1
N140 E130	Metal, late machine cut nail	3
N140 E140	Metal, wire nail	1
N140 E170	Glass, container, clear	1
	Bone, button	1
N140 E220	Glass, container, clear	3
N140 E260	Glass, window, blue tint	2
N140 E320	Glass, window, green tint	1
N150 E160	Metal, machine cut nail	1
N150 E190	Glass, container, green tint	1
N150 E200	Ceramic, white granite, undecorated, unidentified	1
N150 E220	Ceramic, whiteware, undecorated, unidentified	1
	Glass, beer bottle, brown	1
	Glass, container, clear	1
N150 E230	Glass, beer bottle, brown	1
	Glass, container, blue tint	1
N150 E240	Ceramic, whiteware, undecorated, unidentified	1
	Glass, container, clear	1
N150 E250	Ceramic, whiteware, undecorated, unidentified	1
	Glass, container, clear	1
N160 E250	Metal, bolt	1
N165 E200	Ceramic, terra cotta, unglazed, flower pot	2
	Ceramic, whiteware, undecorated, unidentified	1
	Ceramic, whiteware, decal, unidentified	2
	Glass, window, green tint	1
	Glass, beer bottle, brown	10
N165 E205	Metal, machine cut nail	1
	Glass, bottle, amethyst	2
	Glass, unidentified, orange	1
N170 E170	Metal, wire nail	1
N170 E185	Ceramic, terra cotta, unglazed, flower pot	1
	Glass, window, blue tint	1
N170 E195	Glass, window, green tint	1
N170 E200	Glass, window, blue tint	1
	Glass, container, clear	3
N170 E205	Ceramic, terra cotta, unglazed, flower pot	2
	Ceramic, white granite, undecorated, unidentified	3
N170 E210	Metal, wire nail	1
	Glass, container, clear	1
N170 E215	Metal, late machine cut nail	1
	Metal, hardware, unidentified	1
	Glass, container, clear	1

Table 8.1. Continued.

Provenience	Artifact Description	N=
N170E220	Ceramic, terra cotta, unglazed, flower pot	2
	Glass, window, green tint	1
	Glass, window, clear	1
	Metal, late machine cut nail	2
N170 E225	Ceramic, whiteware, undecorated, unidentified	3
	Glass, beer bottle, brown	4
N170 E230	Ceramic, creamware, undecorated, plate	1
N170 E250	Ceramic, whiteware, undecorated, unidentified	1
	Glass, window, blue tint	1
	Glass, window, green tint	2
	Metal, late machine cut nail	1
N170 E260	Ceramic, whiteware, transfer printed, unidentified	1
	Glass, window, green	4
N170 E280	Glass, container, clear	1
N170 E300	Ceramic, whiteware, undecorated, unidentified	1
	Glass, window, blue tint	3
	Glass, container, clear	1
N175 E170	Ceramic, terra cotta, unglazed, flower pot	3
	Ceramic, redware, unidentified	1
N175 E195	Ceramic, porcelain, decal, saucer	1
N175 E200	Glass, container, aqua	1
	Glass, window, green, tint	2
N175 E205	Ceramic, terra cotta, unglazed, flower pot	1
N175 E210	Ceramic, whiteware, undecorated, unidentified	3
	Glass, container, clear	1
	Metal, unidentified flat metal	1
N175 E215	Bone, faunal	1
N175 E225	Ceramic, buff stoneware, jug	1
	Ceramic, porcelain, undecorated, unidentified	3
	Ceramic, porcelain, undecorated, button	1
	Glass, container, clear	3
	Metal, late machine cut nail	2
	Bone, faunal	1
N180 E220	Ceramic, whiteware, undecorated, unidentified	2
	Glass, window, green tint	4
	Glass, container, clear	2
N180 E250	Ceramic, pearlware, undecorated, unidentified	2
	Ceramic, whiteware, undecorated, unidentified	1
	Glass, bottle-soft drink, bright green	3
	Glass, container, clear	12
	Glass, window, green tint	4
	Metal, late machine cut nail	2
N185 E170	Glass, container, clear	1
N185 E185	Ceramic, terra cotta, unglazed, flower pot	1
	Glass, container, clear	1
N185 E220	Ceramic, redware, unidentified	1
	Glass, beer bottle, brown	3
	Glass, window, blue tint	1
N185 E225	Ceramic, redware, unidentified	1
	Glass, container, aqua	1
	Glass, window, blue tint	1
	Metal, zipper	1

Table 8.1. Continued

Provenience	Artifact Description	N=
N185E230	Glass, container, green tint	2
	Glass, table top, green tint	8
	Glass, window, green tint	2
N185 E230	Ceramic, redware, unidentified	1
	Ceramic, whiteware, undecorated, unidentified	2
	Ceramic, whiteware, transfer printed, unidentified	1
	Glass, window, green tint	10
	Bone, faunal	2
N190 E175	Ceramic, pearlware, transfer printed, unidentified	1
	Ceramic, whiteware, undecorated, unidentified	1
	Bone, faunal	1
N190 E190	Metal, button	2
N190 E220	Ceramic, white granite, handpainted, unidentified	1
	Ceramic, white granite, undecorated, cup	1
	Ceramic, whiteware, banded, bowl	3
	Ceramic, whiteware, undecorated, unidentified	1
	Glass, container, clear	1
N190 E225	Ceramic, whiteware, decal, unidentified	6
	Ceramic, whiteware, undecorated, unidentified	7
	Glass, container, clear	1
	Glass, window, green tint	2
	Metal, late machine cut nail	3
	Metal, wire nail	2
N190 E260	Ceramic, redware, unidentified	2
	Ceramic, whiteware, transfer printed, unidentified	4
	Ceramic, whiteware, undecorated, unidentified	3
	Glass, beer bottle, brown	2
	Glass, container, clear	1
	Glass, window, blue tint	6
	Glass, window, clear	1
N190 E280	Glass, window, blue tint	1
	Glass, window, green tint	1
N195 E170	Ceramic, whiteware, undecorated, unidentified	1
	Glass, beer bottle, brown	1
	Glass, container, green tint	1
	Metal, late machine cut nail	1
N195 E175	Synthetic, plastic, unidentified	1
N195 E180	Glass, window, blue tint	1
N195 E190	Glass, container, blue tint	1
	Glass, container, clear	3
N195 E220	Ceramic, buff stoneware, unidentified	1
	Glass, container, clear	2
	Earth, fired clay	1
	Metal, late machine cut nail	4
N195 E225	Ceramic, porcelain, undecorated, unidentified	1
	Glass, container, green tint	1
	Metal, snap	1
	Synthetic, plastic, button	1

Table 8.1. Continued.

Provenience	Artifact Description	N=
N195 E230	Ceramic, porcelain, bric-a-brac	1
	Ceramic, white granite, undecorated, unidentified	1
	Ceramic, whiteware, transfer printed, unidentified	2
	Glass, container, clear	5
	Glass, window, blue tint	5
	Metal, late machine cut nail	7
N195E235	Ceramic, redware, unidentified	1
	Ceramic, white granite, undecorated, unidentified	1
	Glass, bottle-soft drink, bright green	1
	Glass, container, clear	10
	Glass, table top, green tint	4
	Metal, roofing nail	2
	Unidentified, unidentified	1
N190 E240	Ceramic, buff stoneware, handpainted, storage jar	1
	Ceramic, buff stoneware, storage jar	1
	Ceramic, white granite, undecorated, unidentified	3
	Ceramic, whiteware, transfer printed, unidentified	3
	Glass, container, clear	7
	Glass, container, frosted	1
	Glass, container, green tint	1
	Glass, container, olive	1
	Glass, window, blue tint	6
	Metal, late machine cut nail	1
N200 E170	Glass, window, green tint	1
	Metal, late machine cut nail	1
	Bone, faunal	1
N200 E175	Glass, window, blue tint	1
N200 E185	Metal, wire nail	1
N200 E190	Glass, beer bottle, brown	1
	Glass, window, green tint	1
	Metal, late machine cut nail	1
N200 E220	Glass, beer bottle, brown	1
	Glass, container, clear	2
N200 E225	Ceramic, redware, unidentified	1
	Bone, faunal	5
N200 E230	Ceramic, buff stoneware, unidentified	2
	Ceramic, gray stoneware, unidentified	1
	Ceramic, white granite undecorated, unidentified	2
	Glass, beer bottle, brown	5
	Glass, container, green tint	3
	Glass, container, milk glass	1
	Glass, window, blue tint	5
	Metal, late machine cut nail	1
	Bone, faunal	1
N200 E235	Glass, container, clear	4

Table 8.1. Continued.

Provenience	Artifact Description	N=
N200 E240	Ceramic, gray stoneware, unidentified	3
	Ceramic, redware, unidentified	2
	Ceramic, whiteware, handpainted, unidentified	1
	Ceramic, whiteware, undecorated, unidentified	2
	Glass, bottle-liquor, olive	2
	Glass, container, aqua	1
	Glass, container, clear	2
	Glass, container, milk glass	8
	Glass, window, green tint	2
	Metal, late machine cut nail	21
	Metal, unidentified flat metal	8
	Bone, faunal	45
N200 E250	Ceramic, buff stoneware, unidentified	1
	Ceramic, white granite, banded, bowl	1
	Ceramic, whiteware, undecorated, unidentified	5
	Glass, bottle-liquor, olive	3
	Glass, container, blue tint	2
	Glass, container, clear	3
	Glass, window, blue tint	7
	Metal, button	1
	Metal, late machine cut nail	5
	Metal, hardware, unidentified	1
N205 E175	Glass, window, green tint	33
N205 E185	Glass, window, blue tint	3
N205 E190	Glass, window, blue tint	1
	Metal, cap	1
N205 E200	Earthenware, colored glaze, fireplace tile	4
	Ceramic, whiteware, undecorated, unidentified	1
	Glass, window, green tint	2
N205 E205	Glass, container, clear	2
	Glass, window, blue tint	2
	Metal, wire nail	3
N205 E210	Ceramic, buff stoneware, unidentified	1
	Glass, container, clear	2
	Glass, container, green tint	1
	Metal, wire	1
N205 E215	Ceramic, buff stoneware, colored glaze unidentified	1
	Glass, container, green tint	3
	Glass, windowr, green tint	1
	Metal, late machine cut nail	4
	Metal, wire	1
	Bone, faunal	1
N205 E220	Glass, container, clear	4
	Metal, unidentified flat metal	1
N205 E225	Ceramic, buff stoneware, colored glaze unidentified	6
	Ceramic, white granite undecorated, unidentified	1
	Glass, container, clear	4
	Bone, faunal	4
N205 E230	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, whiteware, undecorated, unidentified	2
	Bone, faunal	2

Table 8.1. Continued.

Provenience	Artifact Description	N=
N210 E170	Glass, beer bottle, brown	1
N210 E175	Glass, beer bottle, brown	1
	Glass, container, clear	1
	Glass, container, green tint	2
	Glass, window, blue tint	5
N210 E180	Glass, window, blue tint	1
N210 E185	Ceramic, whiteware, transfer printed, unidentified	1
N210 E190	Glass, beer bottle, brown	1
N210 E195	Ceramic, porcelain, undecorated, button-four hole	1
	Glass, beer bottle, brown	1
	Glass, window, blue tint	2
	Metal, percussion cap	1
N210 E205	Glass, container, green tint	2
	Glass, window, green tint	1
	Metal, late machine cut nail	1
	Bone, faunal	4
N210 E210	Ceramic, white granite undecorated, unidentified	1
	Glass, bottle-liquor, olive	1
	Glass, container, clear	3
	Metal, late machine cut nail	3
	Metal, wire	1
	Synthetic, plastic, unidentified	1
N210 E225	Glass, beer bottle, brown	1
	Glass, beer bottle, olive	1
	Glass, container, blue tint	1
	Glass, container, clear	1
	Metal, hardware-unidentified	1
	Metal, late machine cut nail	8
	Bone, faunal	1
N210 E230	Ceramic, porcelain, undecorated, unidentified	5
	Ceramic, white granite, undecorated, unidentified	4
	Ceramic, whiteware, transfer printed, unidentified	1
	Glass, beer bottle, brown	9
	Glass, container, amethyst	3
	Glass, container, blue tint	2
	Glass, window, clear	5
	Glass, window, blue tint	4
	Metal, hardware-decorative	2
	Metal, late machine cut nail	11
	Metal, wire nail	1
	Bone, faunal	1
N210 E235	Ceramic, whiteware, undecorated, unidentified	1
	Glass, container, clear	3
	Glass, container, blue tint	1
	Metal, wire	2
	Bone, faunal	2

Table 8.1. Continued.

Provenience	Artifact Description	N=
N210 E240	Ceramic, whiteware, undecorated, unidentified	1
	Glass, container, clear	1
	Carbon, rod	1
	Bone, faunal	11
N210 E245	Ceramic, whiteware, transfer printed, unidentified	1
	Glass, container, clear	3
	Metal, late machine cut nail	3
	Bone, faunal	1
N210 E250	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, white granite, undecorated, unidentified	3
	Ceramic, yellowware, banded, bowl	1
	Glass, bottle, aqua	1
	Glass, bottle, clear	1
	Glass, beer bottle, brown	1
	Glass, container, aqua	1
	Glass, container, clear	16
	Glass, container, milk glass	2
	Glass, window, green tint	1
	Metal, late machine cut nail	11
	Metal, pencil part	1
	Metal, unidentified flat metal	3
N215 E175	Glass, window, blue tint	1
N215 E185	Metal, wire	1
N215 E190	Glass, container, clear	2
N215 E195	Bone, faunal	9
N215 E205	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, white granite, undecorated, unidentified	3
	Ceramic, yellowware, undecorated, unidentified	1
	Glass, window, clear	1
	Glass, window, blue tint	1
	Metal, late machine cut nail	1
N215 E210	Ceramic, whiteware, transfer printed, unidentified	1
	Glass, container, aqua	1
	Glass, container, clear	4
	Glass, container, blue tint	1
	Metal, late machine cut nail	2
N215 E215	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, terra cotta, unglazed, flower pot	7
	Glass, container, clear	2
	Metal, late machine cut nail	2
N210 E220	Glass, container, clear	3
	Glass, window, blue tint	1
	Glass, window, green tint	3
N215 E225	Ceramic, white granite, undecorated, unidentified	5
	Glass, container, clear	1
	Glass, window, blue tint	4
	Metal, late machine cut nail	1
N215 E230	Ceramic, terra cotta, unglazed, flower pot	2
	Ceramic, white granite, undecorated, unidentified	1
	Glass, container, clear	2
	Glass, window, blue tint	4
	Metal, late machine cut nail	2

Table 8.1. Continued.

Provenience	Artifact Description	N=
N215 E235	Ceramic, buff stoneware, unidentified	1
	Glass, container, clear	6
	Glass, container, green tint	1
	Glass, window, blue tint	4
	Metal, roofing nail	3
	Metal, wire nail	3
	Metal, wire	1
	Synthetic, plastic, unidentified	1
N215 E240	Ceramic, whiteware, undecorated, unidentified	2
	Glass, container, clear	2
	Glass, window, blue tint	5
	Glass, window, clear	1
	Metal, late machine cut nail	5
	Metal, wire nail	2
N215 E245	Ceramic, buff stoneware, unidentified	1
	Ceramic, pearlware, undecorated, unidentified	4
	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, redware, unidentified	1
	Ceramic, whiteware, flowed, unidentified	3
	Ceramic, whiteware, undecorated, unidentified	3
	Ceramic, yellowware, undecorated, unidentified	3
	Glass, beer bottle, brown	1
	Glass, container, blue tint	1
	Glass, container, clear	5
	Glass, window, blue tint	12
	Glass, window, green tint	2
	Metal, finishing nail	1
	Metal, late machine cut nail	4
	Metal, roofing nail	1
	Metal, wire nail	1
	Metal, bolt	1
	Bone, faunal	1
N220 E175	Glass, container, clear	1
N220 E200	Ceramic, buff stoneware, unidentified	1
	Glass, container, bright green	1
	Glass, container, clear	3
	Metal, wire nail	1
N220 E210	Ceramic, whiteware, undecorated, unidentified	2
	Glass, container, clear	1
	Metal, late machine cut nail	2
N220 E215	Glass, bottle-liquor, olive	1
	Metal, late machine cut nail	1
N220 E220	Glass, container, clear	2
	Glass, window, blue tint	1
	Glass, window, clear	1
	Glass, window, green tint	2
	Metal, late machine cut nail	7
	Metal, unidentified	1
N220 E230	Glass, bottle-liquor, olive	1
	Glass, bottle-medicine, blue tint	1
	Glass, tumbler, frosted	2
	Glass, window, blue tint	1
	Metal, late machine cut nail	1

Table 8.1. Continued.

Provenience	Artifact Description	N=
N220 E235	Ceramic, terra cotta, unglazed, flower pot	1
	Ceramic, yellowware, handpainted, bowl	1
	Glass, window, blue tint	4
	Metal, roofing nail	12
	Metal, wire nail	4
	Metal, late machine cut nail	12
	Metal, washer	1
N220 E240	Ceramic, yellowware, undecorated, unidentified	1
	Glass, container, clear	2
	Glass, window, blue tint	1
	Glass, window, green tint	1
	Metal, coin	1
	Metal, wire nail	6
	Bone, faunal	8
	Bone, button	1
N220 E245	Ceramic, buff stoneware, unidentified	1
	Glass, beer bottle, brown	1
	Metal, buckle	1
	Metal, late machine cut nail	9
	Metal, unidentified flat metal	4
N220 E250	Ceramic, porcelain, undecorated, unidentified	1
	Ceramic, whiteware, undecorated, unidentified	3
	Glass, container, clear	8
	Glass, window, blue tint	4
	Metal, late machine cut nail	1
	Metal, coin	1
	Metal, unidentified flat metal	4
N230 E210	Glass, container, aqua	1
N230 E220	Ceramic, gray stoneware, jug	1
	Ceramic, porcelain, banded, bowl	1
	Ceramic, redware, unidentified	1
	Ceramic, whiteware, transfer printed, unidentified	2
	Glass, container, aqua	2
	Glass, container, clear	7
	Glass, window, blue tint	1
	Metal, late machine cut nail	34
	Metal, unidentified flat metal	1
	Bone, button-three hole	2
	Bone, faunal	1
N230 E230	Ceramic, white granite, undecorated, unidentified	1
	Ceramic, whiteware, handpainted, unidentified	1
	Glass, container, clear	1
	Glass, window, blue tint	1
	Metal, late machine cut nail	2
N230 E240	Ceramic, buff stoneware, unidentified	1
	Ceramic, white clay, smoking pipe	1
	Ceramic, whiteware, undecorated, unidentified	3
	Glass, container, clear	4
	Glass, window, blue tint	2
	Glass, window, clear	1
	Metal, late machine cut nail	2
	Bone, faunal	2
N240 E190	Ceramic, buff stoneware, unidentified	1

Table 8.1. Continued.

Provenience	Artifact Description	N=
N240 E200	Glass, table top, blue tint	1
	Glass, window, blue tint	2
N240 E210	Glass, beer bottle, brown	1
	Glass, container, aqua	1
	Glass, container, clear	2
	Metal, hardware-unidentified	1
	Bone, faunal	2
N240 E230	Bone, faunal	1
N250 E210	Glass, bottle-liquor, olive	1
	Glass, window, green tint	1
N250 E220	Glass, container, clear	1
	Glass, window, green tint	1
N250 E230	Glass, container, clear	1
	Glass, window, clear	1
N250 E240	Glass, container, milk glass	1
	Metal, late machine cut nail	2
N260 E260	Ceramic, pearlware, undecorated, unidentified	1
	Glass, container, clear	1
N260 E280	Ceramic, whiteware, undecorated, unidentified	1
	Glass, window, blue tint	1
N260 E300	Ceramic, whiteware, transfer printed, unidentified	1

Table 8.2. Historic Artifacts Recovered from Surface.

Artifact Description	N=
Ceramic, buff stoneware, unidentified	7
Ceramic, Jasperware, appliqué, vase	1
Ceramic, porcelain, undecorated, bric-a-brac	13
Ceramic, porcelain, undecorated, cup	2
Ceramic, redware, unidentified	2
Ceramic, terra cotta, unglazed, flower pot	4
Ceramic, white granite, undecorated, unidentified	16
Ceramic, white granite, transfer printed, plate	1
Ceramic, whiteware, undecorated, unidentified	8
Glass, bottle-liquor, olive	8
Glass, bottle-medicine, clear	1
Glass, shaker, amethyst	1
Glass, container, blue tint	4
Glass, container, clear	1
Glass, container, milk glass	2
Glass, window, blue tint	11
Metal, drain cap	1

Table 8.3. Prehistoric Materials Recovered from 15Hr53.

Provenience	Artifact Description	N=
N240 E170	Partial Cortical flake	1
N240 E200	Partial Cortical flake	1
	Biface Thinning flake	2
	Flake fragment	1
N230 E170	Ceramic sherd	1
N220 E170	Biface Thinning flake	1
	Shatter	1
N220 E175	Biface Thinning flake	2
	Flake fragment	5
N220 E180	Partial Cortical flake	1
	Biface Thinning flake	1
	Flake fragment	1
	Shatter	1
N220 E185	Interior flake	2
	Biface Thinning flake	1
	Flake fragment	1
N220 E190	Biface Thinning flake	1
N220 E195	Partial Cortical flake	1
N220 E200	Biface Fragment	1
N220 E215	Flake fragment	1
N215 E175	Cortical flake	2
	Partial Cortical flake	1
N215 E195	Partial Cortical flake	1
N210 E170	Partial Cortical flake	2
N210 E180	Partial Cortical flake	1
	Biface Thinning flake	1
N210 E185	Biface Thinning flake	1
N210 E190	Cortical flake	1
N210 E195	Flake fragment	1
N210 E220	Cortical flake	1
	Biface Thinning flake	1
N205 E170	Biface Thinning flake	1
N205 E175	Partial Cortical flake	1
N205 E195	Flake fragment	1
N200 E180	Cortical flake	1
N200 E190	Partial Cortical flake	1
N200 E230	Flake fragment	1
N195 E170	Partial Cortical flake	1
N195 E175	Partial Cortical flake	1
N195 E180	Partial Cortical flake	1
	Flake fragment	1
N195 E185	Partial Cortical flake	1
	Biface Thinning flake	1
N195 E225	Cortical flake	1
N190 E175	Flake fragment	1
N190 E180	Partial Cortical flake	1
	Biface Thinning flake	1
	Flake fragment	1
N190 E190	Biface Thinning flake	1
N185 E170	Flake fragment	1
N185 E175	Partial Cortical flake	1
	Interior flake	1
	Flake fragment	2
N185 E180	Interior flake	1
N185 E185	Interior flake	1

Table 8.3. Continued.

N180 E170	Interior flake	1
	Biface Thinning flake	1
	Flake fragment	1
N175 E175	Flake fragment	1
N175 E180	Partial Cortical flake	2
	Flake fragment	1
N175 E185	Biface Thinning flake	1
N175 E200	Biface Thinning flake	1
	Flake fragment	1
N175 E215	Flake fragment	1
N170 E175	Flake fragment	1
N170 E195	Shatter	1
N170 E200	Cortical flake	1
N170 E215	Biface Thinning flake	1
N165 E200	Biface Thinning flake	1
	Flake fragment	1
N150 E200	Flake fragment	1
N150 E210	Interior flake	1
N150 E220	Partial Cortical flake	1
N150 E230	Cortical flake	1
	Flake fragment	1
N140 E200	Core/core fragment	1
	Biface Thinning flake	1
	Blade-like flake	1
N125 E145	Cortical flake	1
TR3 ST1	Biface Thinning flake	1
TR3 ST2	Flake fragment	1
TR3 ST4	Biface Thinning flake	1
N175 E195	Flake fragment	1
Gen. Surface	Core/core fragment	1
	Partial Cortical flake	2
	Interior flake	1
	Biface Thinning flake	2
	Flake fragment	2
	Shatter	1
Gen. Surface	Triangular Point	1
	Cortical flake	1
	Partial Cortical flake	3
	Interior flake	3
	Shatter	1
Total		**113**

constructed later in the nineteenth century. This would account for the absence of early nails in the recovered assemblage.

Examination of the spatial distribution of the historic artifacts (Figure 8.17), and in particular architecturally related materials (Figure 8.18) at the Handy House site corroborated archival and photographic record. The highest concentrations of artifacts were found in the rear yard just to the northeast of the main house, and within the fenced area where the slave/tenant house and other outbuildings were located (Figures 8.17 and 8.18). This concentration coincides with numerous foundation stones and architecture group artifacts.

A large amount of artifacts also was recovered to the north of the main residence. These materials were found in the area that contains the remains of the demolished north wing of the house as well as the carriage house (Figures 8.17 and 8.18).

A small amount of historic artifacts were found in the front (west) and south side yards of the main house, with two small concentrations being found at the southwest corner of the house and northwest of the house near the gravel drive (Figure 8.17). These concentrations were small and likely represent isolated trash deposits. Another concentration of architecture artifacts coincides with the smaller concentration of artifacts identified northwest of the main house near the gravel drive, which indicates that most of the artifacts in that concentration were architecture related. This concentration was largely comprised of window glass fragments found in shovel probe N205 E175. Perhaps some window panes had been dropped or dumped in that location.

A very small amount of artifacts was recovered from within and around the stone foundation identified at the southwest corner of the site (Figure 8.17). That most were architecturally related reflects their association with this structure.

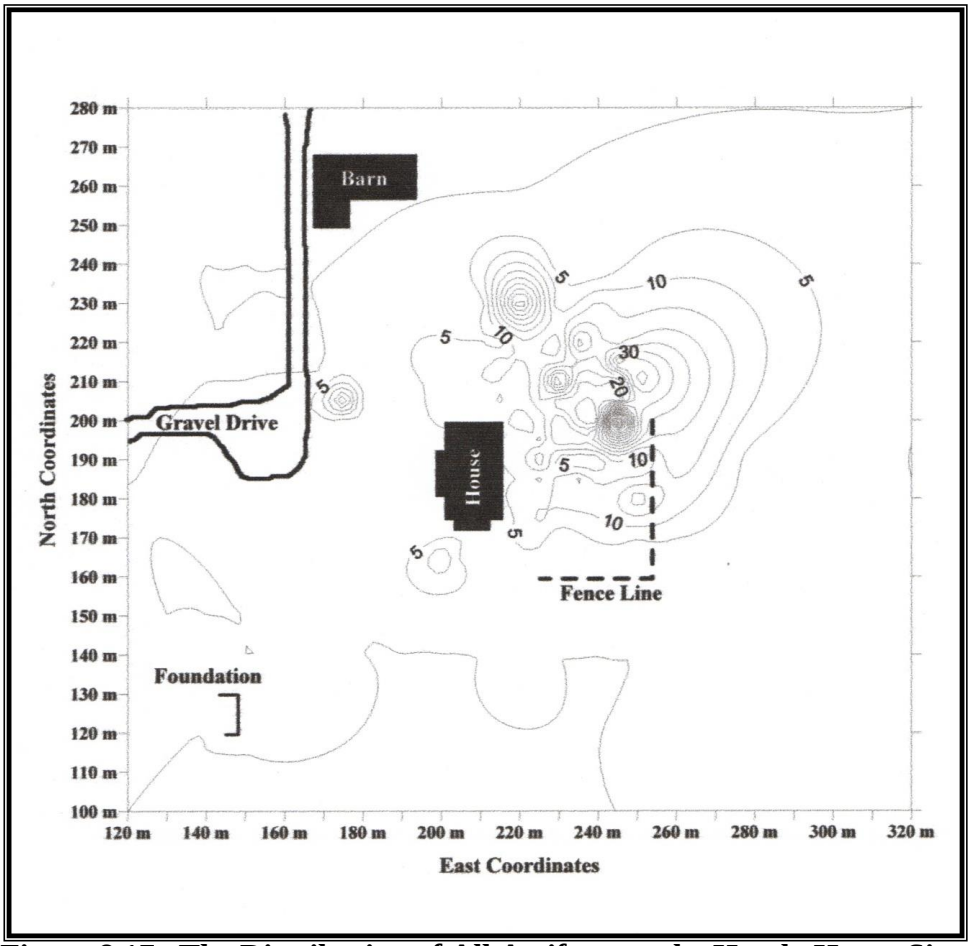

Figure 8.17. The Distribution of All Artifacts at the Handy House Site.

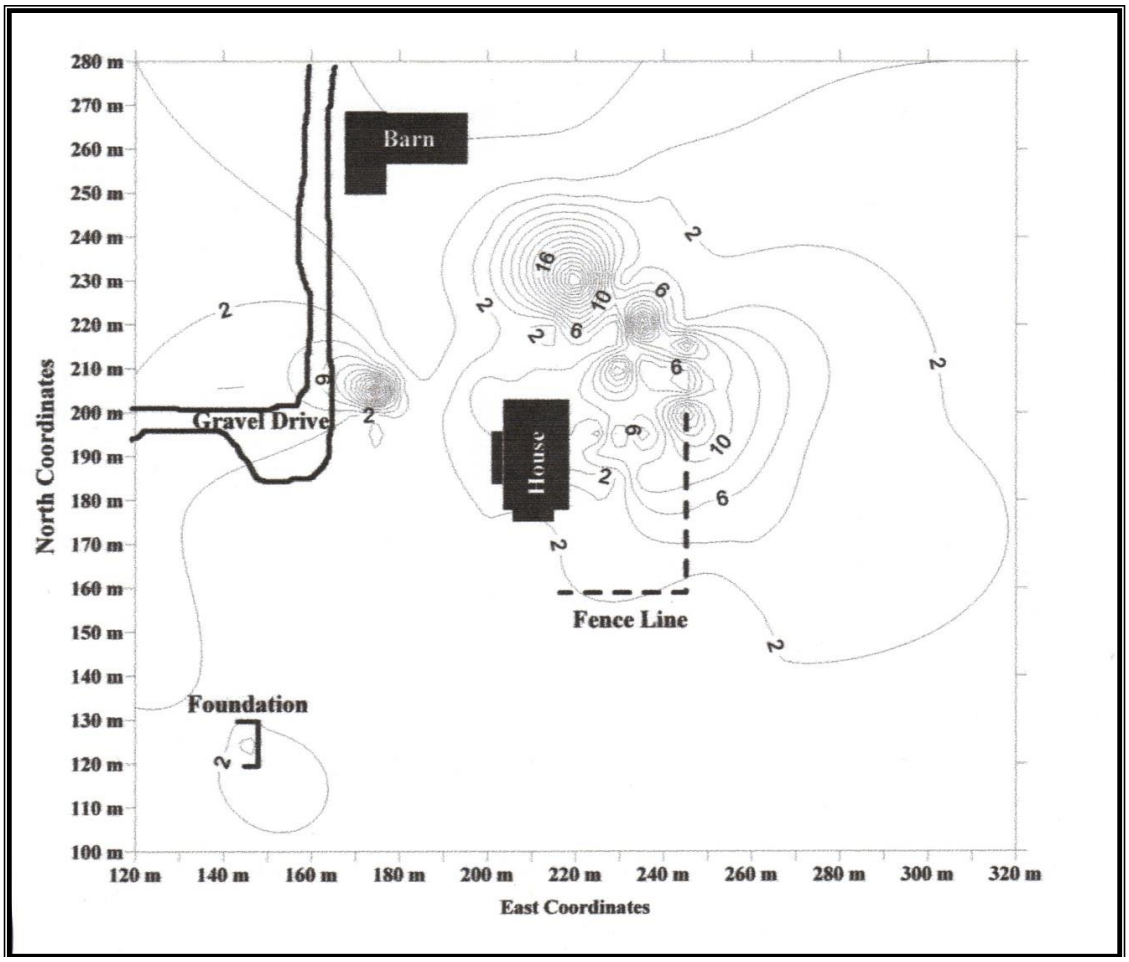

Figure 8.18. The Distribution of Architecture Group Artifacts at the Handy House.

Overall, the distribution of historic artifacts at the Handy House site show that domestic refuse and architectural remains were primarily deposited behind (east) and to the north of the main house. This area was the location of several outbuildings and would have seen extensive domestic activity as the yard spaces between buildings and around the cistern pumps would have been utilized for domestic work. Thus, the historic artifacts recovered from the Handy House site were likely deposited through daily refuse disposal, and the demolition and modification of outbuildings and the main house.

Summary and Recommendations

The Handy House site contains an extensive topsoil artifact midden associated with the domestic outbuilding complex in the rear (east) and north side yards of the main house; the documented location of former outbuildings (slave/tenant house, "carriage house," and "cellar house") and the north wing of the house (Figure 8.19). Based on the results of the archaeological survey and the archival record, significant archaeological deposits associated with the main house and domestic outbuilding complex are located in the area in the rear and north side yard (Figure 8.19). This area contains an extensive topsoil midden, stratified demolition related deposits, remnants of stone foundations, a

brick walkway, and a possible builder's or robber's trench. Further archaeological investigations in this area could help provide a better understanding of the site's chronology, the chronology of the outbuildings, their relationship to the main house, the function of these buildings, the modifications to the house in the 1880s, and the construction and demolition of the north wing of the house, and generate important insights into the daily lives of the residents of the property. These deposits should be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

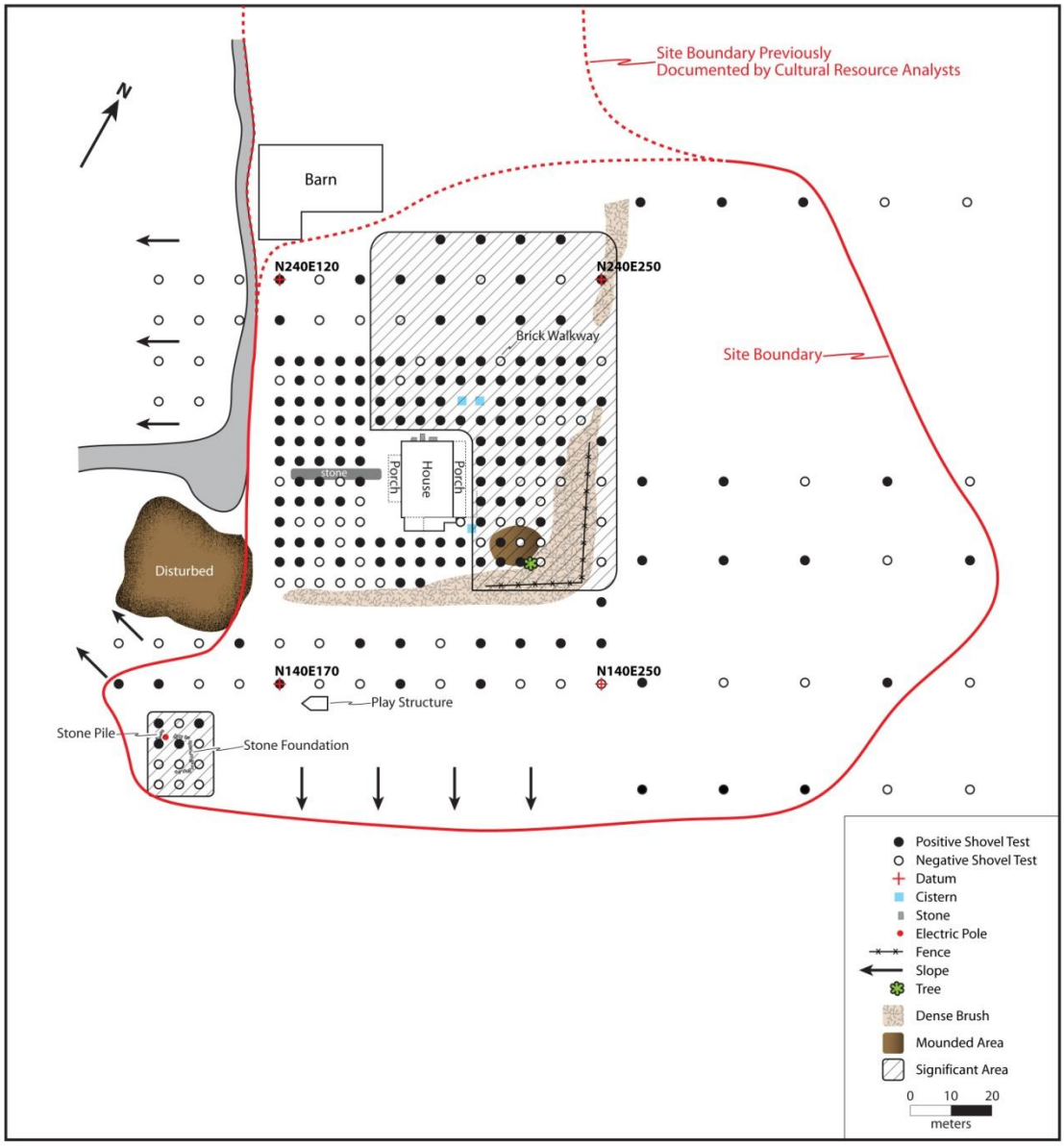

Figure 8.19. Handy House Site (15Hr53) boundary with significant areas identified.

Although a relatively small number of artifacts was recovered from the stone foundation located at the southwest corner of the site, this area could still contain significant archaeological deposits. Further archaeological investigations in this area could provide insights into the chronology, construction, and function of this previously unknown structure. As with those deposits located near the Handy house, the stone foundation should be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

Beyond these two areas few historic artifacts were recovered, and no stratified deposits or features were identified. In fact, much of the cultivated field, the side (north) yard near the barns, the front (west) yard near the gravel drive and parking area, and the south side yard have been disturbed. The archaeological deposits associated with these areas do not need to be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

It is recommended that the above described area in the side (north) and rear (east) yards of the main house, and a 20 m area around the stone foundation at the southwest corner of the site be preserved and protected from disturbance. If this is not possible then the County and City should consult with the Kentucky Heritage Council to determine the nature and extent of additional archaeological studies that may need to be conducted at the Handy House. The Handy House site would be conducive to public interpretation and programming, such as participatory public archaeology field trips and camps, especially given its context on municipal land in a park setting. Any additional archaeological work planned for this property, should consider incorporating a public archaeology component.

SITE 15Hr54

Site Type:	Open Habitation without mounds
UTM Coordinates:	N4253431 E0737242
Elevation:	800 ft AMSL
Physiography:	Dissected uplands
Aspect:	flat
Slope:	2-6 percent
Soil Types:	Loradale silt loam
Vegetation:	Plowed field and pasture, grass, trees, and scrub brush
Visibility:	60-70%
Size:	39,060 m^2
Disturbances:	Agricultural plowing and erosion

As part of this project, additional work was conducted at previously recorded Site 15Hr54. As a result of this work, the site boundaries were refined and expanded, and five internal artifact clusters were identified. Site 15Hr54 is situated on a broad ridge between Flat Run and Indian Creek, both of which are tributaries of the South Fork Licking River (see Figure 1.3). A large portion of the site was in crop (tobacco) as recently as last year and retains good surface visibility. The remainder of the site is in pasture (Figure 8.20 and 8.21). The site measures approximately 180 m north/south extending from a lower slope across the ridge crest toward the slope leading to Indian Creek, and approximately 217 m east/west extending from a low area on the ridge crest due east toward the property boundary. The site area encompasses 39,060 m^2 and its boundaries were determined by the spatial distribution of artifacts on the surface and in shovel probes.

Figure 8.20. Site 15Hr54 facing east.

Figure 8.21. Site 15Hr54 facing west (view toward the Handy House).

Archaeological investigations at the site included intensive pedestrian surface inspection at 10 m intervals of previously plowed sections. The visual inspection was supplemented with the excavation of two shovel probes transects at 20 m intervals across the east/west axis of the site. Of the 22 shovel probes excavated at Site 15Hr54, 11 of which were positive (Figure 8.22). Soil profiles from the shovel probes were very similar across the ridge crest and were characterized by a dark grayish brown silty clay loam plowzone that extended from the surface to between 30-32 cm below surface. The plowzone overlaid a brown silty clay subsoil that appeared between 30-32 cm below surface and extended beyond the depth of the shovel probes (Figure 8.23). Only one location displayed a different soil profile (T4 SP 9) and it is described below.

During the shovel probe excavation, a subplowzone feature was identified in Area D (T4 SP 9) (Figure 8.24). The feature was indicated by the presence of a dark zone situated directly below the plowzone that contained cultural materials. The soil profile for this shovel probe consisted of a dark grayish brown silty clay loam plowzone that extended from the surface to a depth of 32 cm. Directly beneath the plowzone was a dark grayish brown silty clay loam that extended from 32-42 cm below surface. Two cross-mending ceramic sherds (leached limestone temper) were collected from this 10 cm thick zone. Subsoil (brown silty clay) was encountered at 42 cm below surface and continued beyond the limit of excavation (Figures 8.24 and 8.25).

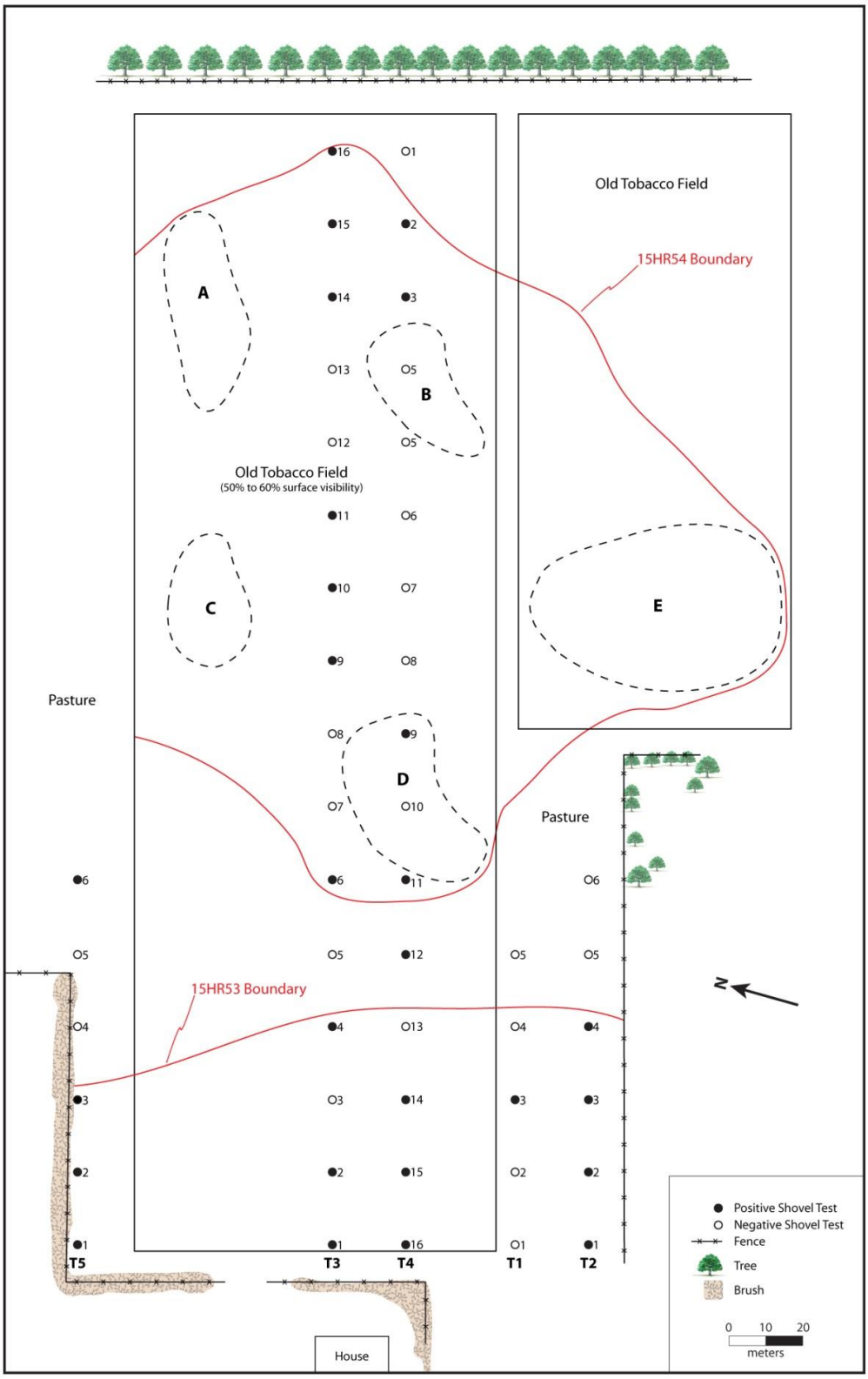

Figure 8.22. Map of Site 15Hr54 with shovel probe locations and Areas A-E.

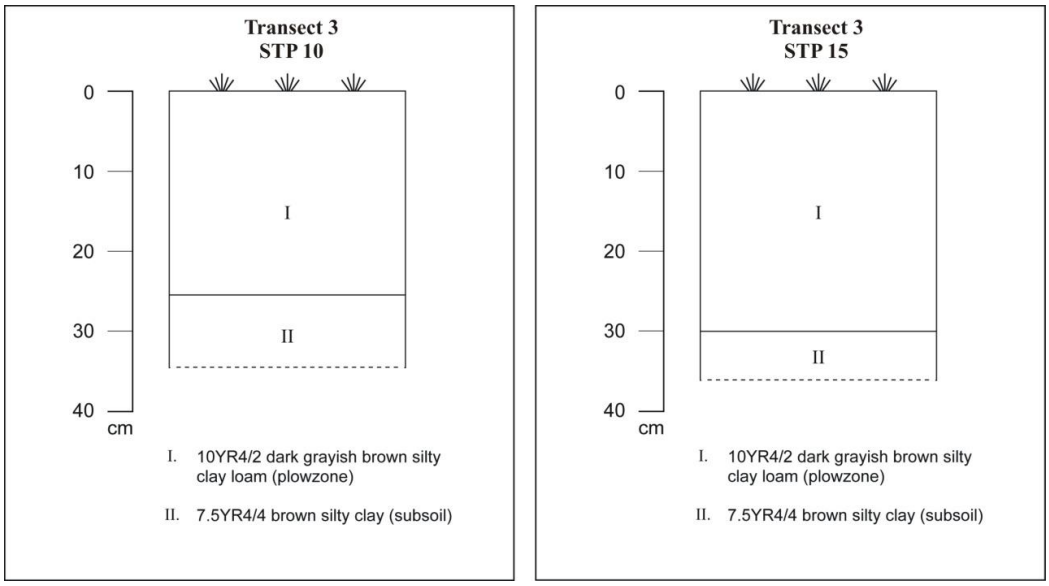

Figure 8.23. Representative Soil Profiles from Shovel Probes at Site 15Hr54.

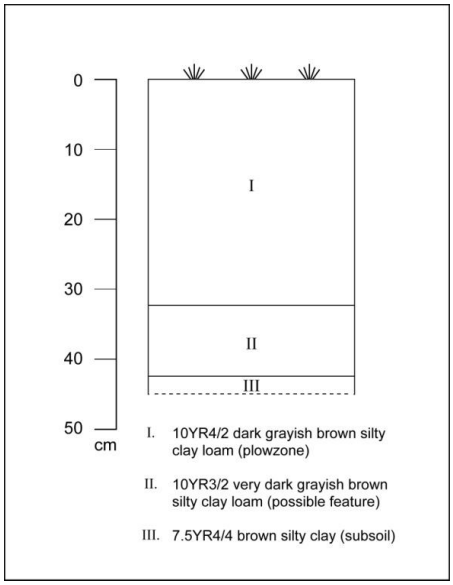

Figure 8.24. Soil Profile from Transect 4 Shovel Probe 9 showing feature deposits.

In order to investigate the feature documented in T4 SP9, a 2 x 3 m unit was excavated. During this excavation, the plowzone was hand removed to expose the spatial extent of the feature. As a result of the unit excavation, three sides of a large Fort Ancient pit feature (Feature 1) was identified, mapped, profiled, and excavated (see Figures 8.26-8.28) (The south side extends into the south wall of the unit and was not excavated.). All fill from the excavation of Feature 1 was screened through 6.35 mm mesh. Cultural materials, which included numerous ceramic sherds (leached limestone tempered, and leached limestone and shell tempered), bone fragments, and lithic artifacts (debitage and Fort Ancient triangular points), were collected.

Figure 8.25. Soil Profile from Transect 4, Shovel Probe 9 at Site 15Hr54 (note the presence of the dark, Zone II).

Figure 8.26. Planview of Feature 1.

Figure 8.27. Feature 1: East-West profile (note presence of at least two strata).

Figure 8.28. Feature 1: North-South profile (note presence of at least two strata).

Prehistoric materials recovered from Site 15Hr54 consisted of ceramic (n=13) and lithics (n=93). Among the ceramics recovered were leached limestone tempered and mixed leached limestone and leached shell tempered sherds. Of the five sherds, large enough for analysis, three had plain exterior surfaces (two limestone and one limestone and shell tempered) and two cordmarked (one limestone tempered and one limestone and shell termpered). One of the limestone plain sherds was recovered from the feature and rest were recovered from the surface. (Additional ceramics as well as chipped stone tools, debitage, and faunal remains were recovered from the excavation of Feature 1. These materials are currently being processed and analyzed. The results of this work will be submitted as an addendum to this report at a later date.). Similar ceramics were recovered from the site when it was initially recorded by Cultural Resource Analysts (Kerr 2003).

Chipped stone tools recovered from this site consisted of a Type 5 Fine Triangular point, a Nodena point, a hafted drill, a knife, and a scraper fragment (Table 8.4). The presence of these tools is suggestive of a relatively wide range of hunting and processing activities that likely involved both butchery and hide preparation/processing. The debitage assemblage indicates that the full reduction process occurred at the site, with the most common chert exploited being Boyle, followed by St. Louis and St. Genevieve. Most of these materials were probably procured from nearby alluvial and fluvial gravel deposits associated with the North Fork of the Licking River, as evidenced by the water-worn (fluvial) cortex on many specimens. The presence of Type 5 Fine Triangular points and limestone and shell tempered ceramics is suggestive of a middle Fort Ancient period occupation.

Areas A-C yielded from three to seven artifacts, while areas D and E yielded 26 and 23 artifacts, respectively (Table 8.4). Though areas A, B, C, yielded fewer artifacts, at least one sherd was associated with each area, with ceramics accounting for two of the three artifacts recovered from Area A and three of the seven from Area B. Not surprisingly given their higher artifact densities, a wider range of including chipped stone tools were recovered from areas D and E.

Summary and Recommendations

Based on the results of the surface inspection, shovel probing, and limited test excavation, the boundaries of the previously recorded Site 15Hr54 were refined and expanded and five internal clusters of surface artifacts were identified. The surface distribution of artifacts at Site 15Hr54 is characterized by a relatively low density scatter of lithic debris and ceramic sherds that are concentrated into five distinct clusters across the site. Each of these five clusters (Areas A-E) contains similar cultural materials that could not be temporally segregated based on the Phase I investigation. However, shovel probing and subsequent test unit excavation did identify an intact, subsurface pit feature (Feature 1) containing Fort Ancient cultural materials within Area D. The cultural materials recovered from Feature 1 are similar to diagnostic materials recovered from the surface of Area D and may provide an age estimate for the other four artifact clusters at Site 15Hr54.

Table 8.4. Materials Recovered by Provenience at Site 15Hr54.

Provenience	Artifact Description	N
TR3 SP6	Cortical flake	1
	Partial Cortical flake	1
	Biface Thinning flake	2
	Flake fragment	1
TR3 SP9	Interior flake	1
TR3 SP10	Cortical flake	1
	Interior flake	1
	Flake fragment	1
TR3 SP11	Partial Cortical flake	1
TR3 SP14	Partial Cortical flake	1
TR3 SP15	Flake fragment	1
TR3 SP16	Partial Cortical flake	1
TR4 SP3	Cortical flake	1
	Flake fragment	1
TR4 SP6	Flake fragment	1
TR4 SP9	Ceramic sherd	1
	Biface Thinning flake	1
TR4 SP10	Biface Thinning flake	1
Gen. Surface	Triangular Point	1
	Drill	1
	Biface Fragment	1
	Cortical flake	4
	Partial Cortical flake	5
	Interior flake	4
	Biface Thinning flake	3
	Flake fragment	2
	Shatter	3
Area A surface	Ceramic sherd	2
	Partial Cortical flake	1
Area B surface	Ceramic sherd	3
	Cortical flake	2
	Flake fragment	2
Area C surface	Ceramic sherd	1
	Interior flake	1
	Biface Thinning flake	1
	Flake fragment	1
Area D surface	Ceramic sherd	5
	Nodena point	1
	Preform/Knife	1
	Core/core fragment	1
	Cortical flake	1
	Partial Cortical flake	5
	Interior flake	4
	Biface Thinning flake	1
	Flake fragment	5
	Shatter	2
Area E surface	Ceramic sherd	1
	Unifacial Scraper fragment	1
	Unidentified Stemmed point	1
	Core/core fragment	1
	Cortical flake	4
	Partial Cortical flake	4
	Interior flake	1
	Biface Thinning flake	4
	Flake fragment	4
	Shatter	2
Total		**106**

Prehistoric artifacts recovered from the surface of Site 15Hr54 are suggestive of the pursuit of a relatively wide range of activities including, ceramic manufacture/use, lithic manufacture, hunting, and probable butchery/hide preparation. The materials recovered from Feature 1 in Area D support the presence of these activities and further suggest that a broad range of domestic-related activities including, food processing, cooking, butchery, and perhaps storage, also occurred at Site 15Hr54. The wide range of domestic activities and presence of a large pit feature, suggest that Site 15Hr54 likely witnessed relatively long-term occupation or occupations during the Late Prehistoric period.

Based on the results of this investigation, Site 15Hr54 is eligible for listing on the National Register of Historic Places (NRHP) under Criterion D for its scientific data content. Additional investigation of Site 15Hr54 has the potential to provide a more complete understanding of the intra-site spatial patterning and artifact distribution, chronology of occupation at the site, site function, and relationship to other Fort Ancient sites within the region, and to address a variety of research questions identified in Kentucky's comprehensive archaeological state plan (Henderson 2008).

It is recommended that Site 15Hr54 be preserved and protected from future disturbance and construction activities (disking of the plowzone or no-till agriculture is acceptable, but deep or chisel plowing should not be permitted). Prior to any planned ground disturbing activities, the County and City should consult with the Kentucky Heritage Council to determine the nature and extend of any additional archaeological work that may be needed.

CHAPTER NINE:
CONCLUSIONS AND RECOMMENDATIONS

Between March 17-27, 2010, Kentucky Archaeological Survey personnel conducted an archaeological survey of Flat Run Veteran's Park in Cynthiana, Harrison County, Kentucky. The survey was conducted for the Harrison County Fiscal Court and City of Cynthiana at the request of Mr. Alex Barnett, Harrison County Judge Executive and Mr. John M. Keith, Jr., Mayor of Cynthiana. Field investigations included surface inspection and shovel probing within areas of the park that had not been previously surveyed and revisiting previously identified archaeological sites within the park's boundaries.

Flat Run Veteran's Park is located just north of the city of Cynthiana, KY in Harrison County. The park property encompasses 120 acres and is bounded to the west by Flat Run Creek, to the south by US 62, and to the north/northeast by Indian Creek. Both Indian Creek and Flat Run Creek are tributaries of the South Fork Licking River, which is located less than 1 km from the western portion of the park property. The terrain within the park encompasses both lowland floodplain and dissected upland ridge crests.

All unsurveyed portions of the Flat Run Veteran's Park property were visually inspected, shovel probed, or both. Of the four previously recourded archaeological sites located within the park, sites 15Hr50 and 15Hr56 had been determined to be not eligible for listing in the National Register of Historic Places. Site 15Hr53 also have been determined to be not eligible for listing in the National Register of Historic Places, but only a small portion of this large site had previously been examined. Based on the data collected during the course of this site, this site was found to contain potentially significant historic archaeological deposits. Finally, Site 15Hr54 had been determined to be potentially eligible for listing in the National Register of Historic Places. During the course of this study it was found to contain significant archaeological deposits that make it eligible for listing in the National Register of Historic Places.

The results of the KAS investigations indicate that the Handy House site (15Hr53) contains an extensive topsoil artifact midden associated with the domestic outbuilding complex (slave/tenant house, "carriage house," and "cellar house") in the rear (east) and north side yards of the main house and the north wing of the house. This area contains an extensive topsoil midden, stratified demolition related deposits, remnants of stone foundations, a brick walkway, and a possible builder's or robber's trench. Further archaeological investigations of these deposits and features has the potential to contribute to a better understanding of the site's chronology, the chronology of the outbuildings, their relationship to the main house, the function of these buildings, the modifications to the house in the 1880s, and the construction and demolition of the north wing of the house, and to generate insights into the daily lives of the residents of the property. These deposits should be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

Although a relatively low density of artifacts was recovered from the stone foundation located at the southwest corner of the site, this area has potential to contain significant archaeological deposits. Further archaeological investigations in this area could provide some insights into the chronology, construction, and function of this previously unknown structure. As with those deposits located near the Handy house, the stone foundation should be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

Beyond these two areas few historic artifacts were recovered, and no stratified deposits or features were identified. These areas do not contain significant deposits. In fact, much of the cultivated field, the side (north) yard near the barns, the front (west) yard near the gravel drive and parking area, and the south side yard have been disturbed. The archaeological deposits associated with these areas do not need to be preserved and protected during the rehabilitation and subsequent adaptive reuse of the Handy House.

It is recommended that the side (north) and rear (east) yards of the main house at and a 20 m area around the stone foundation at the southwest corner of the site be preserved and protected from disturbance (see Figure 8.19). If this is not possible then the County and City should consult with the Kentucky Heritage Council to determine the nature and extent of additional archaeological studies that may need to be conducted at the Handy House. The Handy House site (15Hr53) would be conducive to public interpretation and programming, such as participatory public archaeology field trips and camps, especially given its context on municipal land in a park setting. Any additional archaeological work planned for this property, should consider incorporating a public archaeology component. The remainder of the site may be developed without the need of any additional archaeological investigations.

KAS's investigation of Site 15Hr54 indicate that it contains significant intact subplowzone archaeological deposits associated with the Fort Ancient occupation of central Kentucky and is eligible for listing on the National Register of Historic Places under Criterion D (scientific data content). Additional investigation of Site 15Hr54 has the potential to provide a more complete understanding of intra-site spatial patterning (community organization), chronology of occupation at the site, site function and relationship to other Fort Ancient sites within the region, and to address a variety of research questions identified in Kentucky's comprehensive archaeological state plan (Henderson 2008).

It is recommended that Site 15Hr54 be preserved and protected from future disturbance and construction activities (disking of the plowzone or no-till agriculture is acceptable, but deep or chisel plowing should not be permitted). Prior to any planned ground disturbing activities, the County and City should consult with the Kentucky Heritage Council to determine the nature and extend of any additional archaeological work that may be needed.

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