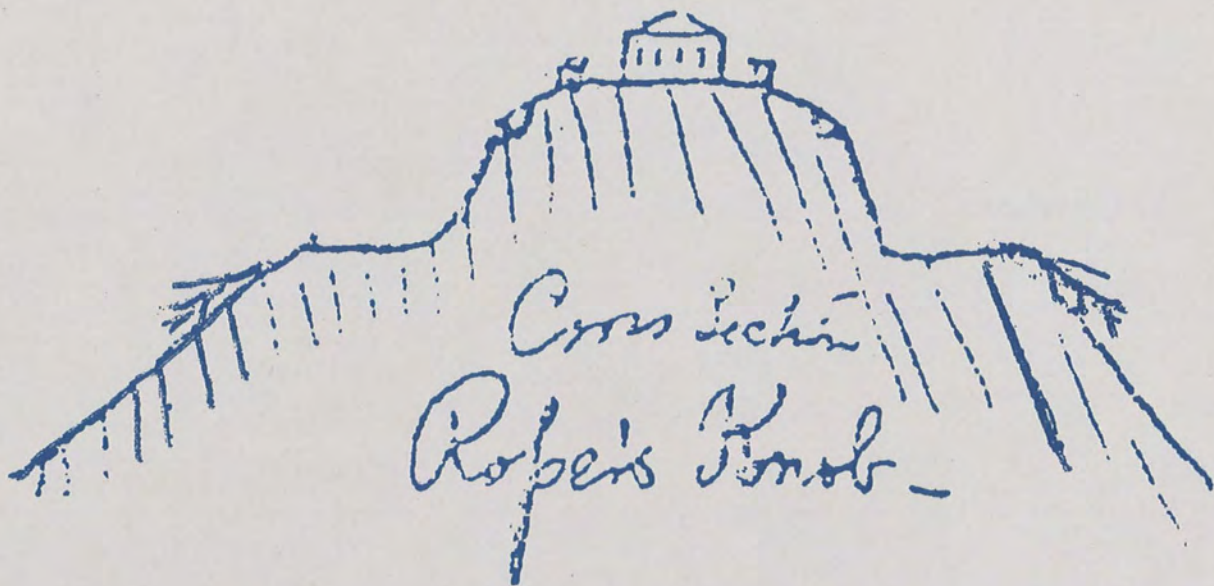


**TEST EXCAVATIONS ON ROPER'S KNOB: A FORTIFIED
UNION SIGNAL STATION IN FRANKLIN, TENNESSEE**



**Tennessee Department of Environment and Conservation
Division of Archaeology
Report of Investigations No. 10**

2005

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UNION SIGNAL STATION IN FRANKLIN, TENNESSEE**

By

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Benjamin C. Nance with the Tennessee Division of Archaeology served as project supervisor conducting much of the preliminary historical research, overseeing day-to-day operation of the excavation, and completing an analysis of the artifacts and the final report. Samuel D. Smith, Historical Archaeologist Supervisor with the Tennessee Division of Archaeology, served as project director, supervising the overall project and assisting with all phases of research, excavation, artifact analysis, and report editing. His experience and advice were essential to the successful completion of the project.

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Roper's Knob excavation. In addition to the task of contacting each person to work out a schedule, Emily worked throughout the project revising schedules to accommodate volunteer needs. Emily herself was also a volunteer excavator.

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Mr. Bill Peach, a local resident and landowner, allowed the crew to access the site through his property and allowed us to park in his driveway. This saved much time and effort in transporting equipment up the steep knob everyday. His kindness is greatly appreciated.

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Frank Baugh, whose family formerly owned the Roper's Knob tract, came to the site to show excavators what he remembered about the area. He also shared information about artifacts that he had recovered. Richard Fultcher, with the permission of the Baugh family, had collected from the Roper's Knob site in the 1970s. In a telephone interview Mr. Fultcher shared information regarding the research he had conducted on the history of the site and the artifacts he had recovered from Roper's Knob.

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INTRODUCTION

In the Fall of 2000, The Tennessee Division of Archaeology conducted test excavations on the state-owned portion of Roper's Knob (Tennessee Archaeological Site Number 40WM101). Located 1.8 miles northeast of the town square of Franklin, Tennessee, Roper's Knob is a high prominence that the Union Army used as a fortified signal station during the American Civil War (Figure 1). Division of Archaeology employees first recorded Roper's Knob as a potential archaeological site in 1988 during a survey of Civil War period military sites in Middle Tennessee (Smith et al. 1990). From documents such as Union Engineer William Merrill's report on the defenses of Franklin, it became evident that in addition to the site's visible above ground features, including an earthen redoubt and outer entrenchments, there was a potential for subsurface features that could only be properly examined through archaeological excavation. At the time, in 1988, the site was still privately owned.

In 1994 the Roper's Knob tract was put up for sale. Realizing the historical significance of the site, the Heritage Foundation of Franklin and Williamson County launched an initiative to purchase the property. Partnering with the State of Tennessee, the Heritage Foundation bought 22.147 acres. The state then acquired 12 acres from the Heritage Foundation. The state-owned portion of the site comprises the top of Ropers Knob where most of the archaeological components are known or believed to exist.

Because of growing interest in opening the Roper's Knob site to the public as a park with passive interpretation of the historical features, the Tennessee Division of Archaeology undertook a project to conduct archaeological testing on the state-owned portion of the site. One of the major goals of the project was to define surviving archaeological remains for interpretation and long-term preservation. Part of the funding for the project was provided through a Federal Survey and Planning Grant administered through the Tennessee Historical Commission. The Division of Archaeology was responsible for a 40 percent match for these funds. Part of this match was obtained through funding from a state grant administered by the Tennessee Wars Commission, with the Division of Archaeology providing the remainder.

Much of the archival research for the project was conducted in August and the first part of September of 2000, and fieldwork began on September 11, 2000. Excavation of the site continued through the middle of December followed by laboratory analysis, conservation, cataloging, and work on a final report through the first half of 2001.

An early concern to the Division was the logistical problem of transporting equipment up the high, steep knob each day. Part of the problem was solved when local resident Bill Peach allowed the Division access to the site through his property.

Parking a state vehicle in Mr. Peach's driveway and unloading equipment there cut out part of the trip up the hill. From here, equipment was hauled in two large carts up paths cleared by Division employees. Part of this path crossed Heritage Foundation property. Some equipment was kept in a locked metal storage cabinet on the site.

The top of Roper's Knob is approximately 1,000 feet [ft.] above mean sea level and about 360 ft. above Spencer Creek, which flows along the north side of Roper's Knob. The site is now bounded by Mack Hatcher Parkway on the east and north sides, and there is a residential neighborhood to the south. The railroad, which was alternately called the Tennessee-Alabama Railroad or the Nashville-Decatur Railroad during the Civil War, and Highway 31 (State Route 6) lie west of Roper's Knob.

Roper's Knob and the adjoining knob to the west dominate the surrounding landscape, making them a natural choice for a signal station location. Roper's Knob consists of a steep slope rising to a relatively flat terrace. The average elevation of the terrace is approximately 920 ft. above mean sea level. Above the terrace there is a steep upper knob, the top of which is about 80 ft. above the terrace. Geologically the upper knob is comprised of what is known as the Fort Payne Formation and Chattanooga Shale. The Fort Payne Formation consists of three distinct groups of stratified (layered) beds called facies. The uppermost layer, or facies, is primarily chert mixed with some siltstone, silica, and shale. Chert, a microcrystalline form of quartz, was often used by American Indians for the manufacture of blade weapons. The middle facies in the Fort Payne Formation is silicastone with varying amounts of calcareous (that is, containing calcite or calcium carbonate similar to limestone) or dolomitic (containing calcium-magnesium carbonate) material. The lower facies is shale with some siltstone. The maximum thickness of the Fort Payne Formation in the region is 220 ft. Underlying the Fort Payne Formation is the Chattanooga Shale, a grayish-black layer of carbonaceous shale about 10 ft. thick. The Chattanooga Shale was deposited during the geologic periods known as Devonian and Mississippian while the Fort Payne Formation formed during the Mississippian Era. This geologic era should not be confused with the archaeological "Mississippian" Period. (Wilson and Miller 1963)

The soils on Roper's Knob, as described by the United States Department of Agriculture, are mainly of two types. The upper part of the hill consists of what the USDA classifies as Bodine cherty silt loam. This soil type occurs primarily on narrow ridges and consists of a surface layer, 6-8 inches thick, that is a dark grayish brown where it occurs in wooded areas and pale brown to yellowish brown in cleared areas. The subsoil is very cherty, silty clay that is yellowish-brown to reddish-brown. The subsoil can be from 18 inches to 5 ft. thick above the bedrock. This soil is described as having a low natural fertility and a low available moisture capacity that make it undesirable for cultivation (USDA 1961:14).

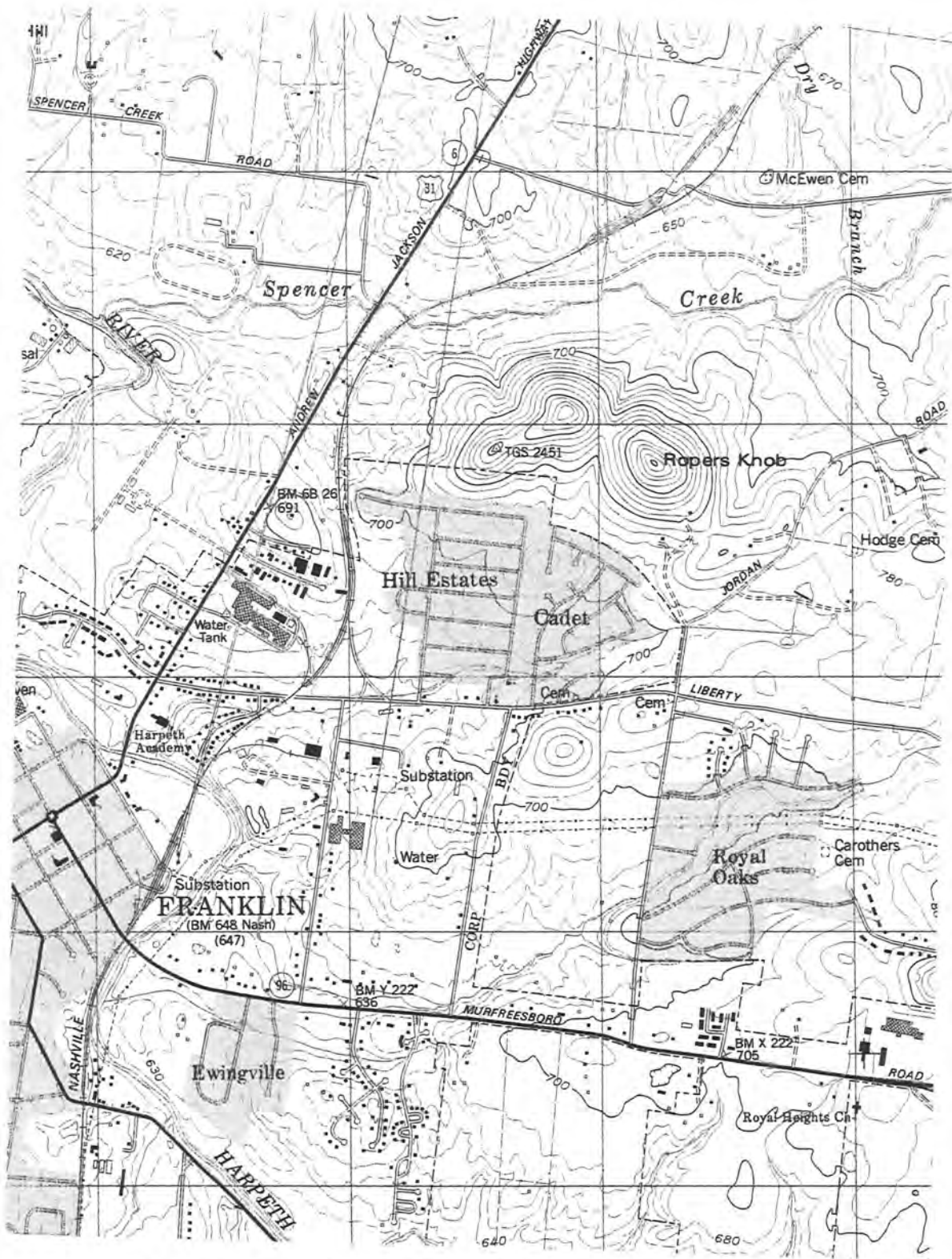


Figure 1. Map showing the location of Roper's Knob (from 1981 USGS Franklin Quadrangle Map).

The soil types on the lower portion of Roper's Knob are classified as Sulphura cherty silt loam. The USDA describes this soil as being "shallow and excessively drained," and it occurs on steep upland slopes. This soil type, generally 18-24 inches deep, develops over shale bedrock and contains a layer of chert from Bodine soils on the upper slopes. It is generally not suited for cultivated crops or pasture (USDA 1961:45).

HISTORICAL BACKGROUND FOR ROPER'S KNOB

Early History Of Roper's Knob

The high prominence that would become known as Roper's Knob (this name first appears in 1859) was part of a 2,660-acre land grant that James Robertson received in 1793 for his service during the American Revolution (Davidson County Deeds, Book D, p. 97). The southern boundary of Robertson's grant lay on the south side of Roper's Knob. Robertson sold his 2,660 acres to Isaac Johnson on December 31, 1796 for the sum of \$2,660 (Davidson County Deeds, Book D, p. 97). Johnson sold 200 acres of his land on Spencer's Creek to David McEwen in August 1800 (Williamson County Deeds, Book A, pp. 39-40). McEwen purchased other land adjoining this property including slightly more than 10 acres purchased from Andrew Goff in 1818 (Williamson County Deeds, Book E, p. 374). By the time of his death, David McEwen had an estate of at least 310 acres.

David McEwen died in 1821 and his will states that he left most of his estate to his wife Margaret including their house and "all the houses on my land." He also left Margaret the land "except the most western field which contains fifteen acres which my son John L. McEwen is to use." Margaret McEwen also received the slaves and all the livestock. Upon Margaret's death John Lapsley McEwen and Cyrus Jefferson McEwen were to divide the 310-acre McEwen estate (Lynch 1970: 238-240).

John and Cyrus McEwen did divide the land in May 1823, their mother having apparently died by this time, giving each of them 155 acres. The deed states that John L. McEwen's tract was "the tract of land upon which David McEwen in his lifetime resided" (Williamson County Deeds, Book G, pp. 378-379). The McEwen house was near Spencer Creek, and several McEwen households along Spencer Creek still appear on an 1878 map of Williamson County (Beers 1878). A McEwen cemetery still exists on the golf course north of Roper's Knob. John L. McEwen appears to have been setting up a household two years later, as a bill of sale recorded on May 21, 1825 lists household goods that McEwen bought from John Davis (Williamson County Deeds, Book H, p. 28). The items include a cooking stove, feather beds, mattresses, tables, chairs, trunks, tea kettles, a gridiron, colander, looking glass, candlesticks, and an assortment of dishes and tableware.

In 1829, John L. McEwen sold a 37-acre tract of land, including what would become known as Roper's Knob, to Thomas Hardeman, County Clerk for Williamson County, in trust for Nicholas P. Perkins (Williamson County, Chancery Court Minute Book, 1857-1867, Vol. I, p. 435). The deed from McEwen to Hardeman, however, failed to mention the trust (Williamson County Deeds, Book K, p. 208). Perkins took possession of the land, possibly living there until his death in 1833. Nicholas P. Perkins was an attorney, and between February 1827 and June 1829 he practiced law with his partner William E. Anderson (Lynch 1985:32).

In 1829 Nicholas P. Perkins paid taxes for one free person (himself) and three slaves (Williamson County Tax Records, 1829). In the following year he paid taxes on the 37-acre tract of land that he had obtained from McEwen (through Hardeman) and five slaves (Williamson County Tax Records, 1830). A Nicholas P. Perkins paid taxes for 100 acres of land on Spencer Creek and three slaves in 1831 (Williamson County Tax Records, 1831). Perkins is not listed again in the tax records after 1831, but in 1836 his heirs paid the taxes on his 37-acre tract of land valued at \$450 (Williamson County Tax Records, 1836).

Following his death the heirs of Nicholas P. Perkins took legal possession of the land. These heirs, named in an 1859 Chancery Court Case, were James Perkins, John N. Perkins, and Ann Elizabeth (Perkins) Knox. In 1837 the tax record lists Solomon Oden as an agent for the Perkins heirs. They continued paying the taxes on the land, with Oden listed as the agent, until 1856 (Williamson County Tax Records, 1837-1856).

The heirs of Nicholas P. Perkins did not actually live on the land or even in the same county district, and it is after Perkin's death that the Roper family shows up in area records. Park Marshall¹ stated in his history of Franklin that the knob was named after a man named Roper who "lived a great many years on Roper's Knob, but he does not seem to have owned the land" (Marshall 1970). Marshall states that the Roper house was on the flat terrace of the knob and was "jam up" against the upper knob. This description fits the location of the house remains located during the archaeological investigations on the knob (see archaeology section for details). At the time of his writing, Marshall said that some of the foundation and chimney stones were still visible.

A George Roper came to Franklin with three children, David C., George W., and a daughter, in the early part of the 19th century, and possibly lived in Davidson County first. Roper's son, George W. Roper, was married in Davidson County in 1806, and in the same year a George Roper was included on a Davidson County jury (Moore 1939:260). W. W. Clayton (1880:372) lists a George Roper who paid taxes in 1816 in what would become the Fourteenth District of Davidson County, encompassing the southwestern part of the county.

George Roper (probably the elder George Roper) is shown on the Williamson County tax records for 1810 where he is listed as insolvent (Williamson County Tax Records, 1810). In 1811 and 1812 George Roper paid taxes on 50 acres on Lick Creek, in the southwestern part of the county plus the poll tax for himself. In 1813 he paid taxes on 100 acres of land, but the location was not given in the records.

¹ Park Marshall was born in Franklin in 1855, witnessing some of the events of the Civil War. He had a career as an attorney and became the mayor of Nashville and later the mayor of Franklin (Crutchfield and Holladay 1999:142). He began writing a history of Franklin and Williamson County as a series of newspaper articles starting around 1917 and continuing for many years. He eventually compiled his writing into a scrapbook in 1945. This scrapbook was published in 1970.

Roper sold his 50 acres, located at the headwaters of Lick Creek and lying on both sides of the Natchez Trace, to Stephen Pigg in 1816, and he does not appear to have owned land in Williamson County after that date (Williamson County Deeds, Book F, p. 53). The Williamson County Marriage Records list a George Roper as bondsman for Andrew Thomas in 1817 (Hamilton 1979). In July 1824 George Roper, then 59 years old, applied for a pension for his service during the American Revolution. He had joined in North Carolina in 1781 and served in Captain Anthony Sharp's and Captain Watson's Companies of Colonel Henry Dixon's Regiment. Roper served for three months. His pension application states that he was a farmer and was apparently very poor. Roper transferred his pension to Illinois in 1828 (Lynch 1976:159-160).

George Roper's adult children remained in Williamson County after he moved to Illinois. George W. Roper had married Agnes Harris in 1806 in Davidson County (Blair 1952:15). A George W. Roper is listed as part of a survey team in Williamson County in 1826 (Lynch 1980b:12). George W. Roper is listed on the 1830 census in Williamson County. Included in his household are two males between the ages of 5 and 10, and one male aged between 15 and 20 years. The oldest male in the household, presumably George W. Roper, is shown as being between 40 and 50 years old. According to later census records, George W. Roper would have been 38 in 1830, so the record is at least very close. Three females are listed in the Roper household in the 1830 Census, one aged between 10 and 15 years old, another 15 to 20 years old, and another, presumably Agnes Roper, between 30 and 40 years old (Federal Census, 1830, Williamson County).

George W. Roper paid a poll tax in Williamson County in 1833. His brother David is also listed on the county's tax list as the owner of two slaves (Williamson County Tax Records, 1831). George does not appear in the Williamson County Tax records again until 1846. The 1840 census listings for the Eighth District of Williamson County (the district in which Roper's Knob was located) shows George W. Roper's household consisting of him, two male children between the ages of 15 and 20, and one female between the ages of 60-70 (Federal Census, 1840, Williamson County, District 8). George Roper was about 48 years old at this time (based on his age given on the 1850 Federal Census, Williamson County, District 8, No. 831). Agnes Roper killed herself on May 12, 1840. According to her obituary in Franklin's newspaper, *The Western Weekly Review*, Agnes Roper had been in poor health, and she hanged herself while her family was away (Lynch 1977:34). In July 1840 Williamson County paid Nicholas P. Holt for holding an inquest over her body (Williamson County Minute Book 15, p. 36).

The Ropers were farmers, but they apparently did not own land in Williamson County. They certainly did not own the tract that would come to bear the family name. It is possible that they were renting it or had some other arrangement worked out with the owners. Marriage records show that a George Roper married Nancy Scott on July 5, 1844 (Bejach and Gardiner 1980:229), but she does not appear on the 1850 census record. The 1850 census list for the Eighth District of Williamson

County shows 58 year old George Roper, Sr. with his children George Jr., 26, Mary, 22, Moody J., 21, and a 29-year old woman named Lutitia Wilkerson. This record also shows that George Roper, Sr. was born in Virginia while his children were born in Tennessee. Wilkerson was born in Georgia. The three males of the household are listed as farmers with no real estate or personal estate (Federal Census, 1850, Williamson County, District 8, No. 831). George W. Roper and Moody Roper paid poll taxes in 1846, 1849, and 1850 but are not listed again in the tax records. A George Roper appears in the Williamson County marriage records in 1850 as bondsman for Joseph Whitney, but it is not clear which George Roper this is (Hamilton 1979).

The Roper family seems to have disappeared by 1859. George W Roper, Sr., George, Jr. and Moody are not listed on the 1860 census for Tennessee, and the only Ropers listed in Williamson County on the 1860 census are a 28-year old Camelia (or possibly Cornelia) Roper (daughter of David and Sarah Roper), and a 40-year old saddler named J. D. Roper, who owned \$800 worth of real estate and \$5,000 worth of personal estate (Federal Census, 1860, Williamson County, East Subdivision, No. 783). A search of census indexes for 1860 in Illinois, Missouri, Kentucky, Virginia, North Carolina, Mississippi, Alabama, Georgia, Arkansas, and Texas failed to find the Roper family.

In 1859 the heirs of Nicholas P. Perkins and Thomas Hardeman were involved in a dispute over the property. Thomas Hardeman had died in 1856, and his heirs were claiming that they legally owned the land. Hardeman's heirs were A. Sessions, Sarah Frances, William D. Hardeman, and Thomasetta Hardeman. The court ruled in favor of Perkins' heirs and ordered that the tract of land be surveyed to determine whether it was better to divide the tract equally or sell it and divide the profits (Williamson County Chancery Court Minute Book, 1857-1867, Vol. I, p. 435). On March 27, 1860, F. B. Carter submitted the land survey to the court. Fountain Branch Carter, owner of the Carter House on Columbia Pike in Franklin, was the District Surveyor for Williamson County, an office he held through the end of the Civil War (United States Court of Claims, National Archives Record Group 123, Box 1454, Case No. 12686, pp. 71-74, 79-80). The final decision of the court was to sell the land, and W. H. S. Hill purchased the Roper's Knob tract in April 1860 (Williamson County Chancery Court Minute Book, Vol. I, p. 450, 524). A drawing of the tract of land (probably from Carter's survey), labeled as "Exhibit A" in the court minutes (Williamson County Chancery Court Minute Book, Vol. I, p. 524), indicates that the tract contained 36 acres and 56 poles (in measurements of area, one pole is equal to 30.25 square yards or one square rod). This drawing is shown in Figure 2. These 1859 court records are significant in that they provide the earliest documented use of the name "Roper's Knob." W. H. S. Hill purchased the land for \$36.30 per acre for a total of \$1,326.77 (Williamson County Chancery Minute Book, Vol. I, p. 524).

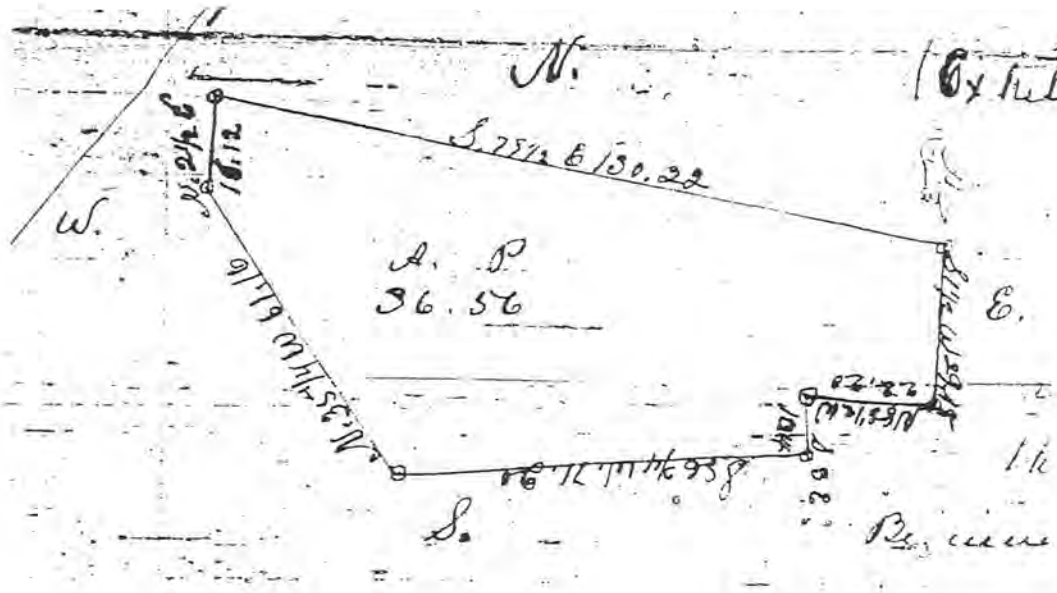


Figure 2. Boundaries of the Roper's Knob tract in 1859 (Williamson County Chancery Court Minute Book, Vol. I, p. 524).

Hill had purchased an adjoining tract of land on the south side of the Roper's Knob tract from Clement W. Nance on September 1, 1859 (Williamson County Deeds, Book Z, p. 58-59). This tract, containing about 140 acres, stretched southward from the Roper's Knob tract to Liberty Pike, and included a small cemetery. The tract that Hill purchased from Nance had originally been part of Captain Anthony Sharp's land grant awarded for Sharp's service during the Revolution. Sharp sold 137 1/2 acres from the northeast corner of his land to James Robertson. The deed filed on October 5, 1810 was intended to replace an earlier deed that had been lost. The original deed was apparently executed in 1808 (or possibly earlier), and the description says that the land was the northeast corner of Sharp's grant (Williamson County Deeds, Book B, pp. 482-483). Robertson did not hold the land for long, selling it to John Goff, Jr. in 1808 (Williamson County Deeds, Book B, p. 147-148). Goff held the tract for one year then sold it to Henry Walker in April 1809 (Williamson County Deeds, Book B, p. 149). Henry Walker died in 1824, leaving his estate to his wife Mary and their twelve children. Mary Walker lived until about 1852 or 1853, and upon her death, her son Henry J. Walker sold the land to C. W. Nance (Williamson County Deeds, Book Z, p. 58-59).

The 1860 Census lists W. H. S. Hill as a farmer who owned \$60,000 worth of real estate and \$30,000 worth of personal property. He was 38 years old at the time of the 1860 Census and lived in the East Subdivision of Williamson County. His household included the Fly family consisting of a 32 year old man named J. W. Fly, 21 year old Misa Fly, probably J. W.'s wife, and three children, Mary, 6, William L., 3, and a five-month old infant boy (Federal Census 1860, Williamson County, East Subdivision, No. 40). Previously Hill had been the Chancery Court Clerk for Williamson County, and was listed as such on the 1850 census. At that time his household included 23- year old Robert F. Hill, who was a lawyer (Federal Census 1850, Williamson County, District 9, No. 157). Hill was also a surveyor and shows up in miscellaneous county records as such (Lynch 1980b:42). Hill owned Roper's Knob throughout the Civil War.

Franklin and Roper's Knob During the Civil War

The American Civil War began on April 12, 1861 with the bombardment of Fort Sumter in Charleston Harbor, South Carolina. Tennessee seceded on May 7, 1861, becoming the last state to leave the union. The Union Army's push into Middle Tennessee began in February 1862 with the capture of Fort Henry on the Tennessee River and Fort Donelson on the Cumberland River near Dover. The Confederate forts succumbed to a combined Federal force of the Army under Ulysses S. Grant and the Navy under Andrew Foote. With these vital river defenses captured, the Confederates were compelled to abandon Nashville. Subsequent to the Union occupation of Nashville, Union troops slowly filtered into Williamson County (Connelly 1979:14-32).

Following the fall of Forts Henry and Donelson, Grant moved his army up the Tennessee River to Pittsburg Landing, Tennessee to confront the Confederate Army gathering at Corinth, Mississippi. Major-General Don Carlos Buell, commander of the troops occupying Nashville, marched to join Grant, leaving Nashville on March 16, 1862. The Union troops passed through Franklin on the way to Columbia then Pittsburg Landing where they arrived in time to reinforce Grant at the Battle of Shiloh on April 6, 1862. Buell left a garrison of 3,000 men under the command of General William Negley at Columbia. Following the defeat of the Confederates at Shiloh and the subsequent campaign to Corinth, Mississippi, General Buell returned to Middle Tennessee with his army and began the task of fortifying his position (Fulcher 1993; Connelly 1979:14-32).

Sallie Florence McEwen, the daughter of John B. and Cynthia Graham McEwen, lived in the vicinity of Roper's Knob during the war. She kept a diary from 1861 to 1862, and on Thursday, May 8, 1862 she wrote that "a good number of soldiers and wagons passed through here today on their way south; they were Yankee wagons" (McEwen 1862). On May 16, 1862 Sallie McEwen recorded in her

diary that "the Yankee picketts [sic] were fired upon last night and there was great excitement here in consequence thereof" (McEwen 1862)

One of the Union Army's primary tasks was to repair and protect the railroads. The Tennessee and Alabama Railroad ran from Nashville through Brentwood, Franklin, Spring Hill, Columbia, and Pulaski before entering Alabama. The railroad lines were vulnerable to attacks by raiding Confederates, and the bridges and trestles were especially at risk. On July 18, 1862, General Buell wrote from his headquarters in Huntsville, Alabama to General Negley at Columbia that he should "lose no time in building stockades at every bridge. A stockade 30 ft. square will hold about 30 men, which will be a sufficient guard for the less important bridges" (War of the Rebellion, Official Records of the Union and Confederate Armies [herein after referred to as OR], Series I, Volume XVI, Part 2, pp. 177-178). Negley informed Buell later that day that bridges between Franklin and Columbia had been attacked on the previous night, so he reinforced the guard at every bridge (OR, Series I, Vol. XVI, Part 2, p. 178).

Negley received a message on July 31 from James B. Fry of Buell's staff stating "Captain Gilbert, of this staff, has inspected and given some directions in reference to the plans of stockades. You are directed to see that the work on the stockades is pushed with all possible dispatch" (OR, Series I, Vol. XVI, Part 2, p. 238). During the Civil War a stockade was a wooden fortification constructed from logs placed upright in a ditch to form a wall, usually in the shape of a square or a cross. Often earth was piled against the wall for extra support and protection, and there was sometimes a ditch or abatis outside the structure for added defense (Scott 1864:573). An abatis is a barricade of felled trees that have had their smaller branches removed and the remaining branches sharpened (Scott 1864:19).

Throughout August of 1862, the Union army made it a priority to build fortifications to protect the railroad, often using slave labor. On August 1, 1862 General Buell wired Colonel C. G. Harker at Stevenson, Alabama asking the Colonel if he had begun work on his defenses and prompting him to "Push the work day and night." Harker responded that he had all of his "spare effective force and about 40 negroes engaged on defenses" (OR, Series I, Vol. XVI, Part 2, pp. 240-241). This sense of urgency was impressed upon Captain James Morton, a Union engineer, when Buell wired "Don't lose an hour in completing the stockades. The work must go on night and day, and if it cannot be done well it must at any rate [be] done quickly" (OR, Series I, Vol. XVI, Part 2, p. 240).

The urgency to fortify was in part due to Governor Andrew Johnson's concern that the Confederates were preparing to launch a campaign to retake Tennessee. Johnson suggested that the enemy might be deterred by strong defenses. Johnson also advised the use of "contrabands" in constructing these defenses (OR, Series I, Vol. XVI, Part 2, pp. 243-244). A contraband was an escaped slave who had fled to the safety of Union lines. Other slaves used for work on fortifications were taken from their owners and returned when the work was finished. Buell directed that

when troops took slaves for this work, they should "leave enough with the owner to do the ordinary and indispensable work about an establishment" (OR, Series I, Vol. XVI, Part 2, p. 287). Major-General George Thomas' headquarters sent a similar directive to General T. J. Wood, Commander of the Sixth Division of the District of the Ohio, telling Wood to send "suitable parties for the impressments of negroes ...for the purpose of working upon the fortifications" but "leaving a sufficient number to do the ordinary business of the farmhouse." This order further stated that each of these slaves should bring a blanket and every squad of six should bring cooking utensils. Care was to be taken that the owners were given receipts so that their slaves could be returned (OR, Series I, Vol. XVI, Part 2, p. 291-292).

Early in August, 1862 two companies of the Seventy-Fourth Ohio Regiment were stationed at the Harpeth River in Franklin to guard the bridges there (OR, Series I, Vol. XVI, Part 2, p. 261).

As work on the fortifications on the railroads continued, there was great apprehension among the Union officers that Confederate General Braxton Bragg, whose army was in Chattanooga, was planning an offensive to retake Tennessee and possibly Kentucky. On August 24, Buell wired Major-General Henry Halleck, General-in-Chief of the United States Army that, "Tennessee and Kentucky are in great peril" (OR, Series I, Vol. XVI, Part 2, p. 406). Buell informed Halleck that Bragg had already crossed the Tennessee River and was heading northward. Buell was trying to pull back his forces and concentrate for an attack on the Confederates. Buell telegraphed General Grant at Corinth, Mississippi, asking for assistance, and he stated that he had pulled his forces so far east that "I have given up girl from Nashville to Decatur" (OR, Series I, Vol. XVI, Part 2, pp. 417-418). The cryptic reference to "girl" apparently refers to the Tennessee-Alabama Railroad (sometimes called the Nashville-Decatur Railroad), and the message implies that Buell no longer found it necessary or possible to protect the line.

Bragg did advance from Chattanooga on August 28, 1862, and he planned to join General Kirby Smith who was in Kentucky. Bragg's army headed up the Sequatchie Valley toward Pikeville and crossed the Cumberland Plateau. During the early stages of this advance, there was wild speculation as to the destination of the Confederate Army. President Abraham Lincoln, having been informed that Bragg might already be in Virginia, telegraphed General Buell asking him how sure Buell was that Bragg was not already in the Shenandoah Valley (OR, Series I, Vol. XVI, Part 2, p. 497). Buell responded to the President saying that Bragg was still in Tennessee and that it might be necessary for Buell to abandon Tennessee (OR, Series I, Vol. XVI, Part 2, p. 500). Bragg pushed northward and found that Buell had by now concentrated his forces around Nashville, so he headed into Kentucky.

As Bragg moved northward, Buell was forced to withdraw most of his troops from Middle Tennessee, and leaving a garrison to hold Nashville, Buell raced northward to protect his supply base at Louisville, Kentucky. The Confederates had hoped that thousands of Kentuckians would join their ranks, but few answered that

call to arms. A lack of cooperation between Bragg and Kirby Smith resulted in a failure to reach Louisville before Buell. On October 8, 1862 Bragg and Buell met at Perryville, Kentucky. After a day of fighting, the two armies suffered about 7,600 combined casualties. The Confederates withdrew that night and began the long retreat back to Tennessee (Connelly 1979:55-57; Foote 1986:735-739).

The opposing armies now took up new defensive positions. Bragg concentrated his army near Murfreesboro, and the Confederates once again controlled Franklin. Buell's inactivity in Middle Tennessee and his slowness to respond to Bragg's invasion had prompted the War Department to replace him despite his success in repelling Bragg from Kentucky. Major-General William Rosecrans, who had been one of Buell's subordinates, was now in command. Rosecrans knew that inactivity would not be tolerated, so he planned a movement against Bragg's position in Murfreesboro (Connelly 1979:57-60).

Prior to this campaign a skirmish ensued at Franklin on December 12, 1862. Brigadier-General David Stanley, commanding the cavalry for the 14th U. S. Army Corps, advanced from Nashville on the 11th, skirmishing briefly south of Brentwood. Moving southward on Wilson Pike, the U.S. forces turned toward Franklin on Liberty Pike, which passes to the south of Roper's Knob in Franklin. Stanley's troops encamped on Widow Water's plantation where sporadic firing occurred throughout the night. The men marched again at four o'clock in the morning and approached Franklin shortly before sunrise. They skirmished with Confederate pickets about two miles outside of Franklin. Colonel Baxter Smith commanded the Confederates numbering about 400 men who were formed along the Harpeth River near a flour mill. Outnumbered, the Confederates were forced to retreat, escaping toward Triune. Stanley intended to burn the mill but couldn't do so without destroying part of the town. Instead he ordered the machinery destroyed (OR, Series I, Vol. XX, Part 1, pp. 76-78).

Stanley's men had captured four wagons full of flour and 10 horses, and had destroyed a wagon-load of whiskey and brandy in addition to destroying the machinery and mill stones at the mill. They then left Franklin and returned to Nashville along the Nashville Pike. Confederate General Patrick Cleburne had been dispatched to Franklin via the road from Triune (what is today Highway 96). The Confederates re-occupied the town, but Brigadier-General John Wharton, commander of a brigade of cavalry in Polk's Corps of the Confederate Army of Tennessee, stated in his report that with the mill destroyed, there was no good reason to keep troops in Franklin. From his headquarters in Nolensville, he requested that his men be withdrawn to protect his exposed left flank (OR, Series I, Vol. XX, Part 1, pp. 76-78).

Within two weeks of the skirmish at Franklin, the Union Army was on the move. Leaving Nashville on December 26, 1862, the three corps concentrated in front of Murfreesboro. The two armies fought from December 31 to January 2, and

though the Battle of Stone's River was ultimately a stalemate, Bragg withdrew to establish a defensive line along the Duck River (Connelly 1979:61-65).

Shortly after the Confederate withdrawal the Union army took possession of Franklin. Brigadier General Charles Gilbert arrived in town on February 12, 1863. Confederate cavalry kept watch on Gilbert's force while staying a short distance away (OR, Series I, Vol. XXIII, Part 1, p. 63). Union Brigadier General Jefferson C. Davis had also entered the town by early February 1863 (OR, Series I, Vol. XXIII, Part 1, p. 28).

On March 5, 1863 there was a skirmish south of Franklin near Thompson's Station. General Gilbert sent a Union infantry brigade with cavalry and a battery southward from Franklin to reconnoiter along the road to Columbia. Colonel John Coburn commanded the advance and skirmished briefly with the Confederates on the afternoon of March 4th. The next day, Coburn advanced to Thompson's Station where the Confederates, commanded by General Earl Van Dorn, were waiting in force. Confederate artillery raked the Union troops, and Coburn ordered a charge on one of the batteries, hoping to capture it and turn the Confederate flank. The force facing him was stronger than he had supposed, and the Confederate infantry routed the Federals, capturing a large portion of the command, including Colonel Coburn. Union casualties totaled 1,446, most of which were captured, while Van Dorn suffered a total of 357 casualties (OR, Series I, Vol. XXIII, Part 1, pp. 73-118; Wills 1992:104-105).

Following the disaster at Thompson's Station, Union forces at Franklin feared an attack on their position. They had begun work on fortifications for defense of the town, but the work was far from finished. Nathan Bedford Forrest, who had played an integral part in the Confederate victory at Thompson's Station, wanted to follow up that win with a raid against demoralized Union troops. His target was the garrison at Brentwood.

On the morning of March 25, 1863, the Confederates made a diversionary attack south of Franklin while the main force under Forrest attacked Brentwood. There were two Union garrisons in the vicinity of Brentwood, one was in the town itself, and the other was in a stockade on the little Harpeth River south of Brentwood. The garrison in town, though protected by a stockade, was forced to surrender when Forrest placed artillery so as to command the fortification. Lieutenant-Colonel Edward Bloodgood commanded the 22nd Wisconsin infantry that garrisoned the stockade at Brentwood. Forrest then moved his troops to the stockade on the Little Harpeth River. This fortification was guarded by the remains of the 19th Michigan Infantry which had lost 457 men at Thompson's Station and whose commander, Captain Bassett, had been accused of cowardice at that battle. Forrest demanded the immediate surrender of the garrison. An artillery shell fired at the stockade caused Bassett to surrender. Forrest's men then took all the supplies that they could carry and quickly marched the prisoners away. In all Forrest wounded and captured 751 Union officers and men. The raid was over before General Gordon

Granger, commanding at Franklin, realized that Brentwood was the intended target (Fulcher 1993:63-77; OR, Series I, Vol. XXIII, Part 1, pp. 177-193).

Even before the actions at Thompson's Station and Brentwood, the Union forces were fortifying their positions at Franklin, Triune, and Murfreesboro. Captain William Merrill, Chief Engineer for what was now called the Army of the Cumberland, designed the defenses of Franklin, and the Pioneer Corps was largely responsible for their construction. The main fortification was Fort Granger, built on a bluff over the Harpeth River overlooking the town (Dilliplane 1974:1-43 and 1975:10-21). Merrill established a fortified signal station on Roper's Knob and several detached artillery positions between the knob and Fort Granger. Merrill reported in May 1863 that Roper's Knob included a redoubt designed to hold four heavy pieces of artillery, a blockhouse for 60 men, a signal station, two cisterns, and a magazine. A detailed description of the fortifications and their construction is given in the following section.

Other Skirmishes occurred in the vicinity of Franklin during the first half of 1863, as the Union forces reconnoitered southward toward the Confederate position. Brigadier General G. Clay Smith reported that his reconnaissance force skirmished with Van Dorn's Confederates near Thompson's Station on March 9, shortly after the large Union defeat there but before Forrest's Brentwood raid (OR, Series I, Vol. XXIII, Part 1, pp. 142-144). Thomas Jordan, Colonel of the 9th Pennsylvania Cavalry reported that detachments of his regiment along with the 2nd Michigan, and the 4th and 7th Kentucky Cavalry fought briefly near Spring Hill (OR, Series I, Vol. XXIII, Part 1, pp. 150-151).

The Confederates also made forays against the Union position. In April 1863, General Van Dorn, believing that the Federals had withdrawn from Franklin, made a reconnaissance in force against the town. On April 10, the Southerners approached the south side of the town on several roads, and they soon encountered the Union pickets. As the resistance became stiffer, Van Dorn realized that the Union Army still occupied Franklin in force, so he ordered a withdrawal. Casualties on both sides were relatively light. Major General Gordon Granger reported that during the skirmish his force consisted of 7,922 men and 20 pieces of artillery, two of which were siege guns, and Van Dorn had between 15,000 and 18,000 men (OR, Series I, Vol. XXIII, Part 1, pp. 222-227; Wills 1992:107-109).

Another Confederate reconnaissance in force resulted in skirmishing at Franklin on June 4, 1863. General Nathan Bedford Forrest, now commanding the Confederates in the area since the death of Earl Van Dorn, ordered the move against Franklin when he thought the Federals were moving out of the town. Colonel John Baird commanded the Union troops in Franklin at that time, as General Granger had moved his headquarters to Triune. Long range shelling from the Federal siege guns helped keep the Confederates at bay, and Forrest soon withdrew his force (OR, Series I, Vol. XXIII, Part 1, pp. 177-193).

Colonel John Baird wrote to General James Garfield, Rosecrans' Chief of Staff, on June 6, 1863 with some complaints. Baird had asked to be temporarily relieved because of poor health, but he said that even though Colonel Van Derveer assumed command, Baird still did all the work. He further complained that General Granger had ordered a change in the disposition of Baird's troops at Franklin, even though he had earlier approved of the arrangements Baird had made. Specifically, Granger ordered that the 78th Illinois Volunteer Infantry be placed in Fort Granger while 150 men from the "remainder of the command" be placed on Roper's Knob. Baird had placed the entire 78th Illinois, then consisting of 332 men fit for duty, on Roper's Knob, and he refused to re-deploy the troops (OR, Series I, Vol. XXIII, Part 2, pp. 388-389).

The following day Baird backtracked and informed General Garfield that he never intended disrespect or disobedience. His intended message had been that he could not make the changes in his disposition because he felt that an attack was imminent. Baird said that he was in the process of carrying out the order when he realized from Garfield's dispatch that Baird's earlier message had been misunderstood (OR, Series I, Vol. XXIII, Part 2, p. 391).

Near the end of June, the front shifted southward as Rosecrans mounted an offensive against Bragg. On the morning of June 24, 1863, the Union army moved forward to flank the Confederates out of their entrenchments at Wartrace, Shelbyville, and Tullahoma. General Gordon Granger's Corps moved southward from Triune toward Shelbyville as part of a feint, while the main body of the army moved east of the Confederate position to threaten the rear. The Confederates withdrew with minor fighting, eventually retreating to Chattanooga by July 6. By August Rosecrans was moving against Chattanooga and General Ambrose Burnside was invading East Tennessee from Kentucky. Franklin and Middle Tennessee were now relatively secure with the exception of small Confederate raiding parties and some local guerrillas (Connelly 1979:61-73).

As the Union army advanced southward, General Gordon Granger took on the new assignment of commander of a reserve corps and all the military posts in the Department of the Cumberland north of the Duck River (OR, Series I, Vol. XXIII, Part 2, p. 480). He was also to assist with the supplying of Rosecrans army and repair the railroads. On July 1, 1863 General Garfield, Rosecrans Chief of Staff, directed Granger to have Colonel Baird, who was still stationed at Franklin, and commanders of all other outposts throw up light defensive works (OR, Series I, Vol. XXIII, Part 2, p. 495-496). The garrisons under Granger's command were reduced to the minimum number of troops necessary for defense, but on July 7, Rosecrans ordered Granger to send cavalry from Nashville to Franklin (OR, Series I, Vol. XXIII, Part 2, p. 519). In an August 27, 1863 communication to General Rosecrans detailing the disposition of troops, Granger reported that there was one regiment of infantry stationed at Franklin (OR, Series I, Vol. XXX, Part 3, p. 192).

Granger, now directing his command from Nashville, seemed particularly concerned about guerillas. On September 1, 1863 He informed General Garfield that he had ordered Colonel Henry Mizner's 14th Michigan Infantry regiment to clear out guerillas in the vicinity of Franklin. Two companies of the 14th Michigan Infantry were stationed in Franklin where Lieutenant Colonel George Grummond commanded the post. The other eight companies were stationed in Columbia where Colonel Mizner kept his headquarters. Granger stated in a report on the disposition of his troops that he would need 200 artillerists if the guns at the fortifications were to be manned. It is not clear if he was talking about only the fortifications at Franklin and Columbia or those in his entire department (OR, Series I, Vol. XXXI, Part 1, pp. 754-755; OR, Series I, Vol. XXX, Part 2, p. 712). The two companies of the 14th Michigan stationed at Franklin were quartered in Fort Granger, which had huts inside the fort (OR, Series I, Vol. XXXII, Part 2, p. 91).

Early in 1864, the 14th Michigan Infantry went home on furlough. Their enlistment period was now over, so they went home to recruit and re-enlist. They were listed on an April return of troops as being on veteran furlough. On April 12, 1864, Lieutenant James R. Willett, Inspector of Fortifications for the District of Nashville, reported on his visit to Franklin. He stated that Fort Granger was dilapidated and had damp magazines. Willett also said the blockhouses along the railroad from Columbia to Nashville were unfinished (OR, Series I, Vol. XXXII, Part 3, pp. 331-332).

Major General R. H. Milroy reported from Franklin on September 5, 1864 that he had just arrived in town having pursued a Confederate force from Murfreesboro through Triune where the Confederates had headed south. Milroy was in Franklin to get supplies before continuing the pursuit (OR, Series I, Vol. XXXVIII, Part 5, p. 804). Later that month Lieutenant Colonel Josiah Park of the 4th Michigan Cavalry reported from Franklin as commander of the post (OR, Series I, Vol. XXXIX, Part 2, p. 496). He stated that Confederate forces had been reported in the area and he was preparing a defense. He asked if it was intended to use artillery in the fort at Franklin. Another of Park's communications was forwarded on October 1, 1864 to Major General Rousseau in which Park said that he could not get artillery on Roper's Knob without machinery and asked if he should do it (OR, Series I, Vol. XXXIX, Part 2, p. 21). Park's concerns for the defense of Franklin were caused by a raid by Nathan Bedford Forrest. Forrest was again raiding the railroad lines and had attacked Pulaski on September 27 and Spring Hill on October 1. From there he moved southward destroying the railroad and capturing blockhouses (Wills 1992:256-258). Colonel William B. Sipes reported to General Thomas on October 6, 1864 that the 1st, 3rd, and 4th Ohio Cavalry were stationed at Franklin, with some of the men mounted and some in the blockhouses (OR, Series I, Vol. XXXIX, Part 2, p. 172).

Military action returned to Franklin with a vengeance at the end of November 1864. Confederate General John Bell Hood had earlier abandoned Atlanta to General William T. Sherman. Hood and Sherman maneuvered as Hood attempted

to strike at the Union supply line. Finally Sherman sent George Thomas with a sufficient force to contain Hood while Sherman began his campaign through Georgia. Hood, with a wild and desperate plan to reclaim Tennessee for the Confederacy, marched northward. He planned to get between a Federal army at Pulaski, commanded by General John Schofield, and Thomas' force in Nashville, then destroy each separately. Then he would march into Kentucky and possibly turn to attack Grant in Virginia (Connelly 1979:87-88).

Schofield withdrew to Columbia where on November 29, 1864 Hood put his plan into action. He sent Stephen D. Lee's Corps to demonstrate against Columbia while Benjamin Franklin Cheatham's Corps and Alexander P. Stewart's Corps marched around Columbia toward Spring Hill. Schofield sent his forces northward to secure Spring Hill and the two armies fought there on November 29. Confusion in the Confederate ranks left the road to Franklin open that night, and the Federal army withdrew silently and headed to Franklin. The Union troops streamed into town all day and Schofield ordered entrenchments to be dug to defend against attack. He did not plan to hold the town, and he was going to withdraw after the bridges on the Harpeth River had been repaired, these having been burned (Sword 1992:82-184).

Hood, angry that his best opportunity to destroy Schofield's army had been lost, hurried his force to Franklin and ordered them into line of battle for a direct assault on the Union works. Despite the objections of his subordinates and the lack of artillery, which was still with Lee coming from Columbia, Hood sent his army into a headlong frontal assault against a heavily entrenched enemy. The first few minutes of the battle turned into a desperate struggle as Confederate attackers followed Union troops, who had been out in advance of the main line, across the main works. When it seemed that the Union line might break, a Union counterattack at the Carter House on Columbia pike drove the attackers back and stabilized the line.

Large artillery fired from Fort Granger, but it is unlikely that Roper's Knob was garrisoned at the time. The battle continued for five hours with repeated Confederate charges being bloodily repulsed. When elements of Lee's Corps arrived that night, they were sent into the battle in a silent charge, but they met the same fate as those who preceded them. The fighting died down late in the evening, and the Union army abandoned the town, withdrawing to Nashville. Every available building in Franklin became a hospital for the thousands of wounded. The Confederates had suffered an estimated 6,200 casualties including five generals killed, seven wounded, and one captured. The Federals had about 1,900 casualties (Sword 1992:185-271).

Hood eventually moved on to Nashville where, on December 16 and 17, General George Thomas virtually destroyed what was left of the Confederate Army of Tennessee. The southern forces retreated through Franklin where some minor skirmishing occurred on the north side of the Harpeth River (Connelly 1979:93-96).

Immediately following the Battle of Nashville and the subsequent Confederate retreat, Lieutenant Colonel Alvin V. Matzdorff, commanding the 75th Pennsylvania Veteran Volunteers was ordered to his "old post" at Franklin. He reported on December 19, 1864 that he was in Franklin and was garrisoning the blockhouses in the area (OR, Series I, Vol. XLV, Part 2, pp. 262, 279). He apparently had been the garrison commander before the Battle of Franklin. Matzdorff's troops were now primarily engaged in rounding up guerilla fighters in the area. On January 16, 1865 men of the 75th Pennsylvania attempted to capture John Burke who Matzdorff described as a "notorious bushwhacker." Burke was wounded, but he escaped. On the 29th Lieutenant Briggs and 20 mounted men of the 75th killed Bob Riggs, the leader of a local guerilla band (OR, Series I, Vol. XLIX, Part 1, p. 7).

In response to Lieutenant Colonel Matzdorff's statement that he did not have an adequate force for dealing with all the partisans in the area, Brigadier General R. W. Johnson increased the mounted force at Franklin by 100 men (OR, Series I, Vol. XLIX, Part 2, p. 8). Matzdorff again reported on his troops' activities on February 20, 1865. He had sent 50 men to chase a gang that had attacked a train on the Tennessee-Alabama Railroad, and his men "succeeded in killing two most notorious desperadoes named Nathan Eazell and ____ Lyons" (OR, Series I, Vol. XLIX, Part 2, p. 8).

On March 17, 1865 the 75th Pennsylvania Veteran Volunteers were ordered to Murfreesboro, and the 61st Illinois Volunteer Infantry took position at Franklin (OR, Series I, Vol. XLIX, Part 2, p. 12). On May 15, 1865 Major J. B. Nulton, commander of the 61st, left Franklin with an escort of the 16th Illinois Cavalry to receive the surrender of four guerilla leaders. They claimed to be part of the Confederate Army and said that they had orders from General Forrest to raise a battalion for his command (OR, Series I, Vol. XLIX, Part 2, p. 832). This followed the surrender of Robert E. Lee to Ulysses S. Grant at Appomattox Court House on April 9, 1865.

Historical Information Concerning the Fortifications on Roper's Knob

Three days after General Gilbert's arrival in Franklin on February 12, 1863, General Rosecrans ordered Gilbert's superior, General Absalom Baird, to instruct Gilbert to "intrench [sic] himself strongly" (OR, Series I, Vol. XXIII, Part 2, p. 71). It is not clear what steps Gilbert took to follow this order. Captain William Merrill, Chief Engineer for the Department of the Cumberland, arrived in Franklin on March 7, 1863 to supervise the construction of the fortifications in Franklin, and General Gordon Granger reported to headquarters that the fortifications would be completed in about one week (OR, Series I, Vol. XXIII, Part 2, p. 113). Granger's prediction would turn out to be overly optimistic. On March 9 General James Garfield, Chief of Staff for General Rosecrans, prodded Granger to "push forward the fortifications" (OR, Series I, Vol. XXIII, Part 2, p. 123). Rosecrans reported to General-in-Chief

Henry Halleck on March 20 that Granger was still strongly entrenching (OR, Series I, Vol. XXIII, Part 2, p. 154).

Fear of an attack by Van Dorn's Confederate force prompted General Rosecrans to give Granger instructions on the defense of his position. Rosecrans instructed Granger on April 7 that should he want to move against the Confederates, he could leave his spare baggage in the fort under a small guard (OR, Series I, Vol. XXIII, Part 2, p. 219). This seems to indicate that at least Fort Granger was making progress, but it is clear from later correspondence that it was not completed. Granger told Rosecrans on April 19, 1863 that "when our forts are done and the guns in position, 2,000 men can hold them against five times their numbers" (OR, Series I, Vol. XXIII, Part 2, p. 254). He added in this same report that "the fortifications will be hurried to the utmost."

The best description of the fortifications of Franklin comes from a May 29, 1863 report by Captain William Merrill. In this report Merrill begins by stating that the Army of Kentucky (this would soon be incorporated into what would be called the Army of the Cumberland) was encamped on the north side of the Harpeth River at Franklin, and that he had been ordered to design fortifications that a small garrison could defend. The main work in the defenses was Fort Granger [recorded in the statewide archaeological site files maintained by the Tennessee Division of Archaeology as 40WM100 (see also Dilliplane 1974 and 1975)], built on a bluff on the Harpeth River where it could overlook the town of Franklin. Fort Granger also had supporting works such as entrenchments to facilitate defense of the nearby railroad bridge (Merrill 1863).

North of Fort Granger the Union Army built fortifications on Roper's Knob. Merrill stated in his report that:

Roper's Knob, which has the remarkable cross section shown in the sketch [Figure 3], has a rifle pit just above the terrace which surrounds it – a redoubt for 4 heavy guns – and a blockhouse for 60 men inside the redoubt. On the crest of the terrace surrounding the crown of the hill is a strong line of abattis. It has likewise two cisterns capable of holding 4500 gallons of water, and a goodsize magazine. 50 men could hold it against 5000. It is the signal station, being visible in all directions from the range of hills surrounding the large valley in which Franklin lies. It sees all the country within a radius of six miles. It is about 250 ft. above the level of the plain, with steep sides and with no hill higher than 30 ft. above the plain, in its vicinity – excepting the one next, which is in easy musketry range and is lower and inaccessible to artillery (Merrill 1863).



Figure 3. Sketch of Roper's Knob by William Merrill (1863).

There were also four detached artillery positions consisting of irregularly shaped earthworks. Three of these positions are recorded in the statewide archaeological site files under site numbers 40WM102, 40WM103, and 40WM104. The fourth site, closest to Roper's Knob, has been destroyed. These defenses are shown in a map compiled by Major James Willett following the 1864 Battle of Franklin and published in 1874 (Willett 1874). A portion of this map is shown in Figure 4 with Roper's Knob enlarged in the inset.

Merrill's 1863 report implies that the works were complete. He stated at the end of his report that during his stay in Franklin there were about 5,000 infantry stationed there working on the fortifications. They worked in two eight-hour shifts per day, with 600 men working at a time. The 4th Battalion of the Pioneer Brigade, a battalion that Merrill had raised himself, supervised the work. The Pioneer Brigade specialized in the planning and construction of fortifications. The 4th Battalion had 11 detachments and a total of 220 men (Merrill 1863).

As discussed in the previous subsection, Colonel John Baird had placed the 78th Illinois Volunteer Infantry, with 332 men fit for duty, on Roper's Knob sometime before June 6, 1863. He had a minor confrontation with General Gordon Granger over troop deployment, and some of these men were apparently moved to Fort Granger. The exact number is not clear, but one comment suggests perhaps 150 men were left on Roper's Knob (OR, Series I, Vol. XXIII, Part 2, pp. 388-389, 391).

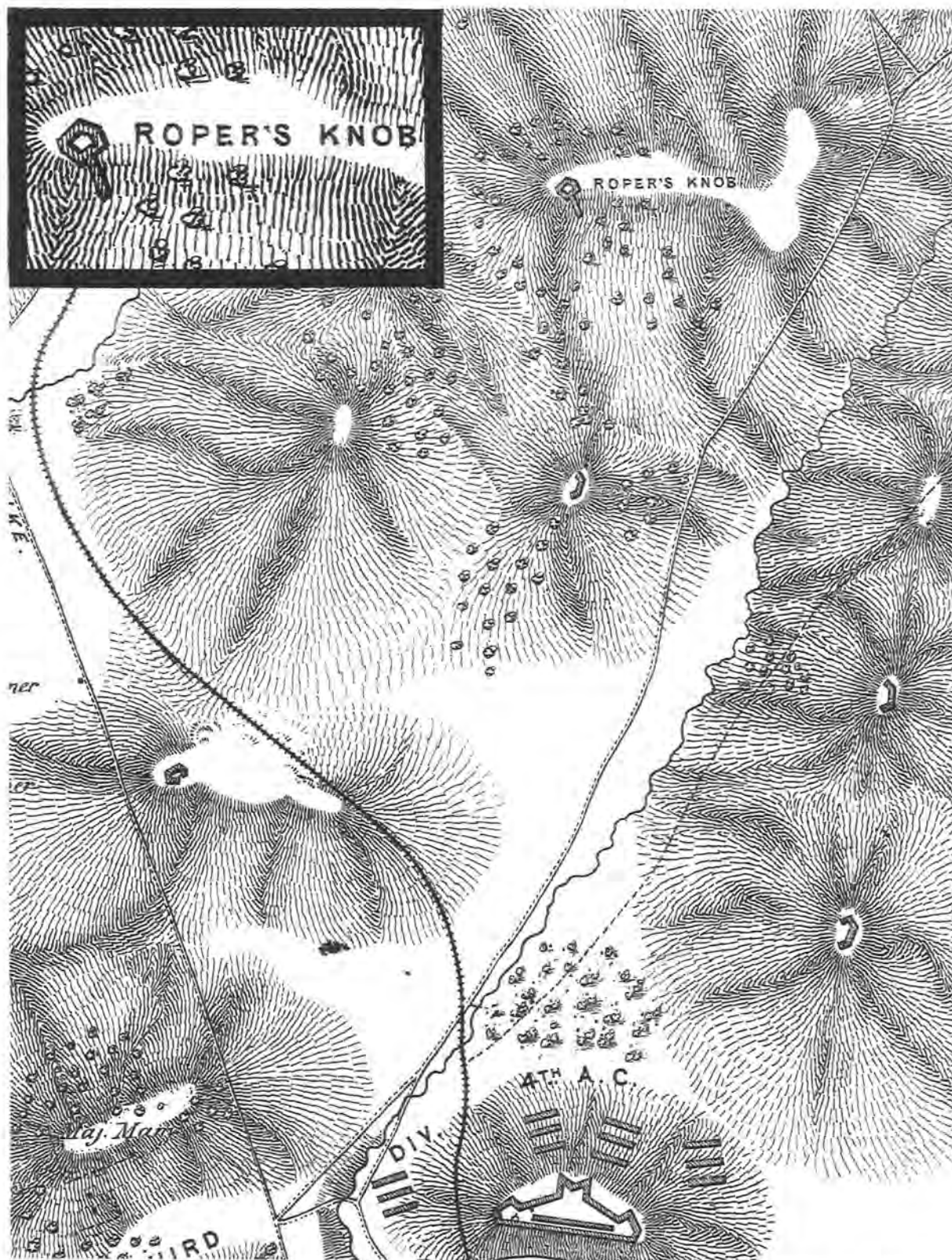


Figure 4. Portion of Major James Willet's map showing the defenses of Franklin. Roper's Knob is located near the top of the map and is shown enlarged in the inset.

Also mentioned in the previous subsection is the October 1864 communication of Lieutenant Colonel Josiah Park of the 4th Michigan Cavalry asking if it was intended to use artillery on Roper's Knob. He stated that he could not get the artillery on the knob without machinery and asked if he should do it (OR, Series I, Vol. XXXIX, Part 2, p. 21). It is not clear from written documentation if artillery was ever placed on Roper's Knob. It seems likely that since the redoubt on Roper's Knob was designed to hold four heavy pieces of artillery and the situation at Franklin in 1863 was somewhat uncertain, there would have been artillery placed there for added defense. It is clear that there was no artillery there in October 1864, and it would seem likely that it was removed during the second half of 1863 when the front lines shifted southward. One piece of archaeological evidence recovered seems to indicate the presence of artillery on Roper's Knob at some point. This is part of a friction primer (discussed in more detail in the section dealing with artifacts).

The artillery would have been inside the redoubt, an enclosed earthen fortification. Redoubts were expected to have formal shapes such as a square, circle, or other polygon, but those built on hills often conformed to the topography of the hill on which they were constructed. This is not the case with the Roper's Knob redoubt, which appears to be a rectangle with the corners removed. H. L. Scott (1864:498-499) states that when artillery is placed in a redoubt, each gun will require 324 square ft. The remaining area in square ft. divided by 10 gives the number of men that a redoubt can hold. It is possible that heavy artillery, such as that for which Roper's Knob was designed, would require greater space, and this redoubt contained a blockhouse in its interior thus affecting the minimum number of men required for its defense.

The blockhouse was a key defensive element that developed during the Civil War (Smith and Nance 2003:144-158). Earlier types of blockhouses, beginning in the previous century, were extensively used for protection against hostile Indian tribes. These were wooden structures that often had overhanging second stories, sometimes used in conjunction with a palisade enclosing a surrounding area. Colonel H. L. Scott's *Military Dictionary* (1864:88) refers to a blockhouse as a "redoubt of wood" and states that it was "a common defense against Indians-at two diagonal angles of a picket work."

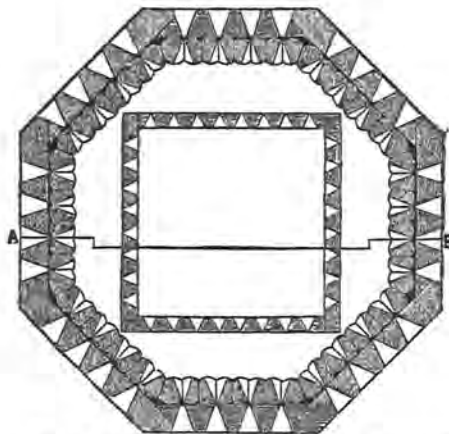
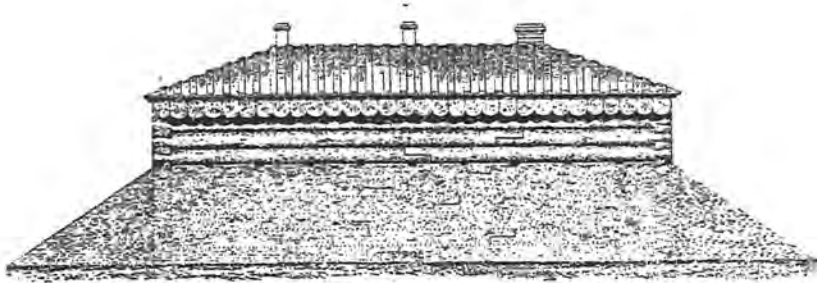
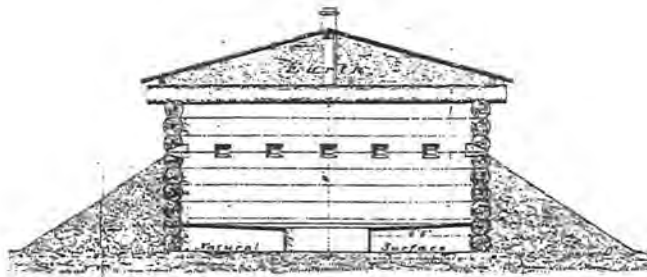
The development of the blockhouse during the Civil War was influenced by the necessity of protecting the railroad lines that provided crucial supplies to the armies. William Merrill, the engineer most responsible for the wartime evolution of the blockhouse, stated that during the period from January to June 1863 while the Union Army was encamped at Murfreesboro, Triune, and Franklin, seven bridges on the Nashville-Chattanooga line between Nashville and Murfreesboro were protected by stockades in the shape of a Greek cross, that is one in which the four arms of the cross are of equal length. These were enclosed structures constructed of heavy vertical timbers with no roof (Merrill 1875:439).

As the Army of the Cumberland moved southward, many more miles on railroad needed to be defended including the Nashville-Chattanooga, Tennessee-Alabama (also called the Nashville-Decatur), Memphis-Charleston, Nashville-Northwestern, and portions of other lines. The job fell to William Merrill to design defenses for these, as he had already done in Kentucky in 1862. Merrill stated that railroad bridges "as a rule were located at points where the land rose gradually on both sides for long distances." This made it difficult to place a defense close enough to a bridge without exposing its defenders to fire from higher ground. General Buell had constructed stockades for the defense of the Tennessee-Alabama line that ran through Franklin, and these were effective against infantry. However, artillery fire plunging into these open structures turned them into "slaughter pens" (Merrill 1875:441-443).

Merrill decided that an enclosed blockhouse was the best kind of fortification for defending the railroads as they would be effective against the type of artillery that cavalry might have with them during raids against the lines. He also experimented with an old stockade at LaVergne, Tennessee, blasting it with artillery, and found that it was necessary to increase the thickness of the walls. He ordered that new blockhouses be built double cased, that is with two layers of timbers, making the walls about 40 inches thick. The roof of a blockhouse was made of heavy logs with earth piled on for extra defense. It was then covered with a layer of shingles when the engineers could get them or board and batten. Often earth was also piled up against the sides of the blockhouse to further absorb the shock of artillery fire. The blockhouses had ventilators, stoves, water tanks, and bunks so that the garrison could live inside (Merrill 1875:439).

Early on Merrill had decided that the best plan for a blockhouse was octagonal, but these were more expensive to build, needing greater expertise to cut the many mortises and tenons required at the corners. His sketch of such a plan is shown in Figure 5 (other examples in Smith and Nance 2003:149-157). Square or rectangular blockhouses were easier to build but they left dead spaces at the corners that could not be effectively covered by musketry from within. Merrill advised that simplified octagons could be built using spikes to join the corners instead of complicated joinery. Along the Tennessee-Alabama Railroad stretching from Nashville to Decatur, Alabama then on to Stevenson, Alabama, a distance of 200 miles, there were 54 blockhouses, most of which were double-cased. Nathan Bedford Forrest captured and burned 11 of these in October 1864, and during Hood's Middle Tennessee campaign, all but three of the remaining blockhouses on the line were burned. By the end of the war, the Union Army had rebuilt most of these blockhouses using an octagonal plan (Merrill 1875:444-446, 452-453).

The Roper's Knob blockhouse, which Merrill designed, was built between February and May 1863. Unlike most blockhouses that would be constructed in the Middle Tennessee area, the blockhouse on Roper's Knob was not designed as a



PLAN OF OCTAGONAL BLOCK-HOUSE WITH TOWER.

Figure 5. Blockhouse plans by William Merrill.

railroad defense. No documentary evidence was found describing the size and shape of the blockhouse, though Merrill said in his May 1863 report that it was designed to hold 60 men (Merrill 1863). Archaeological excavation, detailed in a later section of this report, revealed that the Roper's Knob blockhouse was in the form of a square 43 ft. across with the corners cut off. This made the blockhouse eight sided but not a true octagon. Park Marshall, who was born in 1855, wrote, "A fort was built on [Roper's Knob] and was roofed over" (Marshall 1970). Marshall may have been remembering the blockhouse.

Signal Stations During the Civil War

One of the important functions of Roper's Knob was its use as a signal station. Captain William Merrill emphasized this use in his May 1863 report on the defenses of Franklin (Merrill 1863). Merrill stated that everything within six miles could be seen from Roper's Knob.

Major Albert J. Myer, who organized the United States Signal Corps, developed a system of signaling using a single flag during the day and a torch at night. This became known as the "wigwag" system. Myer's college thesis had involved developing a sign language for the deaf, and in the 1850s he became interested in signals for army and navy use. Signals had been used for a long time, but Myer wanted to simplify the system. While serving as an assistant surgeon in the U. S. Army in New Mexico Territory, Lieutenant Myer developed his system of signaling with flags. The idea for his system came from his observance of Comanches signaling each other by waving lances (Brown 1896:19-20).

In 1858 the army conducted tests of Myer's signaling system and found that it worked well. Myer was appointed to the newly created position of Signal Officer in 1860 and promoted to the rank of Major. While stationed at Fort Fauntleroy, New Mexico, Myer trained other officers to use the signaling system, and in November 1860 through January 1861, the system was put into use during a series of campaigns against the Navajo. At the outbreak of the Civil War in April 1861, Myer reported for duty in Washington, D. C. to form a camp of instruction to train signal corps personnel (Brown 1896:24-39).

The Signal Corps in both the Union and Confederate armies grew rapidly throughout the war, with both using flags and field telegraphs. Myer believed that telegraphs and signal flags complemented each other since each was subject to its own interference. Balloons were even incorporated into the system for the first aerial observation. Eventually messages became encrypted to prevent the opposing army from reading the signals.

Though the Signal Corps had existed since the beginning of the war, it was not a formally established entity until 1863. At this time Myer was promoted to Colonel, and signal instruction was introduced at West Point Military Academy and

the Naval Academy at Annapolis. The operation of telegraphs was taken away from the Signal Corps, which became responsible only for the wigwag system (OR Supplement, Part I, Volume 10, p. 289-291).

The Union Army established a signal camp of instruction at Nashville shortly after seizing the city in February 1862. Lieutenant Jesse Merrill took command of the camp on March 17, and the camp operated until May 16, 1863. Upon its disbandment the officers remaining in camp were sent to field assignments. One of the first uses of the Signal Corps in combat in Tennessee was during the Battle of Shiloh in April 1862 (Brown 1896:459-460).

Several signal stations were operating in the Middle Tennessee area by the spring of 1863 including a line of stations between Franklin and Murfreesboro. Confederate Captain Edward B. Sayers, Chief Engineer for General Leonidas Polk's Corps of the Army of Tennessee, drew a sketch map of the signal stations dated May 6th, 1863². The map shows five signal stations between Franklin and Murfreesboro, and the distances between them. It seems likely that there would have been an additional station between Independent Hill, the station farthest to the east on Sayers' map, and Murfreesboro, a distance of about 13 miles. The other stations in this chain are no more than five miles apart, and Albert Myers stated that signals could be read at a distance of almost eight miles under normal condition, though it was possible to read signals from 15 miles under very clear conditions (Brown 1896:93).

Telegraphs kept the commanders of various posts in communication, but the telegraph wires were vulnerable to the enemy, and civilian telegraph operators were not always reliable. The signal flags provided an additional method of communication. During one of the attacks on Union forces at Franklin (probably either Van Dorn's attack on April 10, 1863 or Forrest's June 4, 1863 attack), the telegraph wires between Franklin and Murfreesboro had been cut, but the Union commanders were able to use signal flags to communicate throughout the attack (OR Supplement, Part I, Volume 10, p. 541).

Following Rosecrans successful campaign, begun in June 1863, to drive the Confederates from their Duck River defenses, the war's emphasis shifted southward. As garrisons in Franklin, Triune, Murfreesboro, and other places were reduced to the minimum number of defenders necessary to hold these points, the Signal Corps was moved southward to the front lines. During activity around Chattanooga in late 1863, the Union army established signal stations in the area including a long communication line up the Sequatchie Valley. The Signal Corps participated in General William T. Sherman's campaign to Atlanta. During General Hood's campaign into Tennessee and the subsequent battles at Franklin and

² Sayer's map was located in the McGaw Collection of Vanderbilt University's special collections. During a survey of Civil War military sites in Middle Tennessee begun in 1988, Tennessee Division of Archaeology staff members viewed the map and made a sketch of it, but did not obtain a photographic copy. The original map was missing from the collection by 2000.

Nashville, the Signal Corps was in Chattanooga, cut off from the main army, so it did not participate (OR Supplement, Part I, Volume 10, p. 541-542; Brown 1896:497).

Signal stations took many forms, and it is not known what the station on Roper's Knob looked like. In many situations, especially in combat, signalmen found a high vantage point from which to relay signals, but there was no structure used. Many permanent stations used platforms built in tall trees. Other stations were built onto existing structures. One possible clue to the Roper's Knob station comes from Park Marshall's history of Franklin. Marshall wrote that a pear tree had been left standing half way up the upper knob of Roper's Knob while all the other trees on the hill had been removed. This tree had a limb that extended over the tramway used to haul artillery to the top of the knob. Remembering that Marshall observed the events in Franklin as a young boy and penned his history late in life, it is possible that the lone tree that he observed was actually one left to serve as a signal station. Marshall also mentioned in his writings that in Fort Granger "the trunks of two trees, used as 'spy trees,' were left standing within the fort" (Marshall 1970).

Signaling using the so-called "wigwag" system involved using flags during the day and torches at night. Signal officers carried a kit with all the necessary equipment for sending signals. This kit included the signal staff that was actually four sections of hickory staff with brass ferules by which the sections could be attached. When using flags the fourth section of the staff held the flag, and when using torches the torch was attached to the third section. The third section of the staff had a six-inch section of brass to guard the staff against the flame from the torch. Seven flags of varying sizes and colors were included in the kit. The different colors were used for varying weather conditions and backgrounds so that the flags would be easier to see, and smaller flags were supposed to be used during combat so that the signalmen would be less conspicuous targets.

The signal kit contained two torches for night signaling, and these were a "flying torch" and a "foot torch." Each was 18 inches long with the flying torch being 1½ inches in diameter and the foot torch two inches in diameter. Each had a screw cap at one end through which the torch was filled with fuel, usually turpentine, and the torch had a cotton wick inserted on the other end. The kit contained a funnel for filling the torches, wick trimmers, pliers, a wind shade for use in high winds, and a worm for extracting the wick if it was stuck. Finally the signal kit was equipped with wind matches that burned in wind or rain, and some quick-match (a cotton wick impregnated with a flammable substance) and slow-match (a match made to burn slowly and evenly) (Brown 1896:115-118; Gove 1986:1865,2147).

Signal officers also carried equipment used to encrypt messages to prevent an enemy from reading them. Various devices used included cipher disks consisting of two or four concentric rings on which were printed letters and their corresponding signal codes. By turning the rings different letters could be represented by different codes. Other systems included a series of long narrow tablets on which different codes were printed and codes that were printed on a single card that could be easily

destroyed to prevent their capture. Other important equipment was a 30X power telescope and field binoculars.

The procedure for signaling was to hold the flag or torch upright then move it from side to side (or to the front), with the motions corresponding to specific numbers. The two-element code used the numbers "1" and "2" with the number "3" being used as a special symbol signifying messages such as the end of a word, sentence, or message. In a four-element code the numbers "1" through "4" were used while "5" was a special symbol. Combinations of numbers corresponded to letters or special messages. Abbreviations were widely used for expediency (Brown 1896:118-120).

Post-War History of Roper's Knob

W. H. S. Hill owned Roper's Knob through the Civil War and held it until 1875 when he sold it to A. W. Moss. Hill traded the 180-acre tract, which he had obtained as two separate tracts, for a house and lot at the corner of Church Street and College (or Indigo) in downtown Franklin (Williamson County Deeds, Book 5, p. 327). The deed describes the two tracts as the "Roper's Knob or Perkins Tract" and the "Walker Place." Hill states in this deed that "having dedicated said public road as a perpetual easement in the deeds to the lots on the south side, I hereby release the full width of said road across the entire tract for perpetual use as a public road. I also release the old [illegible] by Grave Yard as enclosed in a stone wall quantity not known." The property boundary also included a stone fence belonging to John B. McEwen, owner of the adjoining tract. A. W. Moss's residence, located near the southern boundary of the Roper's Knob tract, is shown on the 1876 Map of Williamson County by D. G. Beers (Figure 6).

Abner Moss is listed on the 1870 census as a 50-year old U. S. Assessor. He owned \$4,500 worth of real estate and \$700 worth of personal estate. Mary Moss, his wife, was 45-years old, and they had six children at home, Charles S., age 23, Carrie, 22, Delana, 18, James, 12, Emma, 9, and Sam, 7 (Federal Census, 1870, Williamson County, District 9, No. 142). On this particular part of the census, the census taker appears to be listing domestic servants at the beginning of the household, thus showing Edy Marshall, a 60-year old black female living in the Moss household, but it is more likely that the census taker is writing the household number on the line above the actual beginning of the household. Therefore Edy Marshall would actually be in the previously listed household, and Fannie Southall, a 45-year old black female listed as a domestic servant, would actually be part of the Moss household. A. W. Moss sold the Roper's Knob tract, listed as 177 acres, to his son Charles S. Moss in 1884 for \$4,425 (Williamson County Deeds, Book 10, p. 321).

The 1870 and 1880 Census records list C. S. Moss as a Postmaster. In 1880 he lived with his wife Ella and two daughters, Susie, 3, and Virginia, 2. Ella's 17-year old sister Lillie Hayes and a servant named Lizzie Rucker also lived in the

household (Federal Census, 1880, Williamson County, District 9, No. 303). Charles Moss sold the 177-acre tract to Lucy Ann Redmond in July 1908. Moss reserved the crops that were currently growing on the land, but gave Redmond the immediate use of the "stubble land" and "possession of the house" by August 25, 1908. This is the first mention of a house in the deed records for this land (Williamson County Deeds, Book 28, p. 458). The house to which the deed refers is likely the "A. Moss" house shown on the 1876 Beers Map of Williamson County.

Lucy Redmond sold the land in 1912 to Sandy Brown for \$10,000 (Williamson County Deeds, Book 34, p. 358). Brown and his wife Maggie conveyed the land in a deed of trust to R. W. McLemore to secure a payment of \$9,000 to the Central Trust Company. The deed of trust was assigned to the Equitable Life Assurance Society of the United States. The Browns defaulted on their payment, and in 1936 John Barksdale, substitute trustee, transferred the land to the Equitable Life Assurance Society of the United States (Williamson County Deeds, Book 67, p. 344). James F. Eggleston purchased the land in April 1937 (Williamson County Deeds, Book 69, p. 583).

The land next went to Elon G. and Lona L. Moore in 1941 (Williamson County Deeds, Book 76, p. 320). The Moores held the property until 1954 when Joseph D. and Betty Ann Baugh purchased the land (Williamson County Deeds, Book 99, p. 459). The Baugh family sold portions of the land throughout the years until the last remaining parcel was sold to Services Management, Inc in 1994. The Heritage Foundation of Franklin and Williamson County, partnering with the State of Tennessee, purchased 22.147 acres in 1996, and the state retained the top portion of the knob.

Two lines of evidence suggest that Roper's Knob was a popular place to visit in the years following the war. First is the presence of dated carvings in the stone outcroppings on the top of the knob. Though there is a popular belief among people familiar with the site that some of these carvings date to the Union Army occupation of the knob, no evidence that any of the carvings are from that period was found during examinations made as part of the archaeology project. The earliest date observed is 1870 and the latest is 1935. Many of the carvings have names while some are just initials. One loose stone found at the house site has carvings that appear to be a name and date that are illegible, and a place name in Ohio. The second line of evidence for the post war usage of the knob is the large number of modern artifacts found on the site, primarily in the redoubt. Bottles, jars, shotgun shells, bullet casings, bottle openers, one thermos, lantern parts, and plastic items are among the items classified as "Miscellaneous Modern Material." Many of the items are datable, and these range from the 1880s through most of the 20th century. Evidence of recent campfires further attests to the popularity of the hill.

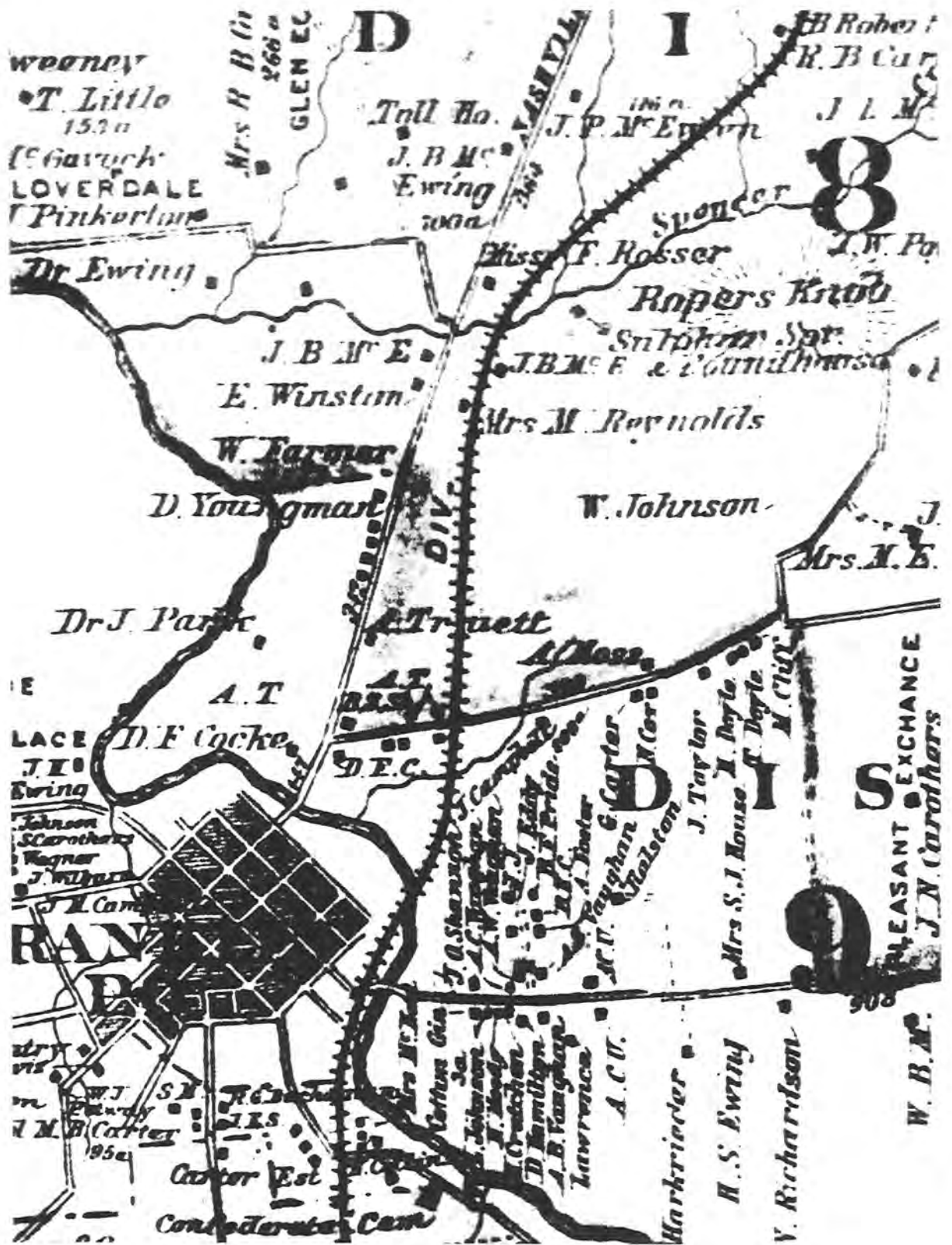


Figure 6. Portion of 1878 D. G. Beer's Map of Williamson County.

During the Civil War Roper's Knob provided an excellent point of observation of the surrounding countryside, because the Union Army cleared the top of the knob of trees. Merrill's (1863) report states that one could see the surrounding countryside for six miles. Evidently it remained clear for some time. An archaeology project volunteer and local resident stated that his uncle knew a man who had grown tobacco on the terrace of Roper's Knob in the 1940s and had used an "army truck" to haul the harvested tobacco. Mr. Frank Baugh, who grew up on the land, stated that his family had grazed cattle on the knob, and that his grandfather once drilled a well in the middle of the redoubt. This well, represented by a pipe about six inches in diameter, was located during the excavations. Mr. Baugh said that as late as the 1970s they could drive a jeep up the southern slope of the knob. More recent activity includes youths riding dirt bikes up the knob and through the redoubt. Relic collecting seems to have been popular from the 1970s up to the time of the archaeology project. Much of this activity was conducted with landowner permission in the past, but collecting is now prohibited on the state-owned portion of the site.

Summary of Historical Information

Historical documentation provides a clear understanding of when the Civil War features of Roper's Knob were constructed. The Union Army began fortifying Franklin immediately after its occupation of the town in February 1863, and Captain William E. Merrill commanding the Fourth Battalion of the Pioneer Brigade supervised the work. The garrison of Franklin provided the labor, working in shifts to speed the completion of the defenses. Merrill reported on the condition of the Franklin defenses in May 1863, and his report implies that the work was complete. Merrill also described several features of Roper's Knob, some of which are still visible today, and some of which were located archaeologically during the project.

There is little information pertaining to specific troops stationed on the knob. The 78th Illinois Infantry was there by June 1863. It appears that emphasis shifted away from Franklin and thus Roper's Knob in the latter part of 1863. Lieutenant Colonel Josiah Park, preparing to defend Franklin in October 1864, asked his superior if he should put artillery in Roper's Knob, so clearly there was none there at the time. There is no information to suggest that Roper's Knob played any part in the Battle of Franklin on November 30, 1864. Following the war Albert Myers, reporting on the Signal Corps, stated that the garrison at Franklin used the signal station on Roper's Knob to stay in contact with Murfreesboro during an 1863 skirmish.

The information pertaining to the house on Roper's Knob and the Roper family itself is somewhat sketchy. Roper's Knob was part of a large tract of land until 1829 when John L. McEwen sold 37 acres to Nicholas P. Perkins. McEwen retained a large estate that included the house in which his father had lived, so it is unlikely that he had any reason to build a house up on a steep hill. It seems possible that

Perkins built or began building the house on the terrace of the knob. Perkins died in 1833, and his heirs owned the land but did not live there. It is during this period that the Ropers appear in the records in Williamson County. Park Marshall noted in his writings concerning Williamson County history that a Roper had lived on the knob but never owned it, and Marshall's description of the location of a house matches the location of the archaeological remains of a house. The last mention of the Ropers in the historical record is on the 1850 census, and they appear to be gone by 1859 when legal proceedings concerning the ownership of the knob were underway. It is in the Minutes of the Chancery Court in 1859 that the name "Roper's Knob" first appears. W. H. S. Hill bought the tract in 1860 and added a larger tract in the same year. Hill would not have been allowed to live in the house, which, if it was still standing, was within the perimeter of the Roper's Knob fortifications during the war. Hill sold the land as a 177-acre tract, and later owners appear to have lived south of the knob. The fate of the Ropers remains a mystery. None of the male Ropers appear on the 1860 census for Tennessee, nor do they appear in the indexes for several other states checked.

ARCHAEOLOGICAL INVESTIGATIONS

Archaeological Methods

Before archaeological excavation was begun on the Roper's Knob site, state surveyors established grid points and elevations from which the Division of Archaeology could lay out excavation units. The beginning point for the grid is located on the terrace on the south side of the knob at the base of the ramp (Figure 7). This point was designated as 1,000 ft. North and 1,000 ft. East (abbreviated 1000N1000E) of the grid center, an unlocated point placed so as to include the entire site in one quadrant of the grid. The grid was oriented 37.5 degrees west of magnetic north so that a line could be run from the 1000N1000E point straight up the ramp into the redoubt. This alignment is referred to as "grid north." A more or less permanent marker was established at 1000N1000E, and it was assigned an elevation of 921 ft. above mean sea level.

The site was divided into specific areas for testing. These areas include the Redoubt, Outer Entrenchments, Ramp, Terrace (divided into three parts), a Platform near the base of the upper knob, a Berm on the edge of the terrace, and the House and Yard areas. Excavation units were placed, based on the presence of surface remains, in areas thought to be likely spots for encampment or in areas where a metal detector scan indicated the presence of a large amount of metal.

Most excavation units were 4 by 4 ft. squares, though smaller units were used in certain cases. The grid point in each unit's southwest corner designated that unit. The soil was screened through $\frac{1}{4}$ inch mesh hardware cloth to recover artifacts. Soil was removed by the use of hand tools, most often masons' trowels. The units were excavated in natural levels following the stratigraphy of the soil. For two areas of the site, culturally related levels were grouped into zones. For the House Area, Zone I is defined as the zone of heavy rubble associated with the destruction of the building. Zone II is what lies beneath the zone of rubble, theoretically dating prior to the destruction of the house. The horizontal extent of the rubble was used to define the area of the "House" versus the "Yard" area that lies outside the heavy rubble. The levels excavated in connection with the feature referred to as the "Platform" were also divided into two zones.

Distinct archaeological "features" were assigned feature numbers and recorded in a feature log. Sixteen features were recorded, all of them being historic period or undetermined. These features include visible surface remains such as the redoubt wall, the outer entrenchments, and the ramp, as well as subsurface remains encountered during excavation, including the foundation of the house, its builders trench, a wall trench for the blockhouse, and several postholes and postmolds. Table 1 lists the sixteen features.

Table 1
Roper's Knob Features

| Feature Number | Feature Type |
|----------------|---|
| 1 | Wall (parapet) of redoubt |
| 2 | Outer entrenchments |
| 3 | Ramp |
| 4 | Possible cistern (East) |
| 5 | Possible cistern (West) |
| 6 | Berm on outer edge of terrace |
| 7 | Probable historic posthole |
| 8 | House foundation |
| 9 | Probable historic postmold |
| 10 | Builder's trench outside house foundation |
| 11 | Builder's trench inside house foundation |
| 12 | Blockhouse wall trench |
| 13 | Probable historic postmold |
| 14 | Probable historic posthole |
| 15 | Probable historic posthole |
| 16 | Probable historic posthole |

Archaeological Features

Redoubt

A redoubt is an enclosed earthen fortification that often has a regular form such as a square or pentagon or an irregular form following the contours of the land. The latter form is usually found on hilltops where it is more difficult to construct a regular geometric shape (Scott 1864:497-498). The Roper's Knob redoubt, despite being on the top of a hill where one would expect to find an irregular shape, appears to have been an eight-sided earthwork most closely resembling a rectangle with the corners removed (Figure 7). William Merrill stated in his May 29, 1863 report that the redoubt was designed to hold four heavy pieces of artillery and also contained a blockhouse built for 60 men (Merrill 1863). It appears from archaeological evidence that the top of the knob was leveled off during the construction of the earthworks, and the dirt was used to construct the wall of the redoubt. The redoubt wall is designated as Feature 1. Figures 8 and 9 show two profiles of the redoubt, oriented North-South and East-West.

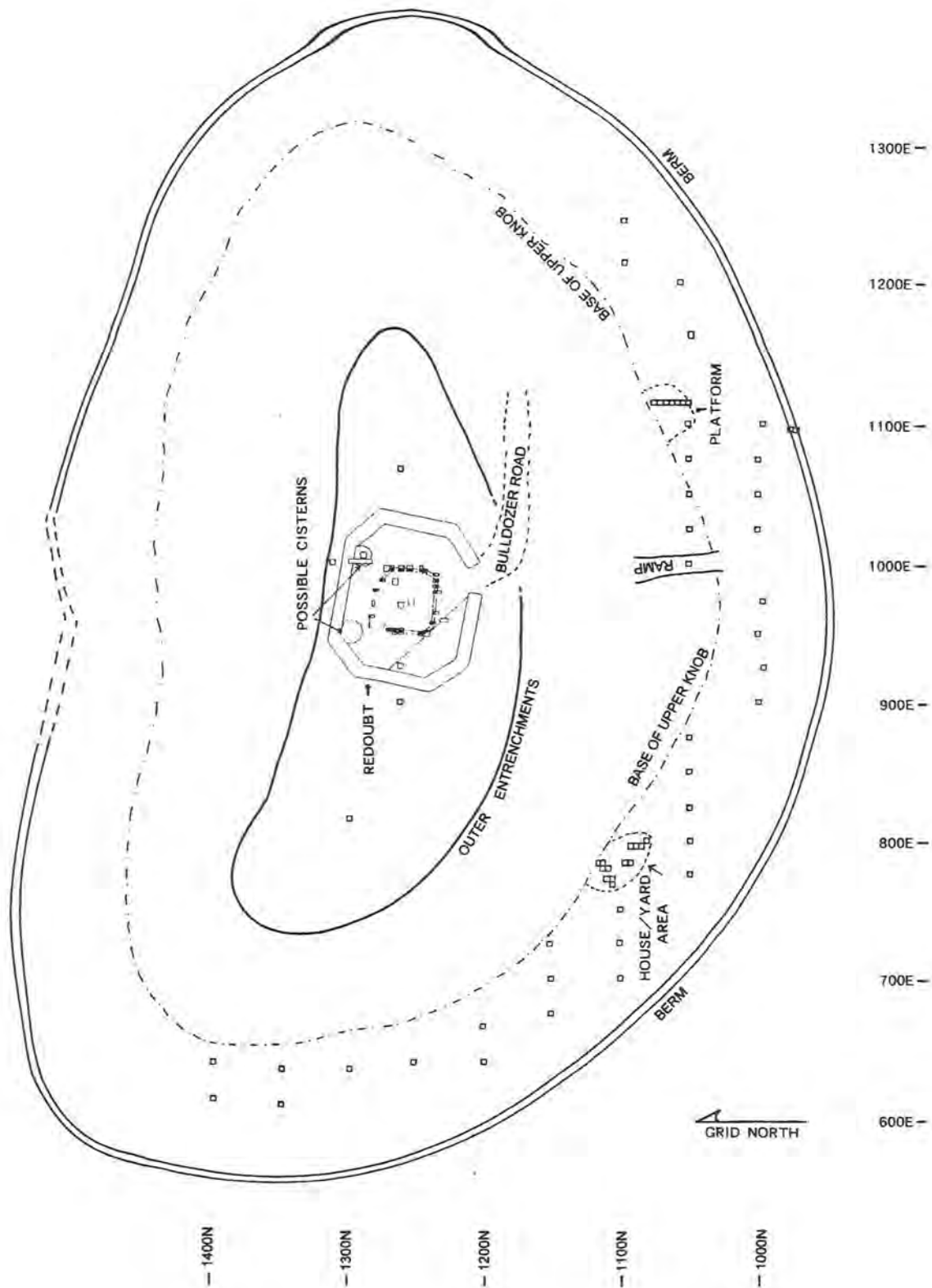


Figure 7. Base map of Roper's Knob archaeological site (small squares represent excavation units).

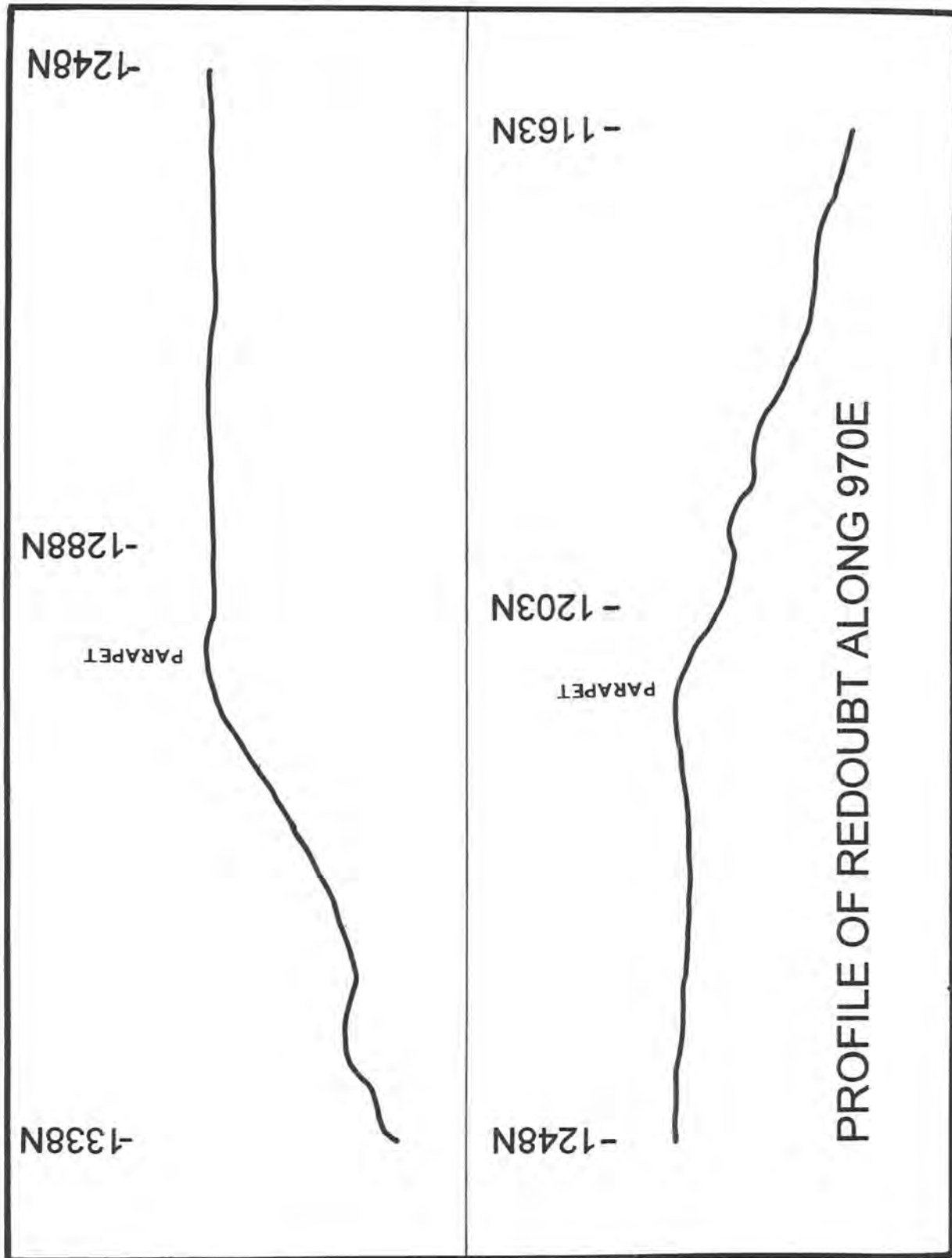


Figure 8. Profile of Redoubt Area along 970E grid line.

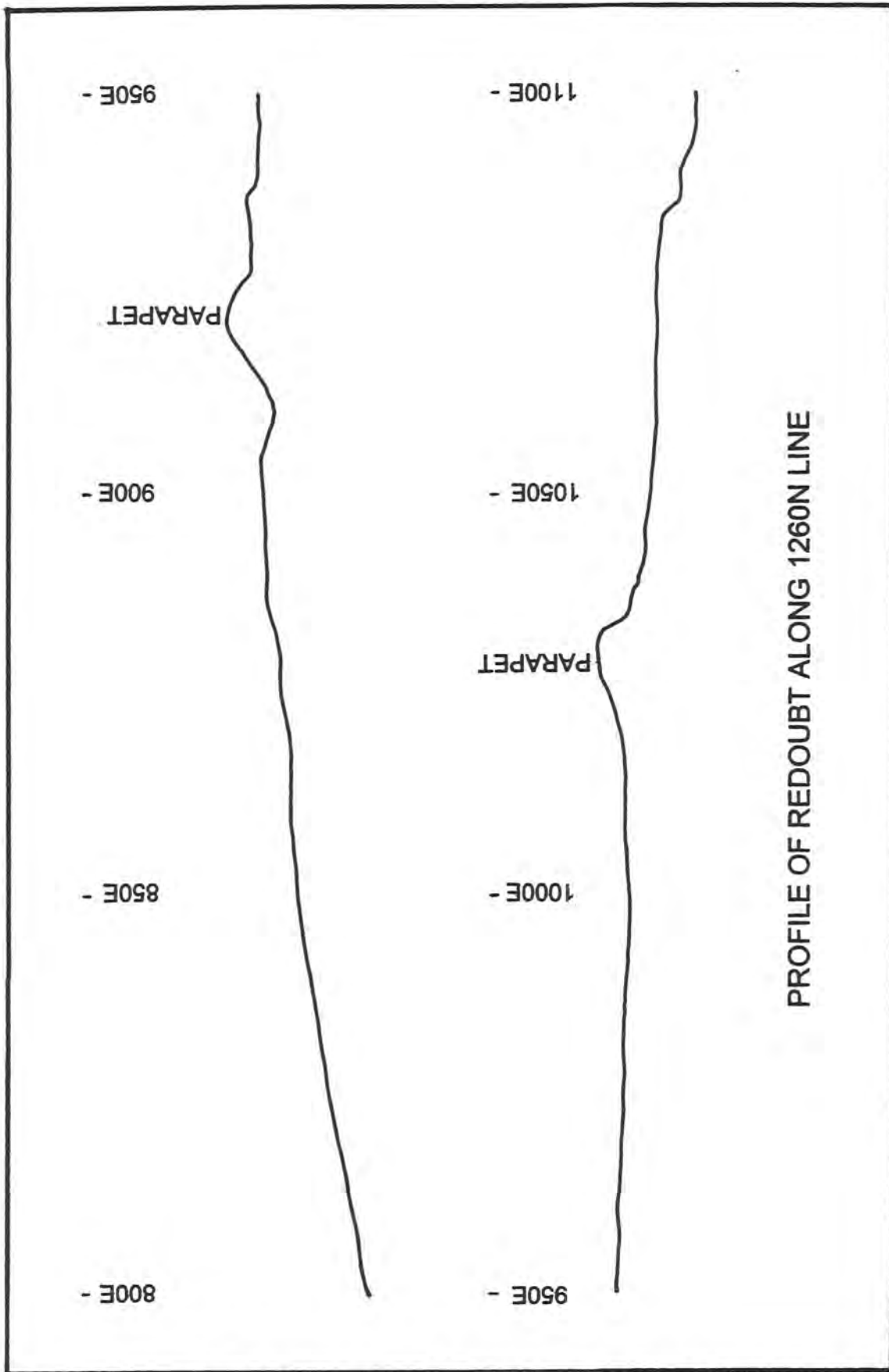


Figure 9. Profile of Redoubt Area along 1260N grid line.

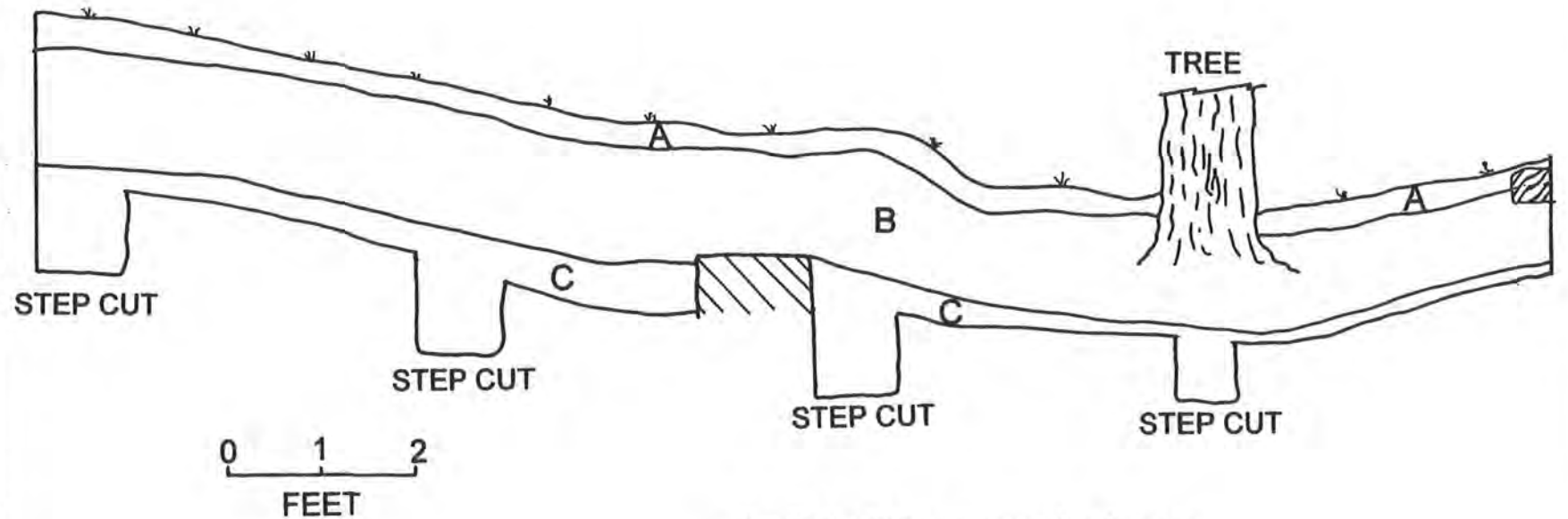
Excavation units placed in the center of the Redoubt Area revealed that a siltstone bedrock is just inches from the ground surface. Units on the north interior of the redoubt showed that the soil is substantially deeper, probably as a result of the earth removed in leveling off the top of the knob being used as fill to create a larger interior level area for the redoubt. A series of adjoining excavation units (3 ft. X 4 ft. each) was placed across what was believed to be a cistern on the northeast interior of the redoubt. Each was excavated to sterile clay subsoil, and a small step cut was dug in the southwest corner of each unit to find the underlying bedrock. The profile of this series of units, shown in Figure 10, shows the slope of the subsoil and the underlying bedrock, indicating the original slope of the hill.

Merrill (1863) states that the Roper's Knob redoubt was designed to hold four pieces of heavy artillery, but there are no records to indicate what type of guns were placed there. As stated in the above subsection "Historical Information Concerning the Fortifications on Roper's Knob," it seems likely that artillery was placed there after the completion of the earthworks in 1863. It is clear that there was no artillery in place in October 1864, probably having been moved farther south nearer the front lines. One artifact found in the Redoubt Area was a portion of a friction primer used to fire artillery, indicating the likelihood that there was once artillery here. Park Marshall, in his reminiscent writings, describes machinery on the knob being used to "draw up heavy artillery with which the fort was supplied" (Marshall 1970).

Within a fortification artillery was usually mounted on a terreplein, which is a level space on the interior of the works. The terreplein was raised above the interior surface of the fortification and often covered with wooden planks to make it easier for gun crews to maneuver the artillery piece. The artillery would either fire over the top of the parapet wall (*en barbette*), or it would fire through an opening called an embrasure. There is at least one raised area inside the Roper's Knob redoubt that was probably a terreplein. This terreplein is in the southwest corner of the redoubt facing downtown Franklin. In the southeast corner of the redoubt, there is a remnant of a possible platform against the inner parapet wall, but this is an area damaged by a bulldozer cut through the wall. There are several openings in the parapet wall of the Roper's Knob redoubt, but all seem to be worn down from years of foot traffic and are not large enough to be embrasure openings. Merrill (1863) reported that the four irregularly shaped battery positions in the vicinity of Roper's Knob were first designed as barbette batteries but were later changed to embrasure batteries.

The parapet wall of the redoubt, designated as Feature 1, was not cross sectioned during this project, but a line of units excavated to cross section the suspected east cistern cut slightly into the north wall of the redoubt. There were some cut limestone blocks in the section of the parapet wall that was exposed, and it is possible that these stones were taken from the house site located on the terrace below the redoubt. Other cut stones are visible in a worn down path over the east parapet wall. Stone is also evident in the west and southwest portions of the redoubt wall, but it appears to be heavily weathered and thinly layered, and is possibly part of the natural stratigraphy of the hill.

PROFILE OF PROBABLE EAST CISTERN



- A = Dark silty loam, recent humic zone
- B = Disturbed fill, loam with gravel
- C = Clay loam with gravel

Figure 10. Profile of excavation units at east cistern (facing west).

Blockhouse

Information on the development of Civil War blockhouses is given in the subsection "Historical Information Concerning the Fortifications on Roper's Knob." William Merrill's sketches of typical blockhouses (Merrill 1864, Map V) show that a footing trench was dug and heavy timbers were placed vertically into the trench. Earth was often piled against the sides of the blockhouse, and this earth is what often remains today. The area inside the Roper's Knob redoubt showed no signs of earthen mounds, and such added protection may have been deemed unnecessary where the blockhouse was inside a redoubt on a high, steep hill.

The first excavation unit dug near the center of the redoubt was somewhat discouraging because the siltstone bedrock was just inches below the ground surface. However, excavation of Unit 1256N952E revealed a trench cut into the bedrock approximately 18 inches wide and 24 inches deep. This trench was designated Feature 12 (Figure 11). Relatively few artifacts came from the trench fill (see artifacts section). As more brush was cleared from the Redoubt Area during the excavation, it became evident that there was a shallow depression marking the line of the wall trench in some parts of the redoubt, particularly on the east and west sides. By following this depression, several additional excavation units were placed to reveal the wall trench. Only three portions of the blockhouse wall trench were fully excavated. To save time, the remaining units were excavated only to the top of the blockhouse wall trench, which was then mapped.

Figure 12 is a map of the Redoubt Area showing where excavation units were placed. The blockhouse wall trench is also indicated on this map as well as conjectural lines showing the probable configuration of the blockhouse. The blockhouse appears to have been basically square with the corners cut off, making it eight sided but not a regular octagon. The plan of the blockhouse becomes somewhat unclear on the north side. Here the soil was deeper than in the rest of the redoubt. The blockhouse wall trench was detected in Unit 1273N981E, the northern most portion of the trench indicated on Figure 12. If this is indeed the main wall of the redoubt, then the overall configuration is slightly irregular, this wall being farther north than would be predicted. One possibility is that this trench represents part of an offset wall that protected the entrance to the redoubt. Blockhouses usually had such an L-shaped wall in front of the entrance to prevent an enemy from firing directly at the door.

A small feature found in Unit 1076N1116E may have some connection to structural remains on this north side of the blockhouse. It appeared to be a slightly lopsided posthole (labeled Feature 16), 1.0 to 1.35 ft. in diameter, with a depth of 0.6 ft. below the point where it first became visible. No artifacts were found in it.

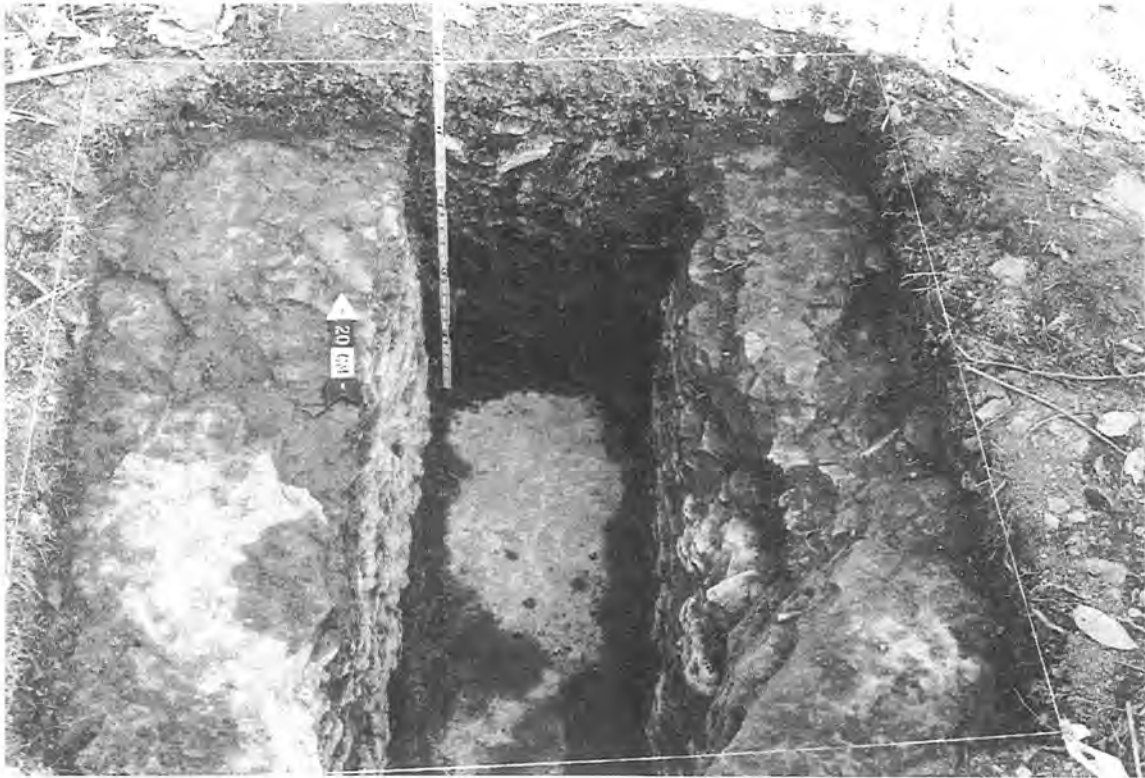


Figure 11. Photograph of section of blockhouse wall trench (Feature 12), with north arrow.

Merrill suggests in his blockhouse sketches that the logs used to construct blockhouse walls should be about 18 inches in diameter. This is the average width of the Roper's Knob wall trench, so it can be assumed that the vertical logs used to construct the walls of the blockhouse that stood above Feature 12 approached this standard (perhaps a little smaller than 18 inches). There was probably no need for the Roper's Knob blockhouse to be double-cased (i.e., two layers of logs), and no earthen embankment seems to have been added to the structure.

Cisterns

William Merrill states in his 1863 report that Roper's Knob had two cisterns with a capacity of 4,500 gallons of water (Merrill 1863). Merrill does not state precisely where these were located, but there are two large depressions inside the redoubt in its northeast and northwest corners. These were suspected to be the remains of these cisterns. The eastern most of these two depressions was tested by excavating a series of 3-ft. wide by 4-ft. long units along the 1000E grid line to cross-section the depression (Figure 12). The Profile of these adjoining units is shown in

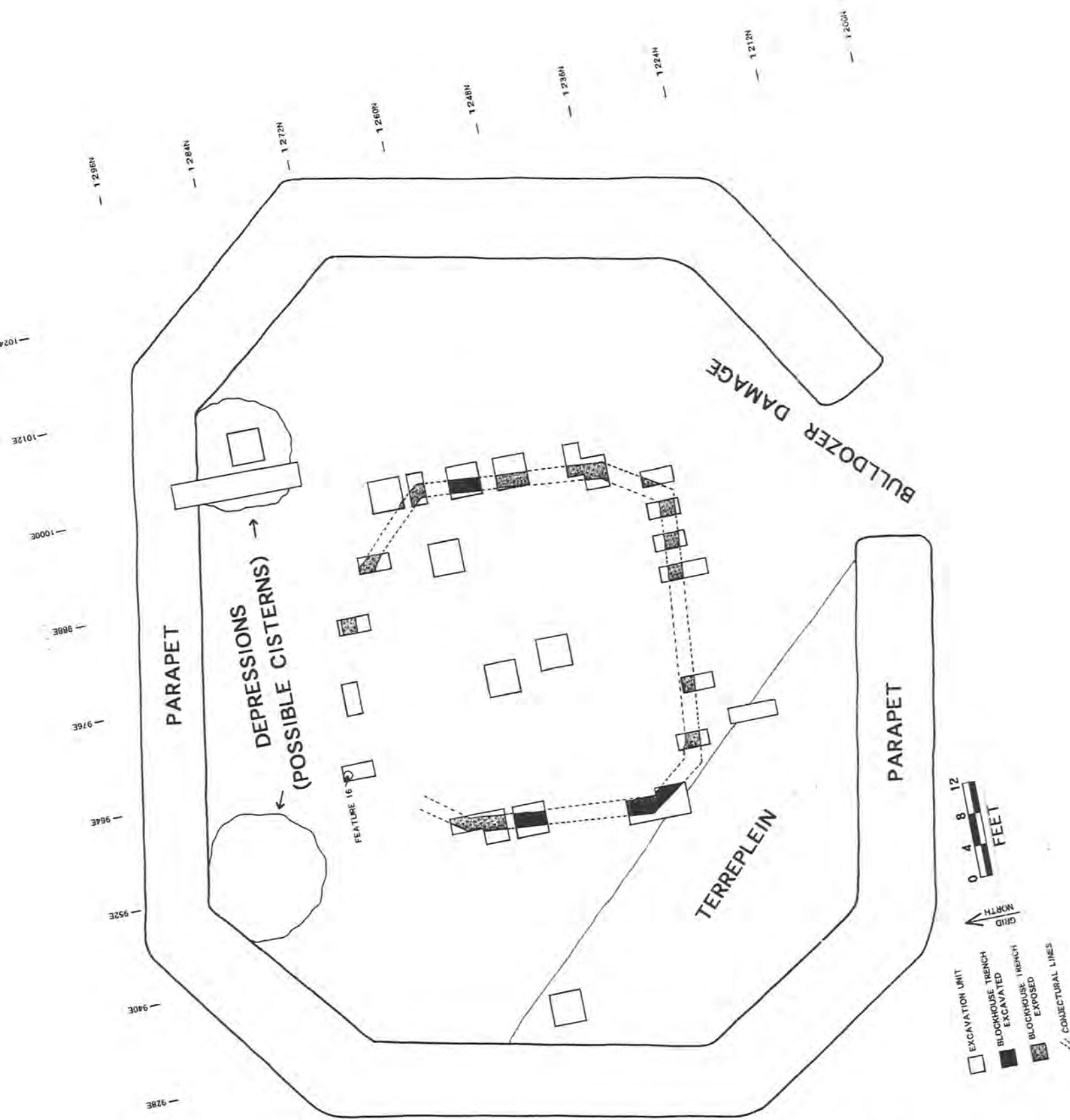


Figure 12. Map of excavation units in the Redoubt Area.

Figure 10. Additionally one 4 X 4 ft. unit was excavated at 1282N1004E. The soil in these units was disturbed, showing little variation in color or consistency. The soil near the bottom of the unit was originally thought to be part of the cistern fill and was designated Feature 4. This fill was shallow and ended at sterile clay subsoil. Several large stones were present in these units, and they may have once been part of a cistern structure, but they have been disturbed.

Artifactual evidence from the suspected cistern indicates that the area has been highly disturbed, evidently by persons digging for relics. A few Civil War period artifacts, including Minie Balls, percussion caps, one musket band spring, and a friction primer wire, were recovered from the cistern units along with much modern material. Additionally several pieces of tin, believed to be roofing tin, were found in these units. Richard Fultcher, a collector and local historian, stated in a telephone interview that several collectors had found roofing tin on Roper's Knob. Frank Baugh, whose family once owned Roper's Knob, said that at one time he had seen a large pile of roofing tin on the north slope of the knob.

Outer Entrenchments

A line of entrenchments, designated as Feature 2, surrounds the upper knob outside the redoubt (Figure 7). They are irregularly shaped, following the contour of the knob. These entrenchments are very pronounced and well preserved around the north, west, and east portions of the knob, but they are shallower and more eroded on the south side. A bulldozer road cuts through the entrenchments on the southeast side. One excavation unit was placed in the outer entrenchments on the north side of the knob. Here the bedrock slopes steeply to the north, and it appears that a large amount of fill dirt was used in constructing the parapet wall of the outer entrenchments on the north side of the knob. Merrill mentions that a rifle pit just above the terrace surrounded the knob.

Ramp

Roper's Knob has an earthen ramp that extends from the terrace to the upper part of the knob where it blends into the natural slope (Figure 7). The Ramp provides a uniform slope up to the level of the redoubt. This feature is indicated on the Civil War period map shown in Figure 4, which suggests that it was much longer than is today visible. The Union troops used the ramp to haul artillery up to the redoubt. It has been discussed in a previous section that Lieutenant Colonel Josiah Park reported that he could not get artillery on Roper's Knob without machinery (OR, Series I, Vol. XXXIX, Part 2, p. 21). Park Marshall wrote that "there was a tramway up the steep part of the knob, up which were hauled the guns by means of block and tackle." He also stated that this tramway had heavy crossties and heavy square wooden beams for the rails, and "an engine and derrick were installed with ropes and drum to draw up heavy artillery" (Marshall 1970). It is apparent that getting heavy artillery into the redoubt on Roper's Knob was no easy task.

One 4 X 4 ft. unit was excavated on the ramp at 1050N1100E. This revealed that the ramp was constructed, at least in part, by digging a ditch on both sides and piling the dirt in the middle. The natural stratigraphy is overlain by inverted stratigraphy, resulting from the soil being removed from the ditch on either side and shoveled into the center to form the ramp.

Platform

One of the more enigmatic features found on Roper's Knob is what was referred to during the excavation as "the Platform." This is a leveled area at the base of the upper knob on its southeast side (Figure 7). The platform appears to be man-made, and at the time of the excavation, several limestone blocks were visible on the surface as were several recent holes left by relic collectors. One 4 X 4 ft. excavation unit, 1050N1100E, was dug near the western edge of the feature, and seven adjoining 3 X 4 ft. units were excavated along the 1116E line to cross section the feature. The profile of this cross section is shown in Figure 13.

The platform appears to have been constructed by piling dirt behind some sort of retaining wall. Several large stones that may have been part of such a wall were found in the excavation trench, especially near its south end, and these seemed to have been disturbed from their original context.

The bottom portions of five probable postholes or postmolds were found in the Platform Area excavation units. These were visible as dark soil stains when the units were excavated down to the level of the sterile clay subsoil. Feature 7 in Unit 1062N1116E was a roughly square posthole about 1.0 ft. across. It was 0.7 ft. deep from the point where it was first detected, and there were a few fragments of brick and a few chert flakes in the feature fill. Feature 9, located in Unit 1066N1116E, was a small circular postmold, six inches in diameter. It had a depth of only .15 ft. from the point where it was discovered and no artifacts were recovered. Feature 13 (in Unit 1074N1116E) was a circular feature 0.85 ft. in diameter with a depth of .45 ft. Small bones were recovered from the fill, and it is possible that this feature was a rodent burrow. Feature 14 (Unit 1074N1116E) was a circular posthole with a diameter of 1.0 ft. and a depth of .20 ft. from where it was detected. One nail and a few chert flakes were found in this feature. Feature 15 (Unit 1074N1116E) was an irregularly shaped stain, about 1.0 ft. to 1.5 ft. across, extending only .3 ft. below the top of the subsoil. No artifacts were found in this feature.

Artifacts recovered from the platform suggest it served a Civil War military purpose. A total of 712 nails came from upper levels (grouped together as Zone I for artifact analysis purposes) and, along with the post impressions just described, point to the former existence of some kind of structure. A more complete excavation would be needed to determine, if possible, the configuration of this structure. A military use of this assumed structure is suggested by the presence of Civil War artifacts including Minie Balls, percussion caps, and military buttons, as well as by a paucity of domestic artifacts.

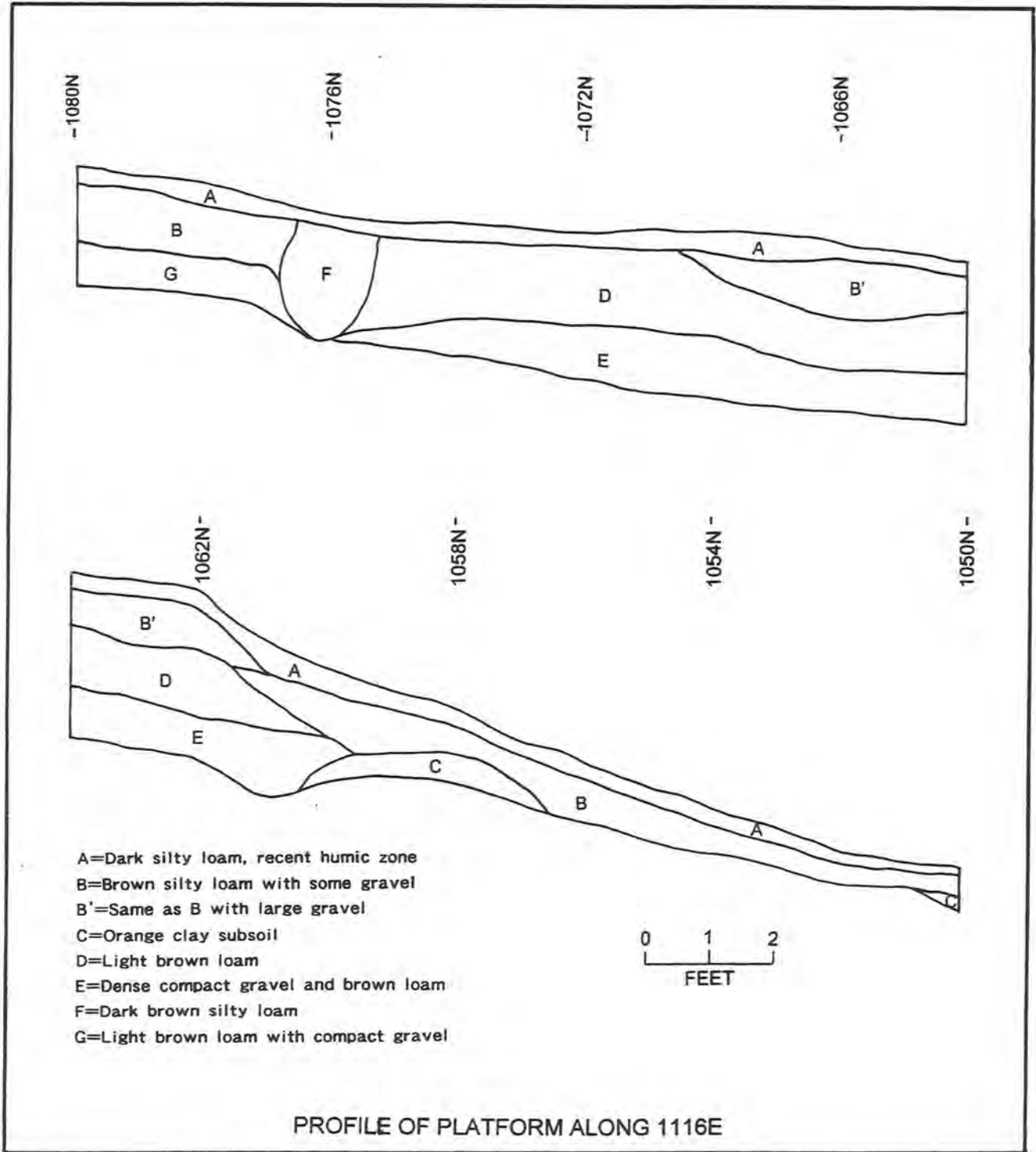


Figure 13. Profile of units across platform (facing east).

Berm

The berm (Figure 7), designated as Feature 6, is a slight rise located on the crest of the terrace surrounding the hill. Merrill states in his May 29, 1863 report that "on the crest of the terrace surrounding the crown of the hill is a strong line of abattis (sic)." An abatis is a barricade of felled trees that have had their smaller branches removed and the remaining branches sharpened (Scott 1864:19). The visible rise, or berm, on the crest of the terrace, or crown of the hill as Merrill describes it, might be related to the described abatis, perhaps being the remnant of a shallow trench behind the abatis.

Two excavation units were placed to cross-section the berm on the south side of the knob at 972N1097E and 976N1097E. No artifacts were recovered from these two units, and there was no clear sign of a ditch or any other man-made feature. Constraints of time did not allow for further exploration of the berm.

Terrace

The Terrace of Roper's Knob is located about 80 ft. below the summit of the hill. It is relatively flat on the west, south, and east and somewhat more sloping on the north side of the hill, which is generally steeper overall. Because the Terrace seemed like a logical place for troops to have camped, a series of excavation units was placed on the west, south, and east sides of the knob (Figure 7). Relatively few artifacts were recovered from the Terrace test units, but this area had previously been intensely searched by relic collectors. The collectors interviewed during the archaeology project reported having found Minie Balls, buttons, at least one bayonet, and other Civil War military artifacts in the flat areas around the upper knob.

House

An area of limestone and brick rubble, clearly visible on the ground surface, indicated the presence of a building, assumed to be a former house. This rubble was located on the west end of the South Terrace against the upper knob. The probable relationship between this house and the Roper family is discussed in the subsection "Early History of Roper's Knob." For purposes of the archaeology project, the general house area was divided into two named areas, the House and the Yard. The House Area was defined by the in situ portions of the building and the heaviest concentration of rubble, most of which appears to be the result of a chimney fall at the east end of the building. Excavation units in the Yard Area were outside this area of rubble concentration but still in the general vicinity of the house.

A number of levels were excavated in the House Area, but for purposes of artifact analysis, these were divided vertically into two zones. Zone I is composed of levels with lots of rubble, while Zone II includes levels that were below the heavy

brick and limestone rubble. This lower zone should represent the period of occupation prior to destruction of the house.

Figure 14 shows the placement of excavation units in the House and Yard areas as well as the portions of the house foundations uncovered during excavation. The initial excavation in the house/yard area was a series of four 4 by 4 ft. units along the 800E line. At the north end of the trench formed by these units, the layer of heavy brick and limestone rubble resulting from the destruction of the house began to take form.

Subsequent excavation units revealed portions of the foundation of the house, designated as Feature 8 (Figure 15, upper). This foundation was made from limestone blocks and was 24 inches wide, extending well below the current ground surface. It was set into a builder's trench, and the contents of this trench were excavated as Feature 10, outside the foundation, and Feature 11, inside the foundation. The north side of the house was built against the steep upper knob, and a taller section of foundation was preserved here, buried under slope erosion (Figure 15, lower).

As shown in Figure 14 and Figure 15 (lower), there are remaining portions of a stone cross wall that runs along a northeast-southwest medial axis. It appears this was built later than the original house because it is set on top of a brick floor. The purpose of this wall is unknown, but it may indicate some attempt at repair of the house or a later subdividing of the lower floor. Another unusual feature of this building is that there is no foundation wall on the western side. The absence of a builder's trench on the western end indicates that there never was a foundation there.

One large stone found in the rubble removed from Unit 1096N784E has a hole bored into it as if for pinning a structural part to the stone. It appears that this stone was part of the foundation, but it is not clear what purpose this hole served.

With so massive a foundation wall, it is possible that the house was made entirely of stone or at least had a lower floor or above ground basement of stone with a wooden structure over it. The overall dimensions of the house, as indicated by the foundation, were 18 by 30 ft., and there is evidence for a stone chimney with a brick firebox on the east end of the building. There was not time to excavate below the brick floor of the house except in one small area of Unit 1096N784E where it appeared that the bricks had been broken up by the collapse of the stone walls. The space was too small to draw any conclusions about the structure of the floor.

The majority of historic period artifacts from the Roper's Knob site came from the House and Yard areas. It appears from documentary and archaeological

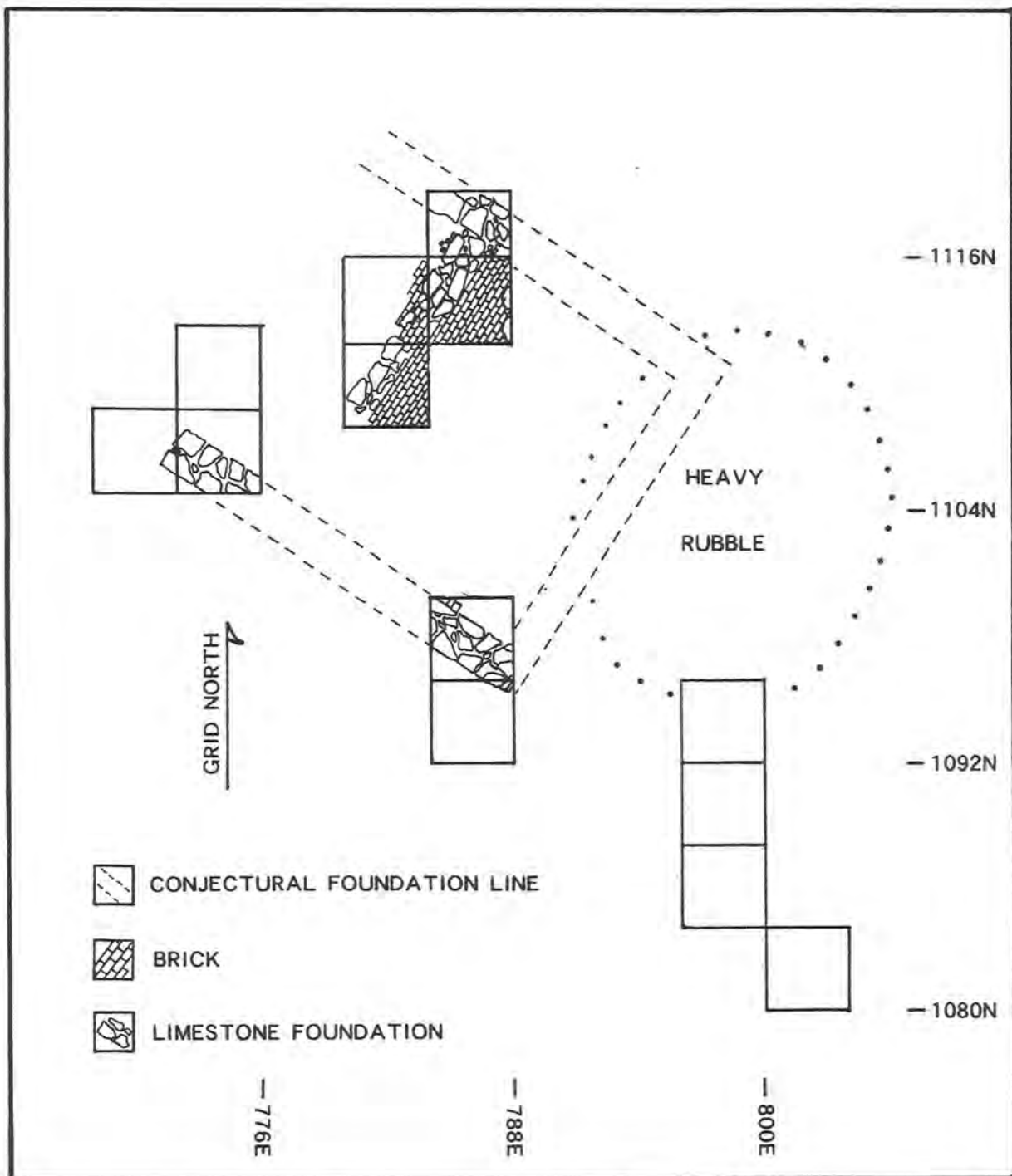


Figure 14. Map of excavation units in the House and Yard areas.

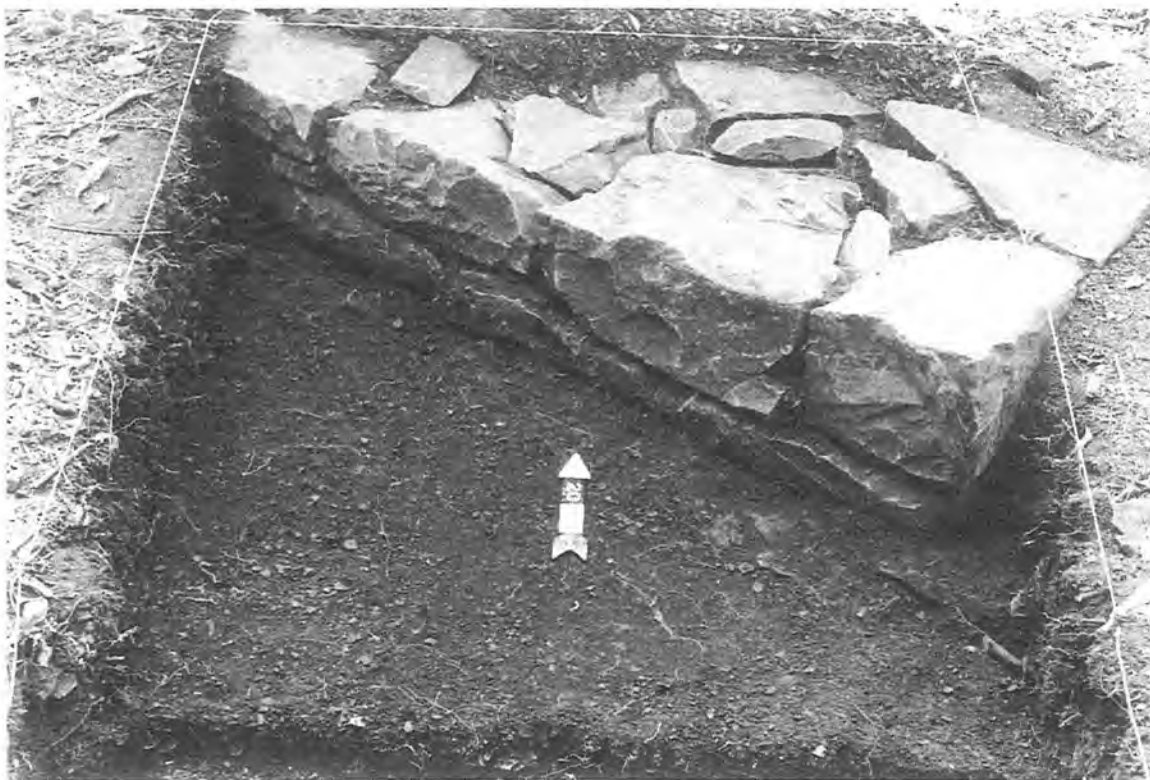


Figure 15. House remains: corner of foundation in Unit 1096N784E (top); north foundation wall, interior cross wall, and portion of brick floor (bottom).

evidence that the house was occupied for a relatively short period of time, no earlier than about 1829 and no later than about 1863. It was probably destroyed in 1863 to use the materials in construction of the military fortifications, and it may have been in disrepair by this time anyway.

Stone Carvings

There are several carvings in the stone outcroppings on Roper's Knob, including names, initials, and dates. Those observed during the test excavation project are on the upper knob near the earthworks except for one loose stone that was found near the house (this loose stone was collected for its protection). The earliest date observed is 1870 and the latest is 1935. There are some carvings that are undated but seem to be recent. This early form of graffiti is evidence of the popularity of Roper's Knob as a spot to visit following the war. The union army had cleared the trees off of the knob, providing an unobstructed view of the surrounding countryside, and the earthworks and possible building remains may have also been an attraction.

ANALYSIS OF HISTORIC PERIOD ARTIFACTS

Introduction

A total of 5,429 historic period artifacts was recovered during the Roper's Knob excavation as well as 340 items classified as "Miscellaneous Modern," 642 pieces of faunal material, and 866 prehistoric artifacts. Historic period artifacts and faunal material are shown in Table 2 while the prehistoric artifacts are discussed in Appendix A. Additionally, brick rubble, mortar, and charcoal were collected and quantified by weight, with most of the brick rubble discarded in the field. These materials are indicated on Table 2 as either present or absent. The main historic period artifact collection was analyzed and tabulated using a system originally presented by South (1977:95-96), which is structured into "groups," subdivided into "classes." This system has previously been modified for use with collections such as those from Fort Southwest Point (Smith 1993) and Fort Blount (Smith and Nance 2000), as well those from various other projects conducted by the Tennessee Division of Archaeology. This report also includes a Civil War Military Artifact Group, similar to one used in the classification of Civil War material recovered from a 1988 excavation at the Carter House in Franklin (Smith 1994:70).

Addition of the "Civil War Military Artifact Group" was made to emphasize those items associated with the primary historical event that impacted Roper's Knob. However, relatively few military artifacts were recovered from the site, and this is indicative of the level of collecting of these artifacts that has occurred on this and most other Civil War military sites. Some of the collectors, who had searched the site with permission of the landowners when it was privately owned, shared information on their finds. Artifacts mentioned included, Minie Balls, Burnside Cartridges, bayonets, one silver plated Union belt buckle, military buttons, and a scabbard tip.

Kitchen Group

The Kitchen Group (Table 2) is divided into several classes, including ceramics, tumblers, glassware, tableware, kitchenware, and four categories for bottle glass. One of the latter, the "General Bottle Glass" class, is a modification of South's (1977:95-96) original classification system, which was designed for dealing with eighteenth-century and earlier sites. This class was added to account for types of bottle glass that are common on nineteenth-century and later sites (Smith 1993:185). The 2,287 Kitchen Group artifacts recovered from Roper's Knob make up 42.1 percent of the total number of historic period artifacts. This is the second largest group of artifacts from the site.

TABLE 2
DISTRIBUTION OF HISTORIC PERIOD ARTIFACTS

| GROUP AND CLASS | South Terrace | West Terrace | East Terrace | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % of Site Total | |
|-----------------------------|---------------|--------------|--------------|-------|------|------|------|----------|-----|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------------|--|
| | | | | Z I | Z II | Z I | Z II | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| KITCHEN GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Ceramics | 1 | 24 | 2 | 420 | 154 | 225 | 11 | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 12 | 874 | 16.10 | | |
| Wine Bottles | 29 | 12 | 3 | 152 | 2 | 22 | 1 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 291 | 5.36 | | |
| Case Bottles | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | | |
| Tumblers | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.04 | | |
| Pharmaceutical Type Bottles | 3 | 0 | 0 | 20 | 0 | 13 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 39 | 0.72 | | |
| General Bottle Glass | 21 | 18 | 11 | 143 | 12 | 82 | 21 | 0 | 29 | 0 | 3 | 0 | 2 | 0 | 22 | 0 | 0 | 0 | 1 | 365 | 6.72 | | |
| Glassware | 0 | 1 | 1 | 12 | 53 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 1.34 | | |
| Tableware | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.11 | | |
| Kitchenware | 7 | 31 | 1 | 191 | 13 | 16 | 23 | 0 | 60 | 3 | 0 | 0 | 0 | 1 | 16 | 1 | 2 | 0 | 271 | 636 | 11.71 | | |
| GROUP TOTAL | 61 | 88 | 18 | 942 | 235 | 366 | 56 | 0 | 150 | 19 | 3 | 0 | 2 | 1 | 40 | 1 | 6 | 0 | 299 | 2,287 | 42.13 | | |
| ARCHITECTURAL GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Window Glass | 10 | 14 | 1 | 692 | 153 | 109 | 23 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 1 | 1,016 | 18.71 | | |
| Nails | 49 | 91 | 18 | 586 | 10 | 75 | 712 | 0 | 193 | 14 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 26 | 1,797 | 33.10 | | |
| Spikes | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 14 | 0.26 | | |
| Construction Hardware | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 38 | 0.70 | | |
| GROUP TOTAL | 59 | 105 | 19 | 1,284 | 163 | 184 | 735 | 0 | 205 | 18 | 0 | 0 | 0 | 0 | 61 | 0 | 4 | 0 | 28 | 2,865 | 52.77 | | |
| FURNITURE GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Furniture Hardware | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0.17 | | |
| ARMS GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Musket Balls, Shot, Sprue | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0.06 | |
| Gunflints | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0.06 | | |
| GROUP TOTAL | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0.11 | | |
| CLOTHING GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Buckles | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0.06 | | |
| Buttons | 0 | 1 | 0 | 9 | 0 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 18 | 0.33 | | |
| Straight Pins | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | | |
| Hook and Eye Fasteners | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.04 | | |
| Shoe Parts | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0.26 | | |
| Strap Slider | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | | |
| GROUP TOTAL | 0 | 1 | 0 | 14 | 0 | 2 | 7 | 0 | 2 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 1 | 39 | 0.72 | | |

TABLE 2 (continued)
DISTRIBUTION OF HISTORIC PERIOD ARTIFACTS

| GROUP AND CLASS | South Terrace | West Terrace | East Terrace | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % of Site Total | |
|----------------------------|---------------|--------------|--------------|-------|------|-------|-------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------------|--|
| | | | | Z I | Z II | Z I | Z II | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| PERSONAL GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Personal Items | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 8 | 0.15 | |
| TOBACCO PIPE GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Tobacco Pipes | 0 | 0 | 0 | 6 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0.18 | |
| ACTIVITIES GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Construction Tools | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0.06 | |
| Farm Tools | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | |
| Toys | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0.06 | |
| Fishing Gear | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | |
| Storage Items | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.02 | |
| Stable and Barn | 1 | 4 | 0 | 14 | 1 | 2 | 16 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 42 | 0.77 | |
| Miscellaneous Hardware | 4 | 0 | 6 | 18 | 2 | 0 | 18 | 0 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 67 | 1.23 | |
| Other | 0 | 0 | 0 | 3 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0.15 | |
| Unidentified Metal | 0 | 0 | 1 | 7 | 3 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 23 | 0.42 | |
| GROUP TOTAL | 5 | 5 | 7 | 49 | 7 | 2 | 37 | 0 | 20 | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 3 | 149 | 2.74 | | |
| CIVIL WAR GROUP | 1 | 1 | 0 | 12 | 0 | 1 | 32 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 56 | 1.03 | |
| SITE TOTAL | 126 | 201 | 44 | 2323 | 405 | 557 | 868 | 0 | 385 | 44 | 3 | 0 | 14 | 1 | 106 | 1 | 16 | 0 | 335 | 5,429 | 100 | | |
| PERCENT OF SITE TOTAL | 2.32 | 3.70 | 0.81 | 42.79 | 7.46 | 10.26 | 15.99 | 0.00 | 7.09 | 0.81 | 0.06 | 0.00 | 0.26 | 0.02 | 1.95 | 0.02 | 0.29 | 0.00 | 6.17 | 100 | | | |
| BONE GROUP | | | | | | | | | | | | | | | | | | | | | | | |
| Bone and Shell Fragments | 0 | 20 | 3 | 428 | 7 | 62 | 88 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 642 | | |
| UNCLASSIFIED MATERIAL | | | | | | | | | | | | | | | | | | | | | | | |
| present = (+) absent = (-) | | | | | | | | | | | | | | | | | | | | | | | |
| brick | + | + | + | + | + | + | + | + | + | + | - | - | - | - | + | + | + | + | - | | | | |
| charcoal | - | - | - | + | - | - | - | - | - | - | - | - | - | - | + | - | - | - | + | | | | |
| mortar | + | - | - | + | - | + | - | - | - | - | - | - | - | - | - | - | + | + | - | | | | |
| coal | - | - | + | - | - | - | - | - | + | + | - | - | - | - | - | - | - | - | - | | | | |
| Misc. Modern Material | 1 | 1 | 0 | 1 | 0 | 0 | 4 | 0 | 329 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 340 | | | |
| GRAND TOTAL | 127 | 222 | 47 | 2,752 | 412 | 619 | 960 | 0 | 740 | 45 | 3 | 0 | 14 | 1 | 113 | 1 | 16 | 0 | 335 | 6,411 | | | |

Ceramics

A total of 874 ceramic sherds was recovered from the Roper's Knob site making this the largest single class in the Kitchen Group. These sherds were classified first by ware type with 80.1 percent being classified as "whiteware." The ware types were further subdivided into decorative types. There is also a residual category that includes 12 sherds that were so damaged from burning or other adverse effects as to make them unidentifiable. The distribution of ceramic sherd types is shown in Table 3. Excavation in the House and Yard areas produced 91.4 percent of the total ceramic collection.

Porcelain

Porcelain is a vitrified, or glass-like, refined ware that is often thin and translucent. Only 11 sherds of porcelain were recovered during the Roper's Knob test excavation, representing slightly more than 1.0 percent of the total ceramic collection. All but two of the sherds were found in the House and Yard areas. Eight of the sherds are undecorated, one is embossed with a fleur-de-lis design, and two have a faint trace of an overglaze enamel decoration. The overglaze enamel is worn to a point that it is barely visible, and the color of the decoration could not be determined. All the sherds are small and no vessel forms could be determined. A sherd of undecorated porcelains is shown in Figure 16B.

Creamware

Creamware is a refined earthenware with a cream-colored to yellowish body and a clear glaze that is lead based. It was developed in the 1760s as a less expensive alternative to porcelain and white salt-glazed stoneware. The glaze can have a yellowish to greenish cast becoming more pronounced where the glaze pools. In the late eighteenth and early nineteenth centuries, Britain exported large amounts of Creamware to America (Noel Hume 1970:124; Price 1979:10; Majewski and O'Brien 1984:21-22; Smith 1993:189).

Only four sherds of Creamware were recovered from the Roper's Knob site, all coming from Zone I of the House Area. These four sherds are undecorated. One is shown in Figure 16A.

Pearlware

Pearlware was developed in 1780 as an improvement over Creamware. Flint was added to the paste, or body, of the ware to make it whiter, and the addition of cobalt to the glaze neutralized the yellow color. The cobalt gives pearlware a slightly bluish cast that is darker where the glaze pools, such as around footings (Noel-Hume 1970:232-233; Price 1979:13-14; Majewski and O'Brien 1984:22; Smith 1993:189).

TABLE 3
DISTRIBUTION OF CERAMIC SHERDS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|---------------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----|------|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| PORCELAIN | | | | | | | | | | | | | | | | | | | | | | |
| Undecorated | 0 | 1 | 0 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0.9 |
| Embossed | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| Overglaze Enamel | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.2 |
| Total | 0 | 2 | 0 | 2 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1.3 |
| CREAMWARE | | | | | | | | | | | | | | | | | | | | | | |
| Undecorated | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0.5 |
| Total | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0.5 |
| PEARLWARE | | | | | | | | | | | | | | | | | | | | | | |
| Undecorated | 0 | 2 | 0 | 13 | 17 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 4.8 |
| Edge Decorated (blue) | 0 | 0 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.7 |
| Transfer Printed (blue) | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1.0 |
| Transfer Printed (dark blue) | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0.6 |
| Handpainted (blue) | 0 | 1 | 0 | 4 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 9 | 1.0 |
| Handpainted (polychrome) | 0 | 0 | 0 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.7 |
| Total | 0 | 3 | 0 | 23 | 29 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 77 | 8.8 |
| WHITEWARE | | | | | | | | | | | | | | | | | | | | | | |
| Undecorated | 1 | 11 | 1 | 165 | 40 | 97 | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 329 | 37.6 |
| Embossed | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.2 |
| Edge Decorated (blue) | 0 | 2 | 0 | 32 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 48 | 5.5 |
| Edge Decorated (green) | 0 | 0 | 0 | 9 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 2.1 |
| Transfer Printed (blue) | 0 | 2 | 0 | 23 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 3.8 |
| Transfer Printed (dark blue) | 0 | 2 | 0 | 8 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 2.4 |
| Transfer Printed (green) | 0 | 0 | 0 | 6 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1.3 |
| Transfer Printed (black) | 0 | 0 | 0 | 22 | 6 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 5.1 |
| Transfer Printed (purple) | 0 | 0 | 0 | 12 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 2.1 |
| Transfer Printed (brown/yellow) | 0 | 0 | 0 | 7 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 2.1 |

TABLE 3 (continued)
DISTRIBUTION OF CERAMIC SHERDS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|---|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----|------|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| WHITEWARE (continued) | | | | | | | | | | | | | | | | | | | | | | |
| Transfer Printed (red) | 0 | 0 | 0 | 6 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1.3 |
| Handpainted (blue) | 0 | 0 | 0 | 12 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1.8 |
| Handpainted (polychrome) | 0 | 1 | 0 | 40 | 25 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 9.7 |
| Annular (banded) | 0 | 0 | 0 | 13 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 2.3 |
| Annular (swirled) | 0 | 0 | 0 | 7 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 16 | 1.8 |
| Rim Bands Only | 0 | 0 | 0 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1.0 |
| Total | 1 | 18 | 2 | 367 | 110 | 186 | 11 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 700 | 80.1 |
| COARSE EARTHENWARE | | | | | | | | | | | | | | | | | | | | | | |
| Red Bodied, Clear glaze | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 0.8 |
| Brown glaze | 0 | 1 | 0 | 6 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 2.4 |
| Total | 0 | 1 | 0 | 8 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 28 | 3.2 |
| STONEWARE | | | | | | | | | | | | | | | | | | | | | | |
| Grey Bodied, Salt-Glazed above w/ brown interior slip | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 | 1.6 |
| Grey, bodied w/cobalt blue | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.2 |
| Brown Bodied, Salt Glazed | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| Black Bodied, "Basalt" | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.2 |
| Total | 0 | 0 | 0 | 6 | 1 | 8 | 0 | 0 | 17 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 | 42 | 4.8 |
| REFINED EARTHENWARE | | | | | | | | | | | | | | | | | | | | | | |
| Burned, unidentifiable | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 1.4 |
| Total | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 1.4 |
| GRAND TOTAL | 1 | 24 | 2 | 420 | 154 | 225 | 11 | 0 | 19 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 12 | 874 | 100 | |
| PERCENT OF SITE TOTAL | 0.1 | 2.7 | 0.2 | 48.1 | 17.6 | 25.7 | 1.3 | 0.0 | 2.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.5 | 0.0 | 1.4 | 100 | | |

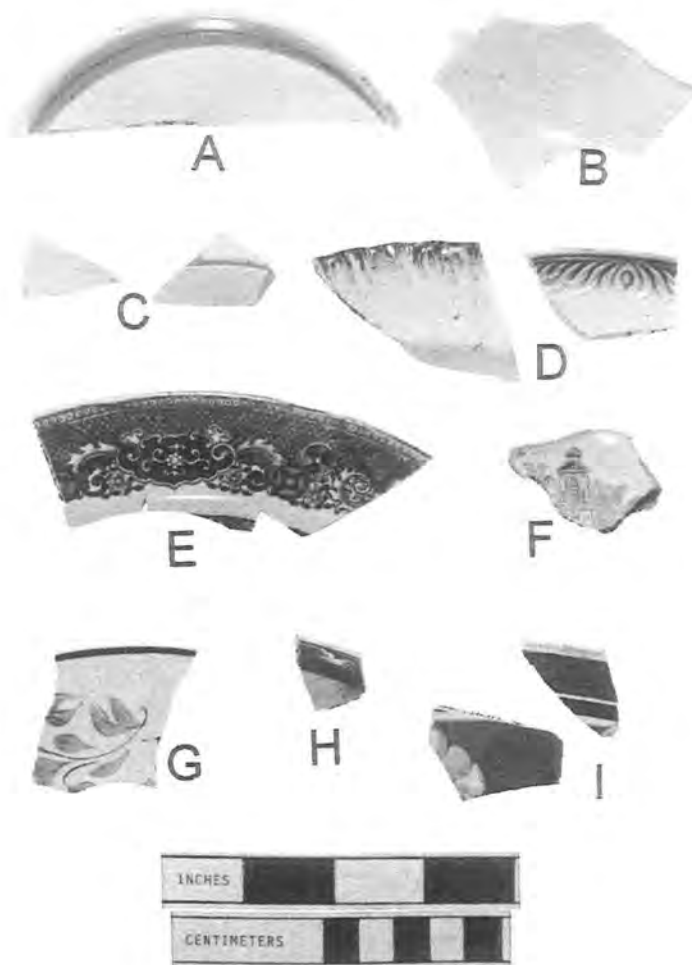


Figure 16. Ceramics: A. Undecorated Creamware, B. Undecorated Porcelain, C. Undecorated Pearlware (two sherds), D. Edge Decorated Pearlware (2 sherds), E. Whiteware with “Willow Pattern” Transfer Print, F. Transfer Printed Whiteware, G. Handpainted Pearlware, H. Handpainted Whiteware rim, I. Annular Whiteware (2 sherds).

Seventy-seven sherds of pearlware were recovered from Roper's Knob, and all but three of these came from the house/yard area, including Feature 10, the builder's trench for the house foundation. Forty-two of the sherds recovered are undecorated, 2 examples of which are shown in Figure 16C. The remaining 35 decorated sherds fall into five decorative categories as shown in Table 3.

Six sherds of pearlware in the Roper's Knob collection are blue, edge decorated. All are from plates with embossed designs on the rims. They represent a minimum of two vessels. Two of these sherds are shown in Figure 16D.

There are 14 transfer printed pearlware sherds. All have blue designs, but they are divided into medium blue (N=9) and dark blue (N=5). The dark blue sherds are what are often called "flow blue." One of the dark blue transfer printed sherds exhibits a pattern identified as "Landing of Gen. Lafayette at Castle Garden, New York, August, 1824." This sherd shows the portion of the pattern with a cannon firing in salute and ships in the harbor. The pattern is attributed to James and Ralph Clews who operated a pottery in Cobridge, England from 1819 to about 1836 (Larsen 1975:53, 57). The sherd appears to be part of a plate or platter.

Four other dark blue sherds form a portion of a rim from a plate or platter. The border pattern on this rim portion is identified in Coysh and Henrywood (1995:20, 142) as being from the "Foliage and Scroll Border Series." James and Ralph Clews and also William Adams produced several views using the same border. Adams may have purchased the engravings for these designs from the Clews when they went out of business in 1834.

The 15 remaining pearlware sherds are hand painted, with nine of these sherds painted in blue and six in polychrome, or multiple colors. The polychrome sherds have floral decorations. One example of handpainted pearlware is shown in Figure 16G.

Whiteware

Sherds of whiteware comprise the largest single ceramic group in the Roper's Knob collection, with a total of 700 sherds equaling 80.1 percent of the ceramics (Table 3). Not surprisingly, 666 (approximately 95%) of the whiteware sherds were recovered from the house/yard area including Feature 10 (builder's trench). Almost half of these (N=329) are undecorated (2 are embossed with no further decoration added). The remaining sherds show a variety of decorative types and colors.

There are 66 edge decorated whiteware sherds (similar to the decoration on the pearlware sherds in Figure 16D). Most (N=48) are blue edged, while the remaining 18 are green edged.

The Roper's Knob site yielded an interesting array of transfer printed whiteware sherds in seven different colors, almost all of them coming from the

House and Yard areas. These colors are blue, dark blue, green, black, purple, brown/yellow, and red.

Three of the blue transfer printed whiteware sherds comprise a portion of a plate or platter rim with a pattern identified as the "Traditional" border for the Willow Pattern (Gaston 1990:11-12, 129). These sherds are shown (cross mended) in Figure 16E. Many early variations of the Willow Pattern exist, but a standard pattern was being produced by the early 19th century (Coysch and Henrywood 1995:402).

Eleven sherds of whiteware have a green transfer printed pattern. These sherds primarily exhibit floral designs, and a minimum of 2 vessels is represented, a plate and a teacup.

A total of 45 whiteware sherds, all from the House and Yard areas, are transfer printed in black. These represent a minimum of four vessels including three plates/platters/saucers and one teacup. A pattern on two of the sherds, which are both portions of the marley of a plate or platter, is identified in Pollan et al. (1996:32) as "Davenport III." This pattern was produced by Davenport, and Pollan et al. assigned a summary date of 1835-1887 to their sherds.

There are 18 sherds of purple transfer printed whiteware, representing a minimum of one vessel. This vessel is a teacup, and the pattern on the cup shows a building (Figure 16F). The pattern could not be identified.

A yellow and brown transfer print was found on 18 of the whiteware sherds. This dual color print forms a floral pattern, and the sherds appear to be from a plate/platter with a scalloped rim.

There are 11 whiteware sherds with a red transfer printed pattern or patterns. These are small sherds from what was probably a plate/platter. The minimum number of vessels with the red transfer print was set at one.

A sizable number of sherds, all but one of them from the House and Yard areas, are hand painted (similar to the decoration on the pearlware sherd in Figure 16G). This includes examples decorated in blue and multiple colors (polychrome). There are 16 of the former and 85 of the latter.

Thirty-six whiteware sherds have some portion of an annular decoration. On 20 of these sherds only the contrasting bands of color are visible, while 16 also have some portion of a swirled design. One of these has a very small portion of swirled decoration, and it is likely that many of the sherds come from one hollowware vessel that had banded decoration at the top and swirled decoration toward the bottom. Examples of two sherds are shown in Figure 16I.

Nine whiteware rim sherds from the House and Yard areas are decorated with rim bands. In most cases these are probably from vessels that had hand

painting or some other kind of decoration below the rim, but this could not be determined due to the small size of the sherd. An example is shown in Figure 16H.

Coarse Earthenware

Coarse earthenware is a type of pottery that is fired at a relatively low temperature and often covered with a clear, lead-based glaze. "Redware" is a common term used by collectors to describe this earthenware (Greer 1981:14). A total of 28 sherds of coarse earthenware was recovered from the site. Most of them (N=21) have a brown glaze color. Seven have a clear glaze or traces of clear glaze over a red body. Four of the latter were recovered from Feature 12, the wall trench of the blockhouse.

Stoneware

Stoneware is fired at a high temperature producing a strong utilitarian ware. It was common in Europe as early as the 14th century, and was produced in America by the late 18th century. By the end of the first quarter of the 19th century, stoneware was being produced in Tennessee (Smith and Rogers 1979; Smith and Nance 2000:161).

Forty-two sherds of stoneware were recovered from the Roper's Knob site, representing 4.8 percent of the ceramics. As shown in Table 3, 14 of these sherds are gray bodied with a salt glaze. Salt glazing was done by introducing salt into a kiln during a high firing stage, with the vaporized salt acting to form a glaze on the surface of vessels. Eleven of the 14 sherds were recovered in the house/yard area, and the other three were recovered in the redoubt and vicinity. Two additional sherds of gray-bodied salt-glazed stoneware have a brown interior slip. One other has a trace of cobalt blue decoration. There are also two salt-glazed stoneware sherds that are brown bodied.

Twenty-three sherds of a black-bodied "Basalt" stoneware were recovered from the site, all from within the redoubt, including eight sherds from Feature 12, the blockhouse wall trench. This is a type of ware that was common from about 1750 to 1820, and the sherds probably came from a vessel that was already an "antique" at the time it was lost (Noel Hume 1970:121-122; South 1977:211).

Ceramic Vessel Forms and Minimum Vessel Counts

An attempt was made to cross mend ceramic sherds to better determine vessel forms. In addition vessel form and decoration were used to attempt to determine the minimum number of vessels represented by the ceramic collection. Table 4 lists the vessel forms identified and the minimum vessel count.

TABLE 4
MINIMUM NUMBER OF VESSELS BY VESSEL FORM

| Wares and Types | Plate | Cup | Small Bowl | Vessel Lid | Storage Jar | Serving Bowl | Pitcher | Jug | Undetermined | Total |
|---------------------------------|-------|-----|------------|------------|-------------|--------------|---------|-----|--------------|-------|
| PORCELAIN | | | | | | | | | | |
| Embossed | | | | | | | | | 1 | 1 |
| Overglaze Enamel | | | | | | | | | 1 | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| CREAMWARE | | | | | | | | | | |
| Undecorated | | | 1 | | | | | | | 1 |
| Total | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| PEARLWARE | | | | | | | | | | |
| Edge Decorated (blue) | 2 | | | | | | | | | 2 |
| Transfer Printed (blue) | 1 | | | | | | | | | 1 |
| Transfer Printed (dark blue) | 1 | | | | | | | | | 1 |
| Handpainted (blue) | 1 | | | | | | | | | 1 |
| Handpainted (polychrome) | 1 | | | | | | | | | 1 |
| Total | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| WHITEWARE | | | | | | | | | | |
| Undecorated | 1 | | | 1 | | | | | | 2 |
| Embossed | 1 | | | | | | | | | 1 |
| Edge Decorated (blue) | 3 | | | | | | | | | 3 |
| Edge Decorated (green) | 2 | | | | | | | | | 2 |
| Transfer Printed (blue) | 2 | | | | | | | | | 2 |
| Transfer Printed (dark blue) | 2 | | | | | | | | | 2 |
| Transfer Printed (green) | 1 | 1 | | | | | | | | 2 |
| Transfer Printed (black) | 3 | 1 | | | | | | | | 4 |
| Transfer Printed (purple) | 1 | 1 | | | | | | | | 2 |
| Transfer Printed (brown/yellow) | 1 | | | | | | | | | 1 |
| Transfer Printed (red) | 1 | | | | | | | | | 1 |
| Handpainted (blue) | | | | | | | | | 1 | 1 |
| Handpainted (polychrome) | | 1 | | | | | | | | 1 |
| Annular (banded) | | | | | | | | | 2 | 2 |
| Annular (swirled) | | | | | | | 1 | | | 1 |

TABLE 4 (continued)
MINIMUM NUMBER OF VESSELS BY VESSEL FORM

| Wares and Types | Plate | Cup | Small Bowl | Vessel Lid | Storage Jar | Serving Bowl | Pitcher | Jug | Undetermined | |
|--|-------|-----|------------|------------|-------------|--------------|---------|-----|--------------|----|
| WHITEWARE (continued) | | | | | | | | | | |
| Rim Bands Only | | 2 | | 1 | | | | | | 2 |
| Total | 18 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 29 |
| COARSE EARTHENWARE | | | | | | | | | | |
| Red Bodied, Clear glaze | | | | | 1 | | | | | 1 |
| Brown Slip | | | | | 1 | | | | | 1 |
| Total | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| STONEWARE | | | | | | | | | | |
| Grey Bodied, Salt-Glazed above w/ brown interior slip | | | | | | | | | 1 | 1 |
| Grey, bodied w/cobalt blue | | | | | | | | | 1 | 1 |
| Brown Bodied, Salt Glazed | | | | | | | | 1 | | 1 |
| Black Bodied, "Basalt" | | | | | | 1 | | | | 1 |
| Total | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 |
| GRAND TOTAL | 24 | 6 | 1 | 1 | 2 | 1 | 1 | 1 | 8 | 45 |

Ceramic Importer's / Manufacturer's Marks and Potter's Marks

Four of the sherds recovered have markings, two being printed marks and two being simply marks impressed into the sherd. Both of the printed marks are from whiteware sherds with a black transfer printed decoration, and each is a partial mark. One of the marks clearly shows the word "HENDERSON," which is part of the mark of the importation firm of Henderson, Walton & Co. or Henderson and Gaines. Four different Henderson partnerships operated in New Orleans at different times, and they imported ceramics manufactured by Davenport. The Davenport firm printed the importer's mark for the firms. Henderson, Walton & Co. operated from 1834 to 1836 and Henderson and Gaines operated from 1836 to 1866 (Pollan et al. 1996:10, 26-27).

The partial mark on the second sherd could not be identified. The letters are in script enclosed in a wreath, and the first word might be "Swiss." A partial word on a second line begins with "Bor... ." It is possible that this mark gives the name of the pattern printed on the vessel.

The two impressed marks are probably potters' tally marks that do not represent a specific manufacturer. One of these marks, on a sherd of polychrome handpainted whiteware, is in the shape of a flower, and the other, found on an undecorated whiteware lid, is a "T."

Mean Ceramic Date

Using the formula developed by South (1977:217-218, 236), a mean ceramic date was calculated for the House and Yard areas, the only areas with a large enough sample of sherds to produce a meaningful result. The mean ceramic date calculations are based on the total number of sherds for certain ceramic types and a median date of manufacture for each type. Not all of the ceramics from a site can be used in the calculations because adequate dates cannot usually be assigned for porcelain, coarse earthenware, and some stonewares. Table 5 lists the Roper's Knob site ceramic types used for the calculations. This is followed by Table 6, which lists the number of sherds used for each provenience and the mean ceramic dates calculated. The groupings used are Zones I and Zone II of the House Area (including Feature 10), the Yard Area, and a Total for both areas. As would be expected, the sherds from Zone II of the House Area yielded an earlier date than those from Zone I. The Zone II sherds were deeper and were presumably deposited before the period of demise of the house. When all three provenience were combined a mean ceramic date of 1848.1 was produced. Further discussion of the meaning of this date is deferred to the concluding section.

TABLE 5
DATES USED FOR DETERMINATION OF MEAN CERAMIC DATE

| <i>Ware Type/decoration</i> | <i>Date Range</i> | <i>Mean Date</i> | <i>Source</i> |
|--------------------------------|-------------------|------------------|-------------------------------------|
| Creamware | | | |
| Undecorated | 1762-1820 | 1791 | South 1977, Smith 1983, 1993 |
| Pearlware | | | |
| Undecorated | 1780-1830 | 1805 | South 1977, Smith 1983, 1993 |
| Edge Decorated, blue | 1780-1830 | 1805 | South 1977, Smith 1983, 1993 |
| Transfer Printed, blue | 1805-1830 | 1817.5 | Weaver 1993 |
| Transfer Printed, dk. blue | | 1817.5 | |
| Handpainted, blue | 1780-1830 | 1805 | Smith 1993 |
| Handpainted, polychrome | 1795-1830 | 1812.5 | Smith 1993 |
| Whiteware | | | |
| Undecorated | 1830-1890 | 1860 | Smith 1983 |
| Embossed | | 1860 | |
| Edge Decorated, blue | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Edge Decorated, green | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, blue | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, dk. blue | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, green | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, black | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, purple | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, yellow/brown | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Transfer Printed, red | 1830-1860 | 1845 | Price 1979, Garrow 1983, Smith 1983 |
| Handpainted, blue | 1830-1870 | 1850 | Price 1979, Garrow 1983, Smith 1983 |
| Handpainted, polychrome | 1830-1870 | 1850 | Price 1979, Garrow 1983, Smith 1983 |
| Annular, banded | 1830-1870 | 1850 | Smith 1983 |
| Annular, swirled | 1830-1870 | 1850 | Smith 1983 |

TABLE 6
MEAN CERAMIC DATES FOR THE HOUSE AND YARD
AREAS OF THE ROPER'S KNOB SITE

| <i>Provenience</i> | <i>Number of Sherds Used</i> | <i>Mean Ceramic Date</i> |
|--------------------|------------------------------|--------------------------|
| House, Zone I | 394 | 1849.5 |
| House Zone II | 139 | 1842.7 |
| Yard | 207 | 1849.1 |
| TOTAL | 740 | 1848.1 |

Bottles and Glassware

This category combines six of the Kitchen Group classes shown on Table 2. This includes five of the classes originally used in the South (1977:95) classification system. As noted at the beginning of the Kitchen Group discussion, a class for "General Bottle Glass" has also been added. The distribution of items in these six classes is shown in Table 7. Container glass was much more randomly distributed across the Roper's Knob site than ceramic sherds. Only 8.1 percent of the ceramic collection came from outside the House and Yard areas, while 32.6 percent of the container glass pieces were from outside this house/yard area.

Wine Bottles

A total of 291 pieces of glass from the Roper's Knob site were assigned to the Wine Bottle Class. These are fragments of bottles that are relatively thick and are dark olive-green in color. The types of bottles represented by these fragments commonly contained wine and other alcoholic beverages. Wine bottle fragments comprise 37.8 percent of the container glass collection. Excavations in the general area of the redoubt, which yielded only 2.3 percent of the ceramic sherds, produced 18.9 percent of the wine bottle glass.

Some of the fragments recovered from the house/yard area are from the lip, neck, and base of at least two wine bottles. Some of the characteristics of these fragments help to date the bottles. An intact lip and upper neck portion (Figure 17A), along with many body fragments, was recovered from Zone I of the House Area. The lip was sheared from a blowpipe and has an added irregular bead of glass, approximately 10 mm wide, applied around the lip, an average of 7 mm from the top.

**TABLE 7
DISTRIBUTION OF BOTTLE GLASS AND GLASSWARE BY PROVENIENCE**

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | | |
|-----------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----|------|--|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| WINE BOTTLES | 29 | 12 | 3 | 152 | 2 | 22 | 1 | 0 | 40 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 291 | 37.8 | |
| CASE BOTTLES | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| TUMBLERS | | | | | | | | | | | | | | | | | | | | | | | |
| Cylindrical | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| Fluted | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| Total | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.3 | |
| PHARMACEUTICAL BOTTLES | | | | | | | | | | | | | | | | | | | | | | | |
| Green | 3 | 0 | 0 | 9 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 3.2 | |
| Aqua | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 | 1.8 | |
| Total | 3 | 0 | 0 | 20 | 0 | 13 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 39 | 5.1 | |
| GENERAL BOTTLE GLASS | | | | | | | | | | | | | | | | | | | | | | | |
| Clear | 0 | 2 | 4 | 20 | 4 | 8 | 2 | 0 | 17 | 0 | 0 | 0 | 2 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 79 | 10.3 | |
| Green | 2 | 8 | 6 | 58 | 8 | 47 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 17.8 | |
| Amber/Brown | 12 | 8 | 0 | 34 | 0 | 26 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 10.8 | |
| Aqua | 7 | 0 | 1 | 31 | 0 | 1 | 17 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 66 | 8.6 | |
| Total | 21 | 18 | 11 | 143 | 12 | 82 | 21 | 0 | 29 | 0 | 3 | 0 | 2 | 0 | 22 | 0 | 0 | 0 | 0 | 1 | 365 | 47.4 | |
| GLASSWARE | | | | | | | | | | | | | | | | | | | | | | | |
| Dish, Frosted, Cut Design | 0 | 0 | 0 | 11 | 53 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 8.7 | |
| Dish, Clear, Mold decorated | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| Dish, Brown Glass | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0.6 | |
| Total | 0 | 1 | 1 | 12 | 53 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 9.5 | |
| GRAND TOTAL | 53 | 31 | 15 | 327 | 67 | 125 | 22 | 0 | 71 | 15 | 3 | 0 | 2 | 0 | 23 | 0 | 0 | 0 | 0 | 16 | 770 | 100 | |
| PERCENT OF SITE TOTAL | 6.9 | 4.0 | 1.9 | 42.5 | 8.7 | 16.2 | 2.9 | 0.0 | 9.2 | 1.9 | 0.4 | 0.0 | 0.3 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 100 | | |



Figure 17. Bottle Glass: A. olive Wine Bottle fragments, B. partial Case Bottle, C. small mold-blown bottle base, D. Pharmaceutical Bottle lip, E. Pharmaceutical Bottle base, F. decorative glass from dish, G. mold-blown bottle base.

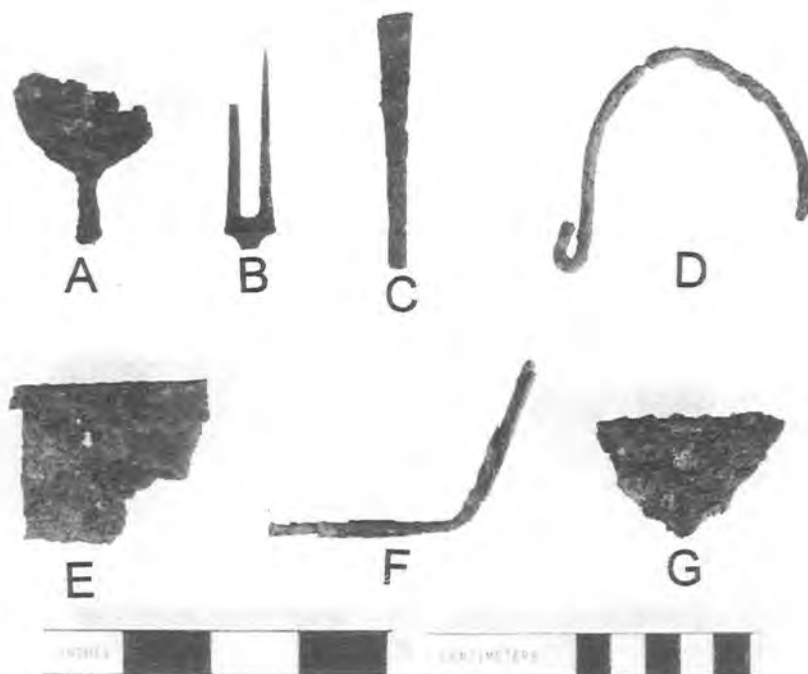


Figure 18. Kitchen Group items: Tableware Class - A. iron spoon, B. two-tine iron fork, C. iron utensil handle; Kitchenware Class - D. Iron bail, E-F. tin container rims, G. cast iron container fragment.

This "applied lip" indicates that the bottle was manufactured between 1840 and 1870. The lip and other neck fragments have no visible seams, but there are visible seams on one base fragment and some body sherds recovered from the house/yard area. Mold seams on the body that end at the neck indicate that the bottle was blown into a mold to shape the body, but the neck was finished by hand. This indicates a manufacturing date between 1845 and 1885 (Newman 1970:72-75).

A base fragment recovered in the Yard Area, in addition to showing the mold seams, has a pontil scar on the base (Figure 17G). A pontil is a tool that was attached to the base of a bottle to hold it while the neck and lip were being finished. It was snapped off when the process was complete, leaving a slight scar or indentation. The use of pontils had been replaced by other techniques by the 1870s (Jones 1971:68-72).

Case Bottles

One piece of glass (Table 7) was identified as being a portion of a case bottle. Case bottles are square sided or sometimes octagonal sided bottles that were made to pack into a case for shipping. The one example from the Roper's Knob site is the lip, neck and shoulder portion of a square sided bottle. It is light green in color with a heavy patina from weathering (Figure 17B).

Tumblers

Only two pieces of glass were identified as being from tumblers. One of these appears to be the lip of a cylindrical tumbler while the other is a body portion of a fluted tumbler.

Pharmaceutical Bottles

Pharmaceutical bottles are small containers used for medicines or toiletries. Thirty-nine pieces of pharmaceutical bottles were recovered from Roper's Knob, 33 of them coming from the house/yard area. Of the total, 25 are green and 14 are aqua. Portions of embossing were found on 3 of the pieces, but none were complete enough to determine a product or manufacturer name. The lip of a pharmaceutical bottle is shown in Figure 17D and a base in Figure 17E.

General Bottle Glass

The General Bottle Glass Class contains 365 fragments. These were subdivided by color as shown in Table 7. As with most of the artifact classes, the majority of these pieces (N=237) were found at the house/yard area.

Glassware

Seventy-three pieces of glassware were recovered from Roper's Knob, and all are identified as pieces of serving type dishes. An example is shown in Figure 17F. Most of these pieces (N=71) were recovered from the house/yard area. A majority of these (N=67) are frosted glass with a cut design. These pieces represent a minimum of two vessels.

Tableware

The Tableware Class contains only 6 items, distributed as shown in Table 8. Two partial knife blades were recovered, as well as fragments of two forks and one spoon. All are made of iron. The knife blade fragments are 24 mm and 21 mm wide. The spoon fragment consists of a portion of the bowl and a short piece of the stem (Figure 18A). One fork fragment has two tines; one is broken, but the intact tine is 46.5 mm long (Figure 18B). The other partial fork is just the handle mid section (Figure 18C). Additionally there is one bone scale fragment from a tableware handle, which was found on the West Terrace. The remaining portion of the bone scale retains two brass pins for attaching the handle to a flat, metal tang.

Kitchenware

The Kitchenware Class (Table 8) includes parts and pieces of various cooking and food storage containers such as kettles, dutch ovens, buckets, and items made of tinware, including tin cans. A portion of an iron bucket bail is shown in Figure 18D, two rim sections of tinware containers are shown in Figure 18E and F, and a piece from of a cast iron cookware container is shown in Figure 18G.

Within the total of 636 kitchenware items, 588 are categorized as miscellaneous tinware fragments, 13 are pieces of tinware vessel rims, and 3 are tinware fragments that show part of a seam. An additional 18 pieces of tinware are identified as pieces of tin cans. Seventeen of these are from cylindrical cans while one is from a rectangular can such as a sardine can. The canning of food began in the early nineteenth century when Nicholas Appert, challenged by Napoleon Bonaparte to develop a process for keeping food fresh, demonstrated that many foods could be preserved in sealed jars. In 1810 Augustus de Heine and Peter Durand obtained English patents for canning food in tin containers. Canned foods were available during the Civil War. Gail Borden developed a method for condensing milk and vacuum canning it. The United States government bought Borden's milk and other canned goods for the army (Clark 1977:11-17).

The remainder of the kitchenware group consists of 12 pieces of cast iron cookware, probably from dutch ovens or iron skillets, and 2 iron bucket bails.

TABLE 8
DISTRIBUTION OF TABLEWARE AND KITCHENWARE BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|--------------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------|-----|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | |
| TABLEWARE | | | | | | | | | | | | | | | | | | | | | | |
| Iron Knives | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.3 |
| Iron Forks | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.3 |
| Iron Spoons | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.2 |
| Bone Scale Fragments | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.2 |
| Total | 0 | 2 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.9 |
| KITCHENWARE | | | | | | | | | | | | | | | | | | | | | | |
| Cast Iron Cookware Fragments | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 12 | 1.9 |
| Tinware Rim Fragments | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 13 | 2.0 |
| Tinware Seam Fragments | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0.5 |
| Misc. Tinware Fragments | 7 | 28 | 1 | 165 | 13 | 15 | 20 | 0 | 49 | 3 | 0 | 0 | 0 | 1 | 14 | 0 | 1 | 0 | 271 | 588 | 91.6 | |
| Tin Can Fragments, cylindrical | 0 | 0 | 0 | 11 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 2.6 |
| Tin Can Fragments, rectangular | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.2 |
| Iron Bucket Bail | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.3 |
| Total | 7 | 31 | 1 | 191 | 13 | 16 | 23 | 0 | 60 | 3 | 0 | 0 | 0 | 1 | 16 | 1 | 2 | 0 | 271 | 636 | 99.1 | |
| GRAND TOTAL | 7 | 33 | 1 | 194 | 14 | 16 | 23 | 0 | 60 | 3 | 0 | 0 | 0 | 1 | 16 | 1 | 2 | 0 | 271 | 642 | 100 | |
| PERCENT OF SITE TOTAL | 1.1 | 5.1 | 0.2 | 30.2 | 2.2 | 2.5 | 3.6 | 0.0 | 9.3 | 0.5 | 0.0 | 0.0 | 0.0 | 0.2 | 2.5 | 0.2 | 0.3 | 0.0 | 42.2 | 100 | | |

Architectural Group

The architectural group includes items related to the construction of buildings, subdivided into four classes (Table 2). This is the largest group from the Roper's Knob site (N=2,865) comprising 52.8 percent of the total historic artifacts.

Window Glass

A total of 1,016 pieces of window glass was recovered from the Roper's Knob site. Pieces of glass assigned to this class are flat, relatively thin, and clear or green tinted. About 94 percent of the total number of fragments (N=958) came from the house/yard area. Twenty-five more pieces came from the Terrace, and 23 were found in the excavations on the platform. Table 9 shows the distribution of glass for the Roper's Knob site, grouped by thickness into 0.50 mm increments.

The thickness of window glass can be used as an indicator of its date of manufacture. During the nineteenth thickness increased through time, and assuming a straight-line progression of this trend, a general date can be determined for a given collection. Ball (1982:13) presents a formula based on samples taken from several sites, primarily in Kentucky. His formula is expressed as:

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

In this formula, D = the date and M = the mean thickness in millimeters of the sample.

Moir (1987) provides another formula for calculating the manufacture date of window glass. His formula as quoted in Meyers (2001:69) is:

$$\text{Initial date} = (84.22 \times \text{mean in millimeters}) + 1712.7.$$

Both formulae were applied to the Roper's Knob sample and the results are as follows:

| Formula | House Zone I | House Zone II | Yard |
|---------|--------------|---------------|--------|
| Ball | 1806.9 | 1806.2 | 1807.9 |
| Moir | 1812.5 | 1812.1 | 1814.6 |

The dates produced by either of these formulae are earlier than the historically suggested date of construction for the house on Roper's Knob, ca. 1829 to 1833. However, Meyers (2001:69) states that in Tennessee Moir's formula only appears to be accurate to within 15 years. If this amount is added to the Moir formula dates, then they at least approach the historically suggested date. More discussion of this appears in the concluding section.

TABLE 9
DISTRIBUTION OF WINDOW GLASS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|-----------------------|---------------|--------------|--------------|------------------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------|------|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | |
| | | | | 0.50mm TO 0.99mm | 0 | | 0 | 0 | | | | | | | | | | | | | | 0 |
| 0.01mm TO 0.49mm | 0 | 0 | 0 | 60 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 7.2 |
| 1.00mm TO 1.49mm | 2 | 12 | 0 | 551 | 119 | 92 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 789 | 77.7 | |
| 1.50mm TO 1.99mm | 7 | 1 | 0 | 77 | 23 | 8 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 133 | 13.1 |
| 2.00mm TO 2.49mm | 0 | 1 | 1 | 3 | 0 | 5 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 17 | 1.7 |
| 2.50mm TO 2.99mm | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| > OR = 3.00mm | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| GRAND TOTAL | 10 | 14 | 1 | 692 | 153 | 109 | 23 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 | 1 | 1,016 | 100 | |
| PERCENT OF SITE TOTAL | 1.0 | 1.4 | 0.1 | 68.1 | 15.1 | 10.7 | 2.3 | 0.0 | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.4 | 0.0 | 0.1 | 100 | | |

Nails and Spikes

Nails and spikes represent two separate classes in the South (1977:95) Architectural Group. A total of 1,812 nails, spikes, and tacks was recovered from Roper's Knob, comprising 63.2 percent of the Architectural Group. This total does not include horseshoe nails, which are found in the Activities Group, upholstery tacks, found in the Furniture Group, and shoe tacks, found in the Clothing Group. Nails are common elements of construction, and their presence in large numbers usually indicates the site of some structure. As for other artifacts found on the Roper's Knob site, a large number of nails came from the house/yard area (N=672). An additional 203 nails and spikes were found in the redoubt, plus a total of 52 recovered in Features 4 and 12 within the redoubt. Zone I of the Platform Area yielded 712 nails suggesting the former presence of a structure there. A total of 158 came from the Terrace areas, particularly the South and West Terrace in the general vicinity of the House Area. Those nails too heavily corroded to allow identification are grouped into a residual category called "Unidentified" (Table 10).

Traditionally, the process of making a nail started with the heating of iron ore in a blast furnace to produce cast iron, sometimes call "pig iron." The brittle cast iron was further heated in the finery and chafery where impurities and excess charcoal were burned off. The iron was then hammered using a large water powered hammer, yielding a malleable wrought iron that could be rolled into sheets and slit into bars. Nail makers used the bar iron to produce wrought nails by hammering the bar into the desired thickness, then shaping the point, either sharp or flat. The nail was cut from the bar stock and headed in a separate heading device. Machines were later invented that could cut a sheet of iron into nails. The heads were still added by hand at first, but later machines could also head the nail (Fruirip et al. 1983:6-9; Smith et al. 1988:26; Smith and Nance 2000:187).

Nail Type Descriptions

Hand Wrought Iron Nails

Hand wrought nails were used in America from the first settlement to the nineteenth century. Even as machine made nails became common, hand wrought nails continued in use until about 1850 because they were not as brittle as early machine cut nails and could be clinched without breaking. The characteristics of a hand wrought nail include a shaft that is tapered on four sides, and an irregular square or rectangular cross section. They lack the burrs created by the cutting process that are common on machine cut nails. The grain of the nail runs longitudinally along the length of the nail.

Only 13 hand wrought nails were found on the Roper's Knob site, representing less than one percent of the total number of nails and spikes. All but

TABLE 10
DISTRIBUTION OF NAILS AND SPIKES BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | Feature 14 | SITE TOTAL | % | |
|-----------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------|-----|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | | |
| HAND WROUGHT NAILS | | | | | | | | | | | | | | | | | | | | | | | |
| Rose Head | | | | | | | | | | | | | | | | | | | | | | | |
| Sharp Point | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.1 |
| Head Portion | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0.2 |
| Square Head | | | | | | | | | | | | | | | | | | | | | | | |
| Sharp Point | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.1 |
| Head Portion | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| T-Head, Indeterminate Point | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.1 |
| Shaft Fragment, Flat Point | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.1 |
| Total Hand Wrought | 0 | 0 | 0 | 10 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0.7 |
| EARLY MACHINE CUT NAILS | | | | | | | | | | | | | | | | | | | | | | | |
| Hand Headed, Rose Head | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| Machine Headed | 0 | 4 | 0 | 126 | 1 | 3 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 8.2 |
| Total Early Machine Cut | 0 | 4 | 0 | 126 | 1 | 3 | 15 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 8.3 |
| LATER MACHINE CUT NAILS | | | | | | | | | | | | | | | | | | | | | | | |
| Machine Headed | 28 | 41 | 14 | 174 | 0 | 41 | 421 | 0 | 123 | 7 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 15 | 0 | 875 | 48.3 | |
| Headless | 0 | 0 | 0 | 3 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.3 |
| L-Head | 0 | 1 | 0 | 58 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 3.8 |
| Total Later Machine Cut | 28 | 42 | 14 | 235 | 0 | 46 | 428 | 0 | 123 | 7 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 15 | 0 | 949 | 52.4 | |
| CUT NAIL SHAFT FRAGMENT | 20 | 45 | 4 | 180 | 9 | 21 | 255 | 0 | 62 | 7 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 10 | 1 | 626 | 34.5 | |

two of these early nails came from the house/yard area. Examples were divided into categories based on head type, then point type, as shown in Table 10. Six have rose heads. Rose Head nails are so called because they have multiple facets on the head created by multiple hammer blows. Two of these have sharp points while the other four are just head portions. Rose head nails are shown in Figure 19A-B.

Three hand wrought nails have square heads that are unafaceted and generally square. Like the rose head nails these are general-purpose nail. Two have a sharp point and one is a head portion only.

Two T-Head nails with points that were too heavily corroded to determine the type were recovered. The "T" shaped heads were created by hammering the sides of what may have begun as generally flat or even rose heads. Nelson (1968) refers to T-head nails as finish nails that are often used in flooring and trim.

Two shaft fragments with hand wrought flat points were also found. Like most of the hand wrought specimens, these came from the House Area.

Early Machine-Cut Nails

Machines for manufacturing nails were in use by the late Eighteenth Century, though the earliest machine cut nails still had to be headed by hand. Ezekiel Reed received a patent for a nail cutting machine in the 1780s, and Adam Rogers had developed a similar machine by 1788 (Edwards and Wells 1993:15; Phillips 1994:5). These early machines cut nails from a flat piece of iron by movable dies. The resulting nail had two tapered sides and two flat parallel sides. The plate was not turned over between cuttings, so the nail shaft had burrs on diagonally opposite sides. Furthermore, the cutting process gave the early nails a cross section roughly approximating a parallelogram. The grain of these early cut nails was perpendicular to the shaft making them more brittle than hand wrought nails (Phillips 1994:5, 9).

Congress imposed an import tax on foreign nails in 1789, and American nail manufacturing and manufacturing technology grew quickly. By 1794 Jacob Perkins had developed a two-stage machine operation for cutting and heading nails. His process produced a nail whose head tended to be irregular. By 1807 Ezekiel Reed's son, Jesse Reed, had developed a machine that could cut and head a nail in one operation. Nails soon became more regular in shape (Nelson 1968; Edwards and Wells 1993:16-17; Phillips 1994:5-6).

One hundred fifty nails recovered from the Roper's Knob site are comparable to the early machine cut nails described by Nelson (1968), and all but one of these appear to have been machine headed. One of these early machine cut nails, recovered from the platform, appears to have a hand made rose head. Those nails classified here as "Early Machine Cut and Machine Headed" are morphologically similar to the "Type 4" nail described by Edwards and Wells (1993:52, 61-63).

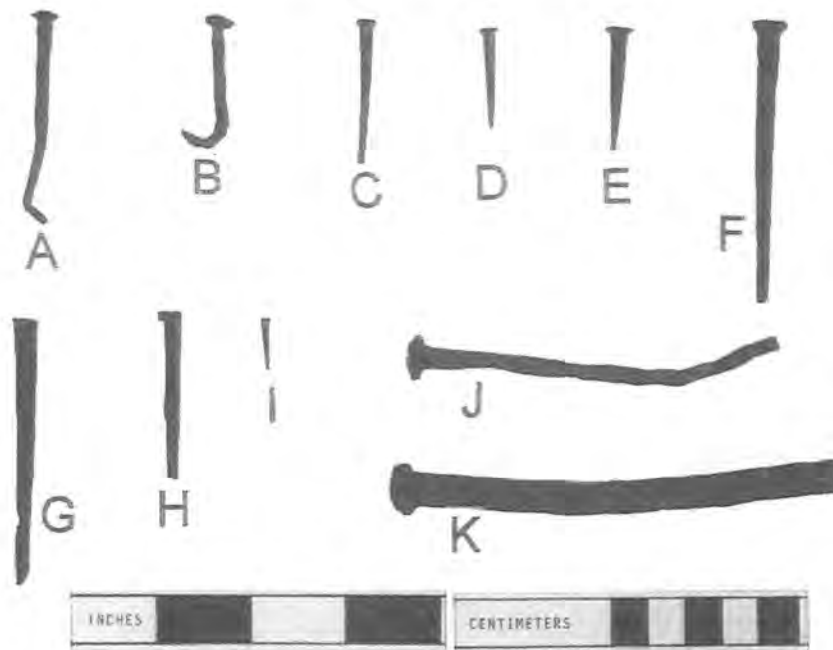


Figure 19. Representative nails: A-B. hand wrought, rose head nails, C-E. early machine made nails, F. later machine made nail, G. machine made headless nail, H. machine made L-head nail, I. iron tack, J-K. machine made spikes.

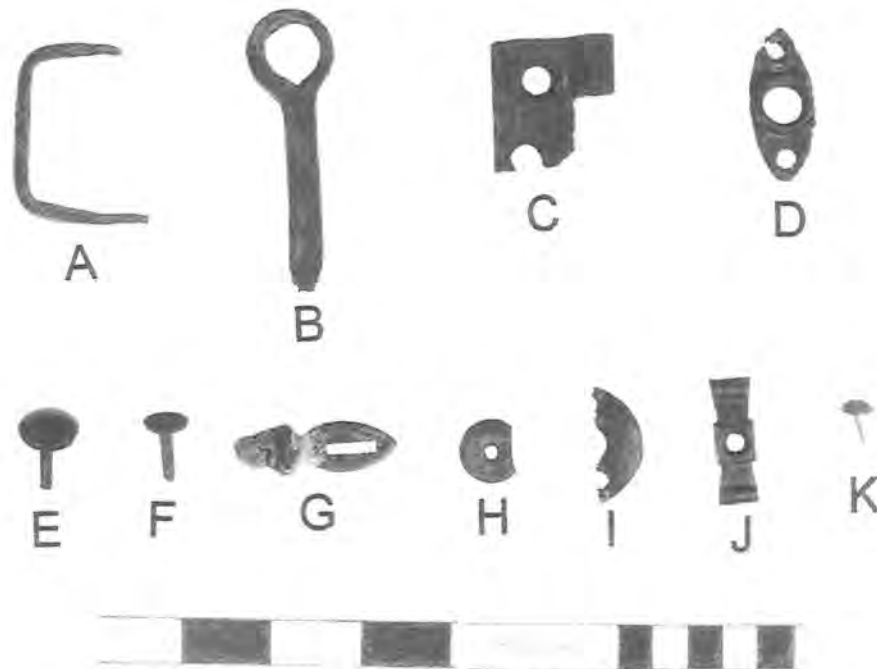


Figure 20. Construction Hardware: A. iron bow staple, B. iron pintle, C. iron hinge, D. iron escutcheon or bracket. Furniture Group items: E-F. brass wick adjusters, G. brass hasp, H. brass escutcheon plate, I. brass keyhole escutcheon plate, J. iron wing nut, K. brass upholstery tack.

Examples recovered from Roper's Knob are shown in Figure 19C-E. The characteristics of these nails include a rectangular cross-section (though sometimes irregular), two sides that are tapered and two that are parallel, pinching on the side of the nail just under the head resulting from the header clamp, and burrs on opposite sides of the nail (indicating that the plate was not turned between cuttings). The "Type 4" nails saw heaviest usage from 1792 to 1836, but they were still in use into the 1840s. Nelson (1968) attributes a date range of 1815s to late 1830s for "Early Machine Headed Cut Nails," which have similar characteristics. As shown in Table 10, 130 of the 150 early machine cut and machine headed nails were found at the house/yard area. Fourteen nails recovered from the platform were identified as being early machine cut and machine headed.

Later Machine-Cut Nails

"Later" machine cut and headed nails recovered from Roper's Knob are comparable to what Nelson (1968) refers to as "Modern" Machine Cut nails, which he assigns a general date range of late 1830s to the present. These share similar morphological characteristics with the "Type 8" nail described by Edwards and Wells (1993:56, 61-62). They attribute a date range of 1830 to 1885 for the heaviest usage of this nail type. Features of the "later" machine cut, machine headed nails from Roper's Knob include beveled and somewhat rounded faces on the shaft under the head, burrs on the same side of the shaft (indicating that the plate was turned after each nail was cut by the die), a uniform rectangular cross section of the shaft, and a uniform rectangular head.

The 949 "Later Machine Cut Nails" from Roper's Knob are divided into three sub categories of Machine Headed, Headless, and L-head. The Machine Headed nails are most numerous (N=875). As shown in Table 10, 174 examples of this type of nail were recovered from Zone I of the House Area and 41 from the Yard Area. By contrast, 421 of these nails came from Zone I of the Platform Area. There were also 149 recovered from the redoubt, including those from Features 4 and 12 within the redoubt. An additional 83 were scattered over the Terrace.

Six nails were classified as being machine cut headless nails, and one of these is shown in Figure 19G. These nails were manufactured without a head for special purposes such as finish nails. They were classified with the later machine cut nails because the shafts showed similar characteristics such as a uniform rectangular cross section and burrs on the same side of the shaft. Their distribution is shown in Table 10.

The Later Machine Cut L-Head nails from Roper's Knob are similar to what Nelson (1968) describes under the heading "completely machine cut sprigs and brads." They have the sharp corners at the head that he attributes to those nails manufactured after 1810, and they have burrs on the same side of the shaft. An example is shown in Figure 19H. This type of nail was used for trim and flooring.

Cut Nail Shaft Fragments

A sizable quantity of broken nail shafts (N=626) was found. These pieces had no head to further identify them. Their distribution, shown in Table 10, follows the pattern for the later machine cut nails.

Special Purpose Nails

One specimen recovered from Zone I of the House Area is a Striking nail, a type commonly used in wagon building and repair. It has a large, flat, square head. Such nails were used to fasten sections of iron tires, called strakes, to the exterior rim of a wooden wheel or to rim segments, called felloes (Grimm 1970:116, 126, 155; Gove 1986:836, 2255). The example from Roper's Knob, found in Zone I of the House Area, is similar to examples found on the site of Fort Blount, a late eighteenth century military post in Jackson County, Tennessee (Smith and Nance 2000:189, 194).

Iron Tacks

Nine iron tacks were recovered from Roper's Knob. These are generally smaller than other nails in the collection (Figure 19I). One appears to be hand made, having a flat head and a sharpened point. Six are machine made, resembling their larger counterparts listed under machine cut and headed nails. Two others are machine made L-head tacks.

Spikes

Fourteen spikes were recovered from the Roper's Knob site, and these fall into two general types. Eleven are larger versions of the Later Machine Headed Cut nails with slightly thicker shafts that have more of a square cross section (Figure 19J). Complete examples of these spikes are over 100 mm in length. Three have thick, square shafts and large, blocky heads (Figure 19K). One spike was found in Zone I of the House Area and all others came from the Redoubt Area and its associated features.

Merrill's drawings of blockhouses show the use of spikes in the construction of these defensive structures. He also notes that later blockhouse construction was made easier by using spikes to join the corners rather than complex mortise and tenon joinery. This made possible the construction of octagonal blockhouses with less cost and no special expertise needed (Merrill 1864).

Construction Hardware

The Construction Hardware Class includes items used in the construction of buildings, excluding nails and window glass, which were discussed above. A small number of Roper's Knob artifacts (N=38) were assigned to this class (Table 11), and they make up only 1.3 percent of the Architectural Group. Most of the items placed

TABLE 11
DISTRIBUTION OF CONSTRUCTION HARDWARE BY PROVENIENCE

| CONSTRUCTION HARDWARE | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|-----------------------|-------|------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|----|------|
| | Z I | Z II | Z I | Z II | Z I | Z II | | | | | | | | | | | | | | |
| Bow Staples | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5.3 |
| Pintle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2.6 |
| Iron Hinge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2.6 |
| Roofing Tin | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 33 | 86.8 |
| Iron Escutcheon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2.6 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 38 | 100 |

in this class (N=33) are believed to be pieces of roofing tin, and all of these were found in Feature 4, the east cistern area depression in the redoubt. Except for these pieces, all of the tin fragments found on the Roper's Knob site were categorized as tinware (in the Kitchen Group), but these particular fragments do seem to be from tin roofing. Some have square corners or nail holes. One collector, who with landowner's permission had relic hunted on Roper's Knob in the 1970s, reported finding large amounts of roofing tin, and he further stated that a friend had dug into the "bomb proof" (perhaps meaning a magazine, but possibly referring to the east cistern depression) and found large amounts of roofing tin. One of the former owners of the site reported seeing a large "dump" of roofing tin on the north slope of the knob. This suggests a possibility that the blockhouse inside the redoubt had a tin roof. There is no documentation to indicate that this, or any blockhouse for that matter, had a tin roof, but it seems unlikely that anyone would haul old roofing tin up the steep hill just to dump it. It is also possible, however, that some post-war structure with a tin roof was built on the upper knob.

Five other artifacts, all recovered from Zone I of the house remains, are included in the Construction Hardware Class. All are made of iron, including 2 bow staples, 1 pintle, 1 fragment of iron hinge, and 1 iron escutcheon or bracket, with a circular threaded opening for attaching something. Artifacts from this class are shown in Figure 20 (A-D).

Furniture Group

The Furniture Group includes pieces of furniture hardware that typically survive in an archaeological context. A total of 9 such items was recovered from Roper's Knob (Table 12), equaling only 0.2 percent of the total historic artifacts (Table 2). Eight of these came from Zone I of the House Area, one from the West Terrace.

Included are three brass knobs, identified as lantern wick adjusters (Figure 20E-F). Two of these came from the House Area, one from the West Terrace. There is one small brass hasp (Figure 20G) that is leaf shaped with a circular area where it attached to something else. It has a thin rectangular opening made to fit over a loop. The proximal end has a fragment of corroded iron from an attachment screw or nail. One partial brass escutcheon plate (Figure 20H) is probably a drawer handle escutcheon, while a second one (Figure 20K) is a keyhole surround. There is one small iron wing nut that probably came from an item of furniture (Figure 20J).

Two brass tacks are included in this group because they are believed to be upholstery tacks. These have domed heads with welded shanks. This type of tack was often used to secure leather or cloth to chairs and was sometimes used as ornamentation on leather covered trunks. One is shown in Figure 20K.

TABLE 12

DISTRIBUTION OF FURNITURE HARDWARE BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | |
|--------------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|---|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Lantern Adjustment Knob, Brass | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Hasp, Brass | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Escutcheon, Brass | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Wingnut, Iron | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Upholstry Tack, Brass | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| GRAND TOTAL | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |

Arms Group

The original Arms Group (South 1977:95) includes all artifacts associated with firearms. For the present report, however, artifacts that appear to relate to military arms are discussed as part of a separate "Civil War Artifacts Group." Only six non-military arms items were found on Roper's Knob (Table 13). Five of these came from Zone I of the House Area, and one from Feature 12.

Musket Balls and Shot

Hamilton (1976:35) suggests a division between musket balls and lead shot based on size. Accordingly, lead balls smaller than .45 caliber are classified as shot. Two round lead shot were found in the House Area. They are .31 and .32-.33 caliber (Figure 21A and C).

One musket ball (Figure 21B) was found in Feature 12, the Blockhouse wall trench. It measures .65 caliber and has the remnants of a casting sprue. Though round balls were still used during the Civil War, they were rapidly phased out in favor of the conical Minie Ball. While it seems most likely that this example was lost during the pre-Civil War era, it is possible that it could be from a spherical case or canister artillery shell (Peterson 1969:107-111). If so it would actually belong in the Civil War Artifacts Group.

Gunflints

Three gunflints were recovered from the House Area (Table 13). Gunflints were used in the firing mechanism of flintlock muskets and rifles. When the trigger was squeezed on a flintlock, it caused the cock to rotate forward so that the flint struck the frizzen, a steel piece that covered the pan. The striking action pushed back the frizzen causing a spark to ignite the black powder in the pan, which in turn ignited the charge in the barrel of the weapon. Gunflints were held in a part of the lock called the jaw with leather or lead grips and clamped down with a screw.

True flint came from England and is black in color. Other so-called flints are actually varieties of chert. The "French Flints" are honey colored. Gunflints are flat and generally rectangular with beveled edges. The small flat surface on the top face is called the plateau and the opposite side is the bed or bottom face. The edge that strikes the frizzen is called the bevel and the edge opposite the bevel is the heel or seat (Witthoft 1966:16-17; Blanchette 1975:44; Hamilton 1980:22-23; Kent 1983:29-31; Smith 1993:266-271).

One of the Roper's Knob specimens is a French type gunflint that measures approximately 20 mm by 19 mm (Figure 21e). The other two are English. One of the latter measures approximately 20 mm by 10 mm. The second is approximately 18 mm in length but is broken (Figure 21d).

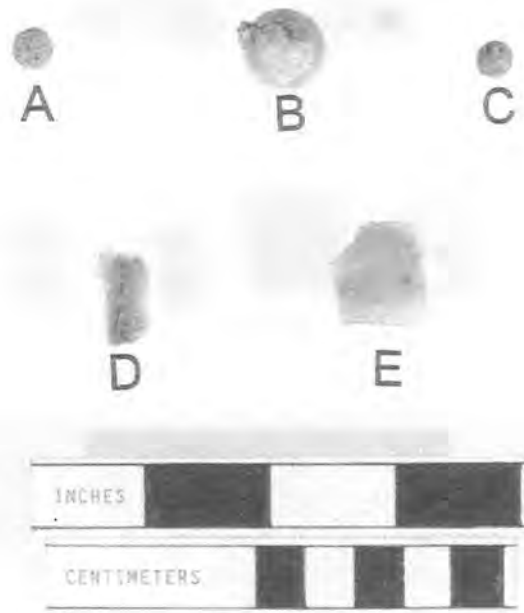


Figure 21. Arms Group: A. .32-.33 caliber shot, B. .65 Caliber musket ball, C. .31 caliber shot, D. English gunflint fragment, E. French gunflint.

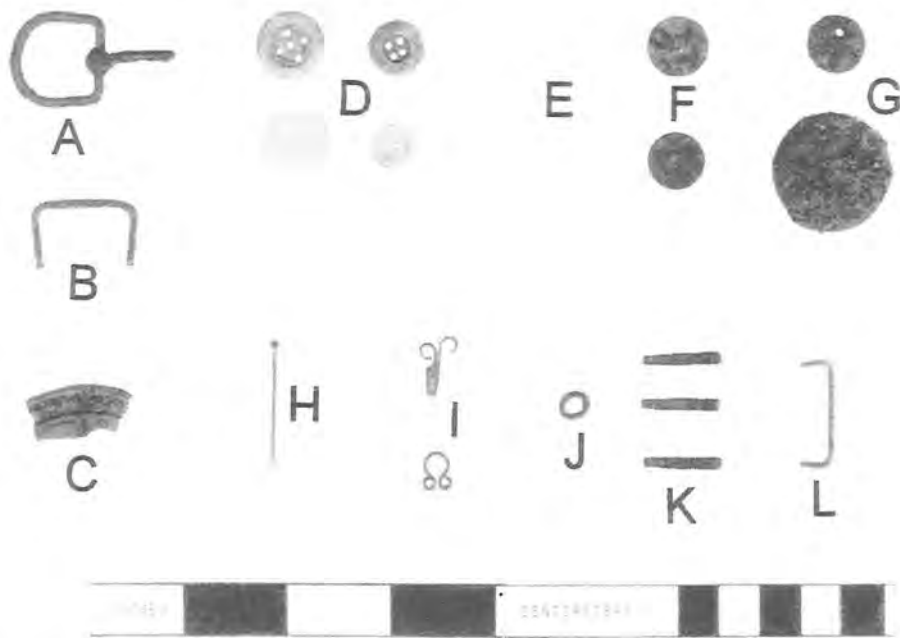


Figure 22. Clothing Group: A. buckle (iron), B. buckle frame (brass), C. buckle frame (brass), D. bone buttons, E. porcelain buttons, F. brass buttons, G. iron buttons, H. brass straight pin, I. hook and eye fasteners (brass), J. shoe eyelet (brass), K. shoe tacks (iron), L. brass strap slider.

Clothing Group

A total of 39 artifacts found on the Roper's Knob site were classified as belonging to the Clothing Group (Table 14). These account for 0.7 percent of the total historic period artifacts (Table 2). A clothing related category excluded from this group is military buttons. These are discussed under the Civil War Artifacts Group. Over the years a number of classes have been added to this group to make it more useable with collections from post-Colonial sites (Smith and Nance 2000:139, 216).

Buckles

Three clothing buckles or buckle fragments were recovered from the Roper's Knob site. These are distinct from buckles included in the Stable and Barn Class of the Activities Group. One is a small iron buckle with a "D" shaped frame, which was found in the Yard Area (Figure 22A). It measures 27 mm by 27 mm. One small brass buckle frame was recovered from Zone I of the House Area (Figure 22B). This piece measures 24 mm by 25 mm. A partial decorative brass buckle frame was found in Zone I of the Platform Area (Figure 22C).

Buttons

The Button Class used here includes all non-military buttons. There are 18 non-military buttons that were recovered from Roper's Knob, and they account for half of the Clothing Group. Various examples are made from bone, porcelain, brass, and iron (Table 14).

Bone buttons are flat disks that have been cut from a piece of animal bone. They are often cut with a tool that has a central point and two scribe points that cut a circle (Mercer 1975:195-198). The seven bone buttons (six complete and one partial) recovered from Roper's Knob have varying numbers of holes. One has one hole, three have three holes, two have five holes, and one fragment had either four or five holes. These range in size from 11.3 mm (0.45 inch) to 17.2 mm (0.68 inch) in diameter. Five bone buttons were recovered from Zone I of the House Area, one was recovered from Zone I of the Platform Area, and one was recovered from Feature 12 (blockhouse wall trench). Four examples are shown in Figure 22D.

Four porcelain buttons (Figure 22E) were recovered from the site. Three of these have four holes and range in size from 9.0 mm (.35 inch) to 10.6 mm (.42 inch) in diameter. The fourth porcelain button has two holes and is 12.2 mm (.48 inch) in diameter. Early ceramic buttons were made by hand and tended to be expensive. In 1840 Richard Prosser patented a process of making "china" buttons by compressing a fine powder into a die to form a perfectly shaped button. This speeded up production with little loss during firing, and the buttons soon became popular on the market (Albert and Adams 1970:4).

TABLE 14
DISTRIBUTION OF CLOTHING ITEMS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | |
|------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|----|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| BUCKLES | | | | | | | | | | | | | | | | | | | | | |
| Brass | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Iron | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| BUTTONS | | | | | | | | | | | | | | | | | | | | | |
| Bone | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 7 |
| Porcelain | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Brass | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Iron | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| STRAIGHT PINS | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| HOOK AND EYE FASTENERS | | | | | | | | | | | | | | | | | | | | | |
| Hook | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Eye | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SHOE PARTS | | | | | | | | | | | | | | | | | | | | | |
| Shoe Tacks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| Shoe Eyelet | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| STRAP SLIDER | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL | 0 | 1 | 0 | 14 | 0 | 2 | 7 | 0 | 2 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 39 |
| PERCENT OF SITE TOTAL | 0 | 2.56 | 0 | 35.9 | 0 | 5.13 | 17.9 | 0 | 5.13 | 0 | 0 | 0 | 30.8 | 0 | 0 | 0 | 0 | 0 | 2.56 | 100 | |

Two brass buttons (Figure 22F) were found in Zone I of the house remains. Both of these buttons are flat disks with a soldered brass eye, similar to "Type A" brass buttons described by Smith (1993:303). One of these has a backmark in Old English style letters (partially obscured) that appears to spell "BEST STK_RC", followed by block lettering that spells "STAND".

Five iron buttons (Figure 22G) were recovered from Roper's Knob. All are heavily corroded. Three of them came from Zone I of the Platform Area. Each has four holes and diameters of 14.6 mm (.58 inch), 14.9 mm (.59 inch) and 17.6 mm (.69 inch). One other iron button was recovered from Zone I of the House Area. It is 30 mm (1.18 inches) in diameter. It was too heavily corroded to determine the number of holes. The final iron button came from the Yard Area. It has four holes and measures 17 mm (.67 inch) in diameter.

One possible non-clothing use for buttons during the Civil War was on Shelter Tents. These tents were made of closely woven cotton material (cotton drill or cotton duck), and each piece had rows of buttons and button holes so that two or four pieces could be fastened together to form a shelter. The two-piece shelter became more common as the war progressed. This system insured that a soldier only had to carry half of a shelter, making his load lighter than if he had to carry an entire tent, and it eliminated the need for carrying larger tents, such as the Sibley type, on wagons. The buttons used on the shelters were made of bone, tin-plated iron, or zinc. Bone was most commonly used before 1864, and these buttons were usually natural colored bone with a depressed center section and four holes for attachment. Metallic buttons were uncommon before the summer of 1864 (Gaede 2001:52-59, 64-72).

Straight Pins

One straight pin was recovered from Zone I of the house (Figure 22H). This pin is brass with a wound head and is 31 mm long. The wound head is typical of pins made before 1824, and these were often tin-plated (Noël Hume 1970:254). There is a trace of tin visible on the one example from Roper's Knob.

Hook and Eye Fasteners

The hook portion of a hook and eye fastener was found in the House Area. The eye portion of a similar fastener came from the platform. These two brass items are shown in Figure 22 (I).

Shoe Parts

Twelve iron shoe tacks were recovered from Unit 1310N996E (Figure 22K). This is the only unit that was excavated in the outer entrenchment (Feature 2). The shoe tacks are all 19 mm long with small square heads. They are similar to examples found at the First Hermitage site (Smith 1976:209). Two shoe eyelets

made of brass were found (Figure 22J). One came from the House Area, the other from the Redoubt Area.

Strap Slider

A brass item (Figure 22L) tentatively identified as a strap slider was recovered from the House Area. It is also possible that this is part of a buckle frame.

Personal Group

The Personal Group includes items presumed to have been owned and used by individuals. The three classes normally included in this group are Coins, Keys, and Personal Items. No coins or keys were recovered during the Roper's Knob test excavations, but there are eight artifacts identified as belonging to the Personal Items Class (Table 15).

Personal Items

Pencils

Two artifacts recovered from the Roper's Knob site are identified as pencils used to write on slate tablets. One is a slender piece of lead, 29 mm long with faceted sides. It was found in Feature 12. The second, found in the House Area, is made from steatite, also called soapstone, and has eight facets. It is broken on one end and rounded, but somewhat rough on the other end. Pencils made from this soft stone, which is a form of talc, as well as those made of lead are common finds on early sites (Smith and Nance 2000:248). Both of the Roper's Knob examples are shown in Figure 23 (A-B).

Combs

Three pieces from combs were found. Part of a bone comb was recovered from Zone I of the House Area (Figure 23C). The end portion of this comb is a smooth curve, slightly thicker in the middle than at the ends. The teeth are missing, but it once had closely spaced teeth on two sides. Two items that appear to be the teeth from an iron comb were found in Feature 4. They are each 20 mm long.

Jewelry

One artifact recovered from Zone I of the Platform Area is classified as a jewelry item (Figure 23D). It is a small black glass cylinder capped on each end with brass caps that have attachment rings. There is a trace of gold on the brass, which was probably once completely gilded. The item is 18 mm long and 6.5 mm in diameter. It might also be classified as a type of decorative "bead."

TABLE 15
DISTRIBUTION OF PERSONAL GROUP ITEMS BY PROVENIENCE

| | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 5 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | |
|--------------------------|-------|------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|---|
| | Z I | Z II | Z I | Z II | Z I | Z II | | | | | | | | | | | | | |
| PENCILS | | | | | | | | | | | | | | | | | | | |
| Lead | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| Steatite | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| COMB/COMB TOOTH | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 3 |
| JEWELRY ITEM | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| CANE/UMBRELLA TIP/FINIAL | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| TOTAL | 0 | 0 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 8 | 8 |



Figure 23. Personal Group artifacts: A. steatite pencil, B. lead pencil, C. bone comb, D. jewelry item, E. brass finial.

Umbrella or Cane Finials

A brass item recovered from the Redoubt Area appears to be a finial, probably the tip of an umbrella shaft or the tip of a cane. It is 11 mm long, possibly broken on one end and slightly rounded on the other. It has a diameter of 10 mm. A similar tip or finial was recovered from Zone I of the House Area (Figure 23E). It is a cylindrical brass item 8 mm in diameter and 15 mm long. It is broken on one end and has a closed and slightly rounded end. There is a trace of what appears to be silver plating on this item, but the plating is absent from the rounded end for a length of 6 mm as if something had been covering that portion.

Tobacco Pipe Group

As modified from its original use, the Tobacco Pipe Group is a category for all items of smoking paraphernalia (Smith and Nance 2000:139, 251). Only one class is represented in the Roper's Knob collection, the Tobacco Pipes Class. Tobacco pipe fragments recovered from this site include examples of stub-stemmed stoneware pipes (both glazed and unglazed) and white clay (kaolin) pipes. Their distribution is shown in Table 16. Ten pieces were recovered, 6 from Zone I of the House Area, 2 from the Yard Area, and 2 from the redoubt. Examples are shown in Figure 24.

TABLE 16
DISTRIBUTION OF TOBACCO PIPES BY PROVENIENCE

| | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | |
|-------------------|-------|------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|----|
| | Z I | Z II | Z I | Z II | Z I | Z II | | | | | | | | | | | | | |
| Stub Stemmed Pipe | | | | | | | | | | | | | | | | | | | |
| Unglazed Bowl | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Unglazed Stem | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Glazed Bowl | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Glazed Stem | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Kaolin Pipe | | | | | | | | | | | | | | | | | | | |
| Bowl | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Stem | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| TOTAL | 0 | 0 | 6 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |



Figure 24. Tobacco Pipe Group artifacts (Tobacco Pipes Class): A-C. unglazed stub-stemmed stoneware fragments, D. white clay fragments, E-F. brown glazed stoneware fragments, G. clear glazed stoneware fragments.

Tobacco Pipes

Stub-Stemmed Stoneware Pipes

Stub-stemmed stoneware pipes were produced in molds and exhibit a wide variety of decoration. They have very short stems and were smoked using a long piece of reed or cane as an added length of stem. Stub-stemmed pipes were manufactured in America as early as the mid-eighteenth century and were being produced in Tennessee by the early nineteenth century (Smith and Rogers 1979:40, 138-141; Smith 1993:338). Eight partial examples of this style of pipe were recovered from the Roper's Knob site, with 6 of them from the house/yard area and 2 from the redoubt (Table 16). Table 17 describes these partial stub-stemmed pipes in greater detail.

White Clay Pipes

Two pipe fragments, one stem fragment found in Zone I of the House Area and one bowl fragment from the Yard Area, are made of white clay or kaolin. Kaolin pipes were manufactured in Britain from the early seventeenth century through the

**TABLE 17
STUB-STEMMED PIPES**

| <i>Provenience</i> | <i>Fragment</i> | <i>Body Color</i> | <i>Glaze</i> | <i>Decoration</i> |
|--------------------|-----------------|-------------------|--------------|----------------------------|
| House | Stem | Red | None | Irregular carving |
| House | Bowl | Gray | None | Starburst (?) on bowl base |
| House | Bowl/stem | Gray | Brown | Fluted |
| House | Stem | Gray | Brown | Molded decorative band |
| House | Bowl | Gray | Saltglazed | Fluted |
| Yard | Stem | Buff | None | Fluted |
| Redoubt | Bowl | Red | Clear | Small circles at bowl rim |
| Redoubt | Bowl | Red | Clear | None |

nineteenth century and were quite common in America. They often had long stems ranging from about nine inches to greater than two ft. (Noel-Hume 1970:305; Smith 1993:335). The two Roper's Knob fragments are small and have no signs of decoration.

Activities Group

The Activities Group contains several classes of artifacts that pertain to a variety of activities. The group as proposed by South (1977:96) includes classes for construction tools, farm tools, toys, fishing gear, storage items, stable and barn, miscellaneous hardware, and military objects. Additions and modifications have been made as required for use with later sites (Smith and Nance 2000:140). Distribution of the 149 items assigned to this group is shown in Table 18. These comprise just 2.7 percent of the total number of historic artifacts recovered from the Roper's Knob site (Table 2).

Construction Tools

Only three Roper's Knob artifacts are included in this class, and all of them were recovered from Zone I of the House Area. The first two are iron files (Figure 25A). One has a triangular cross section with grooves on all three sides and a body that is tapered. Triangular files were sometimes called three-square files and were commonly used to sharpen saws (Mercer 1975:293-294). The second is a fragment of a half round file. The fragment is slightly tapered and is broken on both ends. Half round files were used to sharpen the under side of an adze, some curves of molding plane bits, or the threads of gimlets or screw augers (Mercer 1975:294).

TABLE 18
DISTRIBUTION OF ACTIVITIES GROUP ARTIFACTS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|---------------------------|---------------|--------------|--------------|-------|------|------|----|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|----|------|
| | | | | Z I | Z II | | | Z I | Z II | | | | | | | | | | | | | | |
| CONSTRUCTION TOOLS | | | | | | | | | | | | | | | | | | | | | | | |
| File | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1.3 |
| Iron Ferule | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Class Total | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2.0 |
| FARM TOOLS | | | | | | | | | | | | | | | | | | | | | | | |
| Iron Rake Tine | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| TOYS | | | | | | | | | | | | | | | | | | | | | | | |
| Harmonica Reed Plate | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Marbles, Clay | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Marbles, Stone | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Class Total | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2.0 |
| FISHING GEAR | | | | | | | | | | | | | | | | | | | | | | | |
| Sinker | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| STORAGE ITEMS | | | | | | | | | | | | | | | | | | | | | | | |
| Barrel Bands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| STABLE AND BARN | | | | | | | | | | | | | | | | | | | | | | | |
| Horseshoes | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Horseshoe Nails | 1 | 3 | 0 | 6 | 1 | 2 | 16 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 21.5 |
| Harness Buckles | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 4.7 |
| Bits | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 |
| Saddle Brace | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0.7 |
| Class Total | 1 | 4 | 0 | 14 | 1 | 2 | 16 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 42 | 28.2 |

TABLE 18 (continued)
DISTRIBUTION OF ACTIVITIES GROUP ARTIFACTS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | | |
|------------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------|------|--|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| MISCELLANEOUS HARDWARE | | | | | | | | | | | | | | | | | | | | | | | |
| Nuts | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2.7 | |
| Screws | 0 | 0 | 0 | 7 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 11 | 7.4 | |
| Washer, Brass | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | |
| Metal Strap | 0 | 0 | 0 | 5 | 0 | 0 | 9 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 25 | 16.8 | |
| Chain | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2.7 | |
| Wire, Iron | 4 | 0 | 6 | 1 | 0 | 0 | 5 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 14.1 | |
| Rivet, Brass | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | |
| Class Total | 4 | 0 | 6 | 18 | 2 | 0 | 18 | 0 | 13 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 67 | 45.0 | |
| OTHER | | | | | | | | | | | | | | | | | | | | | | | |
| Button Mold | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.7 | |
| Scrap Lead | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2.0 | |
| Iron Bar | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 2.7 | |
| Class Total | 0 | 0 | 0 | 3 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 5.4 | |
| UNIDENTIFIED METAL | 0 | 0 | 1 | 7 | 3 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 23 | 15.4 | | |
| GRAND TOTAL | 5 | 5 | 7 | 49 | 7 | 2 | 37 | 0 | 20 | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 3 | 149 | 100 | | |
| PERCENT OF SITE TOTAL | 3.36 | 3.36 | 4.7 | 32.9 | 4.7 | 1.34 | 24.8 | 0 | 13.4 | 4.7 | 0 | 0 | 0 | 0 | 0.67 | 0 | 4.03 | 0 | 2.01 | 100 | | | |



Figure 25. Activities Group: A. iron file, B. rake tine, C. stone marble, D. clay marble, E. harmonica reed plate, F. lead fishing sinker, G. horseshoe nail, H. iron harness buckle, I. iron bit, J. button mold.



Figure 26. Civil War Military Artifact Group: A. .58 cal. Minié Ball, B. .54 cal. Sharp's carbine bullet, C. .45 cal. bullet, D. .54 cal. William's cleaner bullet, E. carved Minié Ball, F. .32 cal. shell casing, G. musket band spring, H. friction primer wire, I. percussion caps, J. Federal uniform cuff buttons.

The third Construction Tools Class artifact is a small iron ferule presumed to be part of a tool. This item would have been located where the tang portion of a tool entered its handle. The ferule is 20 mm in diameter and is 3 mm deep. The hole in the middle has a diameter of 7.5 mm.

Farm Tools

One artifact, also from the House Area, is classified as a farm tool. This is the tine from an iron rake (Figure 25B).

Toys

There are three items in the Toys Class. The first is part of a brass harmonica reed plate, recovered from the House Area (Figure 25E). There are two marbles. An earthenware marble, also from Zone I of the House Area, is 7.8 mm in diameter (Figure 25D). A stone marble found on the West Terrace measures 16 mm in diameter (Figure 25C). Stone marbles were manufactured in America as early as the seventeenth century (Baumann 1970:25-27).

Fishing Gear

A fishing sinker from Zone I of the House Area is the only item of fishing gear found on the site (Figure 25F). It is a split shot lead sinker, slightly flattened, with a diameter of approximately 15 mm. It also has a clearly visible mold seam.

Storage Items

One item recovered from the Redoubt Area is classified as a barrel band. This is a section of iron band that retains a rivet used to secure the overlapping ends of the band. The presence of a rivet is the criteria used here to distinguish barrel bands from other pieces of metal strap, which are classified under Miscellaneous Hardware.

Stable and Barn

The Stable and Barn Class includes items such as wagon and carriage parts as well as things used for horses and other farm animals. The Roper's Knob excavation yielded 42 artifacts belonging to this class, the majority of them (N=32) being horseshoe nails.

Horseshoes

One partial horseshoe was recovered from Zone I of the House Area. It has two nail holes in the fullering groove on the intact branch of the shoe and has a calkin, which is the down turned piece of the shoe at the end of each branch. The overall length of the shoe is approximately 13 cm.

Horseshoe Nails

Horseshoe nails are included in the Stable and Barn class of the Activities Group rather than in the Architectural Group because of their specialized function. These nails have bulbous heads with wide tapering shafts that are flat on the end. The nails were driven through a hole in the fullering groove of the horseshoe and into the hoof at an angle. The nail protruded from the hoof and was then clenched over to secure it.

Thirty-two horseshoe nails (Figure 25G) were recovered, distributed as shown on Table 18. Sixteen horseshoe nails, half the total, were found in Zone I of the Platform Area. This concentration of nails might suggest that the platform feature was used as a place for stabling horses. Nine others horseshoe nails were recovered from the House and Yard areas.

Harness Buckles

Seven iron buckles are classified as harness buckles (Figure 25H). These have square or rectangular frames with a single tongue and sometimes a roller where the end of the tongue rests on the frame. This type of buckle is commonly associated with harnesses, but similar buckles were sometimes used on saddlebags or cartridge boxes.

Bridle Bit

A partial iron bridle bit was found in Zone I of the House Area (Figure 25I). This is part of a snaffle bit (Haug and Malm 1975:15-24), a kind of bit that might have been used with a horse or mule in harness.

Saddle Brace

One saddle brace was found in Feature 12 (the blockhouse wall trench) in Unit 1256N995E. This type of iron brace served as an internal part of a saddle, providing support to the overall structure of the saddletree.

Miscellaneous Hardware

The Miscellaneous Hardware Class includes artifacts that were used in various ways. For most of them there is no way to be certain of their specific formerfunction, as, and may have had more than one kind of use. This is the largest class in the Activities Group, consisting of 67 items (Table 18).

Nuts

Four iron nuts were found on the site. All are small square nuts. One from Zone I of the Platform Area measures 24 by 24 mm and is about 10 mm thick. One

from Zone I of the House Area is 25 by 25 mm and 10 mm thick. The corners on one face of this nut are slightly beveled. The example from Zone II of the House Area measures 15 by 15 mm by 7 mm thick. The nut recovered from the Redoubt Area is 11 mm square and about 4 mm thick.

Screws

Eleven iron screws were recovered, most (N=7) from Zone I of the House Area. All are heavily corroded and missing their points.

Brass Washer

One small brass washer was found in Unit 1278N1000E in the redoubt. This washer measures 9 mm in diameter, and the hole, which is slightly off center, is approximately 3 mm in diameter.

Metal Strap

There are many uses for metal strap including reinforcement of crates, barrel bands, and architectural reinforcing to name a few. With just a fragment of band, it is difficult to assign a precise function, thus their inclusion in the Miscellaneous Hardware Class. This is the largest category in this class (N=25), as shown on Table 18. Metal straps that have one or more rivets that were used to attach overlapping ends are usually classified as barrel bands (under Storage Items).

Chain

Four iron chain links were recovered from the House Area. Three came from Zone I, and one from Zone II.

Iron Wire

As shown on Table 18, 21 fragments of iron wire were recovered from the Roper's Knob site. This is a category with almost endless possible functions.

Brass Rivet

One brass rivet came from Zone I of the House Area. It has two circular disks connected by a central bar.

Other Specialized Activities

This class provides a category for listing items that pertain to localized manufacturing or its by-products and any other "specialized activities."

Button Mold

One mold for casting buttons was recovered from Zone I of the House Area. This mold is made of siltstone and is roughly rectangular, measuring 70 mm by 50 mm with an average thickness of 17 mm (Figure 25J). In the center is a circular depression about one mm deep and 15 mm in diameter. This has a carved design consisting of a central hole with eleven other holes around the edge, and there are other carvings that may be letters or geometric designs. The holes in the mold would have produced raised areas on the face of the button. There are also two deeper holes near the edges of the mold, but their function is not known. Smith (1990:100-105) describes a button mold found on a nineteenth-century site in Smith County, Tennessee. It is slightly larger than the Roper's Knob mold (70 mm by 65 mm) and has depressions for molding nine buttons on one side and four on the other. It is made of slate (or schist), a stronger type of stone than the siltstone used for the Roper's Knob mold. These molds were probably used to cast buttons from a soft metal such as pewter.

Small stone molds for the casting of pewter buttons have been recovered from sites associated with early historic period Indians. There are also examples of similar button molds used during the American Revolution (Smith 1990:103-105). Given the context in which the Roper's Knob mold was found, it appears that such molds were used into the nineteenth century.

Scrap Lead

Three pieces of scrap lead were recovered from the site. One piece came from Zone I of the House Area, one from Zone I of the Platform Area, and one from Feature 12. Scrap lead can represent a number of activities, including bullet molding.

Iron Bar

Four pieces of iron bar were recovered from the Roper's Knob site. These are possibly raw materials for some type of blacksmith activity. Two were found in Zone I of the Platform Area, and one each came from Zones I and II of the House Area.

Unidentified Metal

This is a residual category for items that are unidentified or unidentifiable. Twenty-three pieces of iron could not be identified as to their form or function. This was due to either advanced corrosion of the item or to the fragmentary nature of the artifact.

Civil War Military Artifact Group

The Civil War Military Artifact Group is not part of South's (1977:95) original classification scheme, but has been used elsewhere to account for these particular kinds of artifacts (Smith 1994). It is used here as a convenient method of categorizing artifacts that are specifically related to the Civil War activity that occurred on Roper's Knob. Table 19 lists the 56 Civil War military artifacts recovered from the site, and examples are shown in Figure 26. Relatively few military artifacts were found; probably due to the many years of relic collecting that preceded the archaeology project. Many of those that were found were situated among larger rocks that would have shielded them from detection. Collectors interviewed during the project reported finding military buckles, bayonets, many bullets, and Burnside type casings. The cavalry used Burnside carbines, and the presence of Burnside casings, assuming the reports of finding them are accurate, may indicate the use of Roper's Knob as a cavalry outpost and observation point.

Minié Balls and Other Bullets

Minié balls, named for Claude Etienne Minié, were improvements over the standard round ball. The conical shape and hollow base meant that the projectile would expand when fired and grip the spiral rifling of the weapon's barrel. This gave the projectile greater range and accuracy (Lord 1965:15). Eighteen Minié balls were recovered from the Roper's Knob site, distributed as shown in Table 19. Thirteen of these bullets are .58 caliber, and three are .54 caliber. A dropped .58 caliber bullet is shown in Figure 26(A), along with one that has been randomly carved (Figure 26E). One partially melted example could not be measured. The remaining Minié bullet is a type called a William's Cleaner (Figure 26D). This bullet has a plunger at the base and a small flange that was compressed when fired so that the flange scraped the barrel, cleaning residue left from burning gunpowder (Thomas 1981:16).

Four other bullets were found, all in Zone I of the House Area. Two are .45 caliber (Figure 26C), and no further information was determined about them. The remaining two are .54 caliber Sharp's type bullets (Figure 26B).

Shell Casings

Two shell casings were recovered from the site, and both are .32 caliber. One is a rimfire casing and the other is a centerfire. Neither were marked with headstamps. An example is shown in Figure 26(F).

Percussion Caps

Twenty-five whole and one partial percussion caps were found during the excavation. Twenty-two of these were recovered from Zone I of the Platform Area.

TABLE 19
DISTRIBUTION OF CIVIL WAR MILITARY ARTIFACTS BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|----------------------------|---------------|--------------|--------------|-----------|----------|----------|-----------|----------|----------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|-----------|------------|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | |
| Minie Ball | | | | | | | | | | | | | | | | | | | | | | |
| .54 cal. | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5.4 |
| .58 cal. | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 | 23.2 |
| melted | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| William's Cleaner, .58 cal | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| Bullets | | | | | | | | | | | | | | | | | | | | | | |
| .45 cal. | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3.6 |
| .54 cal. (Sharp's) | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3.6 |
| Casings | | | | | | | | | | | | | | | | | | | | | | |
| .32 cal. Rimfire | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| .32 cal. Centerfire | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| PERCUSSION CAP, rifle | 0 | 0 | 0 | 2 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 42.9 |
| PERCUSSION CAP, pistol | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| Fragment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1.8 |
| BUTTONS | | | | | | | | | | | | | | | | | | | | | | |
| Large, Brass, Eagle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1.8 |
| Small, Brass, Eagle | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5.4 |
| MUSKET BAND SPRING | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| FRICTION PRIMER WIRE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.8 |
| TOTAL | 1 | 1 | 0 | 12 | 0 | 1 | 32 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 56 | 100 |

Percussion caps are small brass caps that contained mercury fulminate (Lord 1965:190). This crystalline compound, made from a blend of mercury, alcohol, and nitric acid, exploded when forcibly struck. The mercury fulminate in the brass cap sent a spark into the barrel of a musket, thus igniting the powder and firing the weapon. One of the caps recovered is small, indicating that it was used for a pistol rather than a musket. Examples are shown in Figure 26(I).

Buttons

Four brass military buttons were found. One large size coat button was found in the blockhouse wall trench (Feature 12). Three smaller size cuff buttons came from Zone I of the Platform Area (Figure 26J). All are standard issue U. S. Regulation buttons with an eagle on the front face. Examples are depicted in many publications relating to Civil War artifacts (e.g., Lord 1965:62-63).

Musket Band Spring

One artifact recovered from the redoubt was identified as a musket band spring (Figure 26G). The band spring holds the musket band in place when it is slid onto the stock. The example recovered is made of iron.

Friction Primer

The brass wire portion of a friction primer was recovered from Feature 4, the suspected cistern. A friction primer is a hollow brass tube filled with gunpowder with a piece of wire pushed into and perpendicular to the tube. The tube is placed into the touchhole of a cannon, and a lanyard is attached to the wire. When the lanyard is pulled, the friction ignites the powder, thus firing the cannon (Peterson 1969:116-117).

Bone Group

The faunal remains from archaeological sites are usually not treated as part of a regular "artifact" group, but are analyzed as an independent category (Table 2). The Roper's Knob excavation produced 642 pieces of bone and shell. There was no expert (zooarchaeologist) available to identify the species of animal represented by each bone, so they were sorted into general categories as shown in Table 20. Most of the material (77.5 percent) came from the House and Yard areas. Much of it

TABLE 20
DISTRIBUTION OF FAUNAL MATERIAL BY PROVENIENCE

| | South Terrace | West Terrace | East Terrace | House | | Yard | Platform | | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 10 | Feature 11 | Feature 12 | Feature 13 | SITE TOTAL | % | |
|----------------------|---------------|--------------|--------------|-------|------|------|----------|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|-----|------|
| | | | | Z I | Z II | | Z I | Z II | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Large Mammal | 0 | 9 | 0 | 201 | 3 | 38 | 23 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 279 | 43.5 |
| Small Mammal | 0 | 2 | 3 | 60 | 0 | 8 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 82 | 12.8 |
| Bird | 0 | 1 | 0 | 41 | 0 | 2 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 9.5 |
| Turtle Carapace | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 1.7 |
| Shell | 0 | 1 | 0 | 3 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1.6 |
| Egg Shell | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0.9 |
| Unidentified | 0 | 7 | 0 | 116 | 4 | 13 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 193 | 30.1 |
| TOTAL | 0 | 20 | 3 | 428 | 7 | 62 | 88 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 642 | 100 |
| Percent of SiteTotal | 0.0 | 3.1 | 0.5 | 66.7 | 1.1 | 9.7 | 13.7 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 100 | |

appears to be from pigs. The platform yielded 13.7 percent of the site total. Some of the material, such as the turtle carapace and some of the small mammal bones may be recent and not associated with the historic occupation of the site.

Non-Formally Classified Material

The groupings on Table 2 under "Unclassified Material" account for certain kinds of activity remains not treated as discrete artifact categories. This includes whole and partial bricks and brick rubble, fragments of charcoal, and small pieces of mortar and coal. On the table these items are accounted for as either present or absent from each provenience unit.

Brick

Brick was used in the construction of the house on Roper's Knob, primarily in the chimney firebox and the floor, and brick fragments are scattered all around the House and Yard areas and in other parts of the site. Modern camping activity has contributed to a redistribution of brick and limestone away from the House Area, for use in forming rings around campfires. Remains of such rings were observed on the Terrace and in the Redoubt Area. It also appears that stone building material from the house was used during the Civil War in constructing the fortifications. Limestone blocks are present in the redoubt wall, and limestone appears to have been used in a retaining wall to form the feature referred to as the Platform. Brick from the house may have also been used to some extent during the Civil War occupation.

During the excavations, the brick from each unit was quantified by volume, later converted to weight. Brick was found in units on the South and West terraces near the house, and a concentration was found on the north end of the West Terrace near where a collector/informant stated that he thought there were Civil War encampments. Very little brick was found on the East Terrace, but some was recovered from the Platform Area excavations. Very little brick was found in the redoubt.

Several whole bricks were recovered from the house, and measurements of these were made in the field. All appear to have been hand made in box molds. Using this technique, clay was pressed into an open mold and the excess was scraped off. This scraping leaves striations on the top face of the brick, evident in the Roper's Knob examples. The wet bricks were turned out of the mold in a brickyard to dry in the sun. They were then fired. It is not unusual to find animal tracks in bricks from creatures crawling through the brickyard, and one example recovered from Roper's Knob has a dog's paw print impressed into the brick.

Forty-two whole bricks were measured. Forty of these came from the House Area (38 in Zone I and two in Zone II); one was recovered from the redoubt, and one in Zone I of the Platform Area. There was very little variance in size in these bricks.

The length ranged from 20.5 cm to 21.5 cm (8.07 to 8.46 inches). The width ranged from 9.0 cm to 10.5 cm (3.54 to 4.13 inches). The thickness ranged from 5.0 cm to 6.5 cm. (1.97 to 2.56 inches).

Mortar

Small amounts of mortar were recovered from the House and Yard areas and nearby on the South Terrace. It was not found on any other part of the site.

Charcoal

Limited amounts of charcoal occurred as small pieces scattered through Zone I of the House Area. Feature 4, the bottom portion of what may have been a cistern, also contained some charcoal, but it appeared that there had been recent burning in that disturbed area. The largest single piece of charcoal found was from the blockhouse wall trench, Feature 12 in Unit 1256N995E. This appeared to be the basal portion of a post that had been set into this carved stone trench. Analysis of the wood showed that it was white ash.

Coal

As indicated by Table 2, a few small pieces of coal were found on the site, but the significance of these seems minimal. They may relate to some incidental use of coal during the period of occupation by the Roper family, or perhaps soldiers brought a few pieces onto the knob during the Civil War era.

Miscellaneous Modern Material

Twentieth century material recovered from the site is classified in this category. The abundance of such material, especially in the Redoubt Area, attests to the continued use of the knob as a popular recreation spot, a trend that seems to have started shortly after the end of the Civil War. Not all of this material is listed here, but a few items are mentioned to illustrate post-Civil War site usage.

Fourteen pieces of jar glass collected from inside the walls of the redoubt appear to be from the same jar. The brand was identified as "Atlas Strong Shoulder," indicating that it was manufactured around 1915. People tend to hold on to and re-use such jars, so it could have been deposited later in the twentieth Century.

Several modern bullet casings and shotgun shells were recovered from Roper's Knob, primarily in the Redoubt Area. Some modern shotgun shells made with plastic were observed on the ground surface but not collected. Three brass shell bases that were collected, formerly had paper cartridges. Two are from 12 gauge shells and one is from a .410 gauge shell.

A .22 caliber long brass casing with an "XR" headstamp is identified as a product of the Western Cartridge Company, manufactured from 1927 to present. Another bullet and casing found in the redoubt is a .22 caliber short with an "H" impressed on the head. It was manufactured by the Winchester Repeating Arms Company from 1927 to 1931.

A large amount of modern bottle glass was collected, and even more was observed inside the walls of the redoubt but not collected. Some pieces could be identified as from modern bottles for Coca-Cola, 7-Up, and Nehi brand sodas. Additionally several crown bottle caps were found. A thermos type bottle was recovered from one of the units near the suspected east cistern. This highly disturbed area yielded other modern artifacts including a bottle opener, the type of tumbler often marketed as a jelly jar or found in laundry detergent, and lantern parts. A total of 340 modern items was collected (Table 2), some of it later discarded.

CONCLUSIONS

One of the goals of the test excavation conducted on the Roper's Knob site was to provide a general assessment of archaeological remains to help plan for their long-term preservation and interpretation. Roper's Knob went through two phases that left distinct archaeological remains. These phases are the domestic occupation of the site, during which a house was constructed on the terrace below the upper knob and inhabited probably no more than 30 years, apparently by the Roper family, and the military occupation of the site during the Civil War, when fortifications were constructed on the upper knob and around the terrace below. Historical documentation gave some insight into both of these phases and helped predict the kinds of archaeological remains that might be present.

Documentation concerning the house is sketchy, but when pieced together with artifactual evidence recovered from the site, it becomes possible to infer a general history of use. As stated in a previous "Summary of Historical Information" subsection, it appears that the house could have been built, or at least begun, by Nicholas P. Perkins between 1829 when he took possession of the land and 1833 when he died. It is clear that his heirs owned the land until 1859 but did not live there. The Roper family, said to have lived on the terrace where the house is located, first shows up in the Williamson County historical records in District 8 (where the knob is located) in 1836. They remain at least as late as 1850 when they are last mentioned on the census. W. H. S. Hill bought the land in 1859, and he added a large adjoining tract to his holdings. He does not appear to have lived on the knob. In 1863 the Union army fortified the knob, and it appears that material from the house was used in the construction of the fortifications.

Artifactual evidence sheds some light on the probable dates of building and occupation of the house. The mean ceramic dates for the House Area are 1849.5 for Zone I and 1842.7 for Zone II, and for the Yard Area 1849.1. The date for these three proveniences combined is 1848.1. Assuming that 1848 represents the most likely true mean date for the collection and for the occupation that occurred here, and assuming that this occupation ended by 1859, as the records suggest, then the suggested starting date is about 1837. This seems too late to be related to Nicholas Perkins, but is about right for the documented appearance of the Roper family. Perhaps they were the builders and the only occupants of the house that stood on the knoll named for them. An occupation starting about this time is not clearly negated by the dates suggested by the nails and window glass recovered, but the window glass does suggest a somewhat earlier date, one even compatible with Perkins 1829-1833 ownership of the land. While the question is far from clearly resolved, mean ceramic dates have generally been reliable indications of site age, and it seems a little more likely that the Roper's Knob house was built or first occupied by the Ropers.

The date for Civil War features on Roper's Knob is much clearer. It is well documented that construction of the fortifications began in February 1863 and it seems reasonably clear that they were completed or nearly so by May of the same year. William Merrill's report lists the major features of the site but does not describe them in great detail.

Both the visible (above ground) and archaeological features of Roper's Knob comprise an important historical resource that is well worth preservation and further study. This includes the archaeological remains of a house dating from the first half of the nineteenth century. Directly related to why it was purchased for preservation, the site provides examples of blockhouse construction, earthen fortifications, a signal station, and troop encampments, and there is a potential for other areas of investigation if archaeological remains of a magazine and all cisterns can be found. Feature 12, a wall trench cut into solid rock to support the vertical log walls of the blockhouse that stood inside the redoubt, ranks as one of the more unusual Civil War military features reported to date.

The first step in preservation was taken when the State of Tennessee and the Heritage Foundation of Franklin and Williamson County purchased the Roper's Knob site. One long-term goal is to open the site to the public with access by hiking trails and appropriate signage. However, an immediate problem related to this plan is that there is no adequate location for a parking lot.

Opening the site to the public brings with it the dangers of site destruction by higher pedestrian traffic on the earthworks and easier access that could be used by relic collectors (even though this activity is now prohibited by state law). The site has already suffered from extensive collecting and some of the activities of campers, hikers, and dirt bike riders. Questions regarding site monitoring and protection must be answered before the site is made accessible. Traffic on the ramp and the earthworks would have to be limited, and vegetation would have to be carefully managed. There would need to be periodic clearing of some areas, but vegetation for erosion control would have to be maintained.

Opening the site without proper interpretation of the resources would prove a wasted effort. Roper's Knob is a valuable resource only if people can learn from it. This will take, at a minimum, proper signage at crucial areas.

The question of what will happen to the adjoining knob must also be addressed. Development of this hill would not only dramatically change the view from Roper's Knob, but it could also provide an alternate means of access to the site, thus increasing traffic in an uncontrolled manner.

The long term preservation and interpretation of Roper's Knob will require the cooperation of several entities including the State of Tennessee, the Heritage Foundation, local landowners, and the City of Franklin. A major need for this site is a comprehensive management plan. One that addresses what will be done with the site, who will be involved in its management, and who will provide the needed funding.

BIBLIOGRAPHY

Authors Cited

- Albert, Lillian Smith and Jane Ford Adams
1970 Essential Data Concerning China Buttons. In Guidelines for Collecting China Buttons, pp. 3-15. The National Button Society of America.
- Ball, Donald B.
1982 Chronological Implications of Window Glass Thickness and Coloration at the Linville Site (15BK12), Bracken County, Kentucky. U.S. Army Corps of Engineers, Louisville, Kentucky.
- Baumann, Paul
1970 Collecting Antique Marbles. Wallace-Homestead Book Company, Radnor, Pennsylvania.
- Beers, D. G.
1878 Map of Williamson County from Survey. D. G. Beers and Company, Philadelphia.
- Bejach, Wilena Roberts and Lillian Johnson Gardiner
1980 Williamson County, Tennessee Marriage Records 1800-1850
- Blair, Sarah Tucker
1952 Marriage Record Book I, January 2, 1789-December 13, 1837, Davidson County, Tennessee. Copied from the original, French Lick Chapter, Daughters of the American Revolution, Nashville.
- Blanchette, Jean-Francois
1975 Gunflints from Chicoutimi Indian Site (Quebec). Historical Archaeology, 9:41-54. The Society for Historical Archaeology.
- Brown, J. Willard, A. M.
1896 The Signal Corps, U. S. A. in the War of the Rebellion. U. S. Veteran Signal Corps Association, Boston.
- Clark, Hyla M.
1977 The Tin Can Book: The Can as Collectible Art, Advertising Art & High Art. New American Library, New York.
- Clayton, W. W.
1880 History of Davidson County, Tennessee. Reproduced from 1880 original by Charles Elder-Bookseller, 1971, Nashville.

Connelly, Thomas L.

1979 Civil War Tennessee, Battles and Leaders. The University of Tennessee Press, Knoxville.

Coysh, A. W. and R. K. Henrywood

1995 The Dictionary of Blue & White Printed Pottery: 1780-1880, Volume 1. Antique Collectors Club, Woodbridge, Suffolk, England.

Crutchfield, James A. and Robert Holladay

1999 Franklin: Tennessee's Handsomest Town. Hillsboro Press, Franklin, Tennessee.

Dilliplane, Ty L.

1974 Fort Granger (Franklin, TN): A Study of Its Past and Proposal for Its Future. Prepared for the National Park Service.

1975 Exploratory Excavations at Fort Granger. Prepared for Franklin Jaycees, Franklin, Tennessee and the National Park Service.

Edwards, Jay D. and Tom Wells

1993 Historic Louisiana Nails, Aids to Dating of Old Buildings. The Fred B. Kniffen Cultural Resources Laboratory Monograph Series No. 2. Department of Geography and Anthropology, Louisiana State University, Baton Rouge.

Foote, Shelby

1986 The Civil War: A Narrative: Volume I, Fort Sumter to Perryville. Vintage Books, New York.

Frupip, David J., Russell Malewicki, and Donald P. Heldman

1983 Colonial Nails from Michilimackinac: Differentiation by Chemical and Statistical Analysis. Archaeological Completion Report Series, No. 7. Mackinac Island State Park Commission, Mackinac Island, Michigan.

Fulcher, Richard Carlton

1993 Brentwood, Tennessee: The Civil War Years. Fulcher Publishing Company, Brentwood, Tennessee.

Gaede, Frederick C.

2001 The Federal Civil War Shelter Tent. Civil War Monograph Series No. 1. O'Donnell Publications, Alexandria, Virginia.

Garrow, Patrick H.

1983 Dating Nineteenth Century Ceramics. Handout sheet for paper presented before the annual meeting of the Society for Historical Archaeology, Denver, Colorado.

- Gaston, Mary Frank
1990 Blue Willow: An Identification and Value Guide. Collector Books, Paducah, Kentucky.
- Gove, Philip Babcock, editor
1986 Webster's Third New International Dictionary of the English Language. Merriam-Webster Inc., Springfield, Massachusetts.
- Greer, Georgeanna H.
1981 American Stonewares, The Art and Craft of Utilitarian Potters. Schiffer Publishing, Ltd., Exton, Pennsylvania.
- Grimm, Jacob L.
1970 Archaeological Investigation of Fort Ligonier 1960-1965. Annals of Carnegie Museum, Vol. 42. Pittsburgh, Pennsylvania.
- Hamilton, Edward K.
1979 Marriage Records of Williamson County, Tennessee. Cook and McDowell Publications, Hartford, Kentucky.
- Hamilton, T. M.
1976 Firearms on the Frontier: Guns at Fort Michilimackinac 1715-1781. Reports in Mackinac History and Archaeology, No. 5. Mackinac Island State Park Commission, Williamston, Michigan.

1980 Colonial Frontier Guns. The Fur Press, Chadron, Nebraska.
- Haug, LeRoy C. and Gerhard A. Malm
1975 Bible of Bridle Bits. Published by the authors, Valley Falls, Kansas.
- Jones, Olive
1971 Glass Bottle Push-Ups and Pontil Marks. Historical Archaeology, 5:62-73. The Society for Historical Archaeology.
- Kent, Barry C.
1983 More on Gunflints, Historical Archaeology, 17(2):27-40. The Society for Historical Archaeology.
- Larsen, Ellouise Baker
1975 American Historical Views on Staffordshire China. Dover Publications, Inc., New York.
- Lord, Francis A.
1965 Civil War Collector's Encyclopedia. Castle Books, New York.

Lynch, Louise Gillespie

- 1970 Wills from Williamson County, Franklin, Tennessee. Published by the author.
- 1976 Our Valiant Men: Soldiers and Patriots of the Revolutionary War Who Lived in Williamson County, Tennessee. Published by the author.
- 1977 Miscellaneous Records of Williamson County, Volume 1. Published by the author.
- 1980a Miscellaneous Records of Williamson County, Volume 3. Published by the author.
- 1980b Miscellaneous Records of Williamson County, Volume 4. Published by the author.
- 1985 Newspaper Excerpts 1822-1835, Williamson County. Published by the author.

McEwen, Sallie Florence

- 1862 "Diary of Sallie Florence McEwen." Miscellaneous Papers of the Tennessee Historical Society, Microfilm No. 824, Box 9, Folder 1. Tennessee State Library and Archives, Nashville.

Majewski, Terisita, and Michael J. O'Brien

- 1984 An Analysis of Historical Ceramics from the Salt River Valley of Northeast Missouri. Publications in Archaeology: Cannon Reservoir Human Ecology Project. American Archaeology Division, Department of Anthropology, University of Missouri-Columbia.

Marshall, Park

- 1970 Williamson County. Typewritten copies of newspaper articles by Park Marshall from ca. 1917 to 1945, with corrections and editing by Campbell H. Brown. Tennessee State Library and Archives, Nashville.

Mercer, Henry C.

- 1975 Ancient Carpenter's Tools. The Bucks County Historical Society. Horizon Press, New York.

Merrill, William E.,

- 1863 Report of William Merrill on Defenses at Franklin. Record Group 77, Records of the Office of the Chief Engineer, Letters Received, Microfilm 4321, National Archives, Washington, D.C.
- 1864 "Block House Sketches," Buell-Brien Papers. Manuscript Accession Number 267, Tennessee State Library and Archives, Nashville.

- 1875 Development of the Blockhouse in the Civil War. In A History of the Army of the Cumberland, Volume 2, pp. 439-458, by Thomas B. Van Horne.
- Meyers, Danielle F.
2001 Phase III Archaeological Testing of Site 40KN150 in the Proposed State Route 131 (Emory Road) Corridor from Near Gill Road to Near Bishop Road, Knox County, Tennessee. Center for Transportation Research, The University of Tennessee, Knoxville.
- Moir, Randall W.
1987 Socioeconomic and Chronometric Patterning of Window Glass. Historic Buildings, Material Culture, and People of the Prairie Margin: Architecture, Artifacts, and Synthesis of Historic Archaeology, Volume 5, pp. 73-78, edited by David H. Journey and Randall W. Moir. Richland Creek Technical Series. Archaeology Research Program, Southern Methodist University, Dallas, Texas.
- Moore, Mrs. John Trotwood (and others)
1939 Tennessee, Davidson County, Superior Court of Law and Equity, Mero District, Pleas, 1805-1807. Prepared by the Historical Records Survey Transcription Unit, Works Progress Administration. Bound copy filed at the Tennessee State Library and Archives, Nashville.
- Nelson, Lee H.
1968 Nail Chronology as an Aid to Dating Old Buildings. Reprint of 1963 Technical Leaflet 15. Technical Leaflet 48, History News, Volume 24, No. 11. American Association of State and Local History, Nashville.
- Newman, T. Stell
1970 A Dating Key For Post-Eighteenth Century Bottles. Historical Archaeology, 4:70-75. The Society for Historical Archaeology.
- Noel Hume, Ivor
1970 A Guide to Artifacts of Colonial America. Alfred A. Knopf, New York.
- OR (1880-1901)
The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. Government Printing Office, Washington, D. C.
- Peterson, Harold L.
1969 Round Shot and Rammers. South Bend Replicas, Inc., South Bend, Indiana.

Phillips, Maureen K.

- 1994 "Mechanic Geniuses and Duckies," A Revision of New England's Cut Nail Chronology before 1820. APT Bulletin, 25(3-4):4-16. Association for Preservation Technology.

Pollan, Sandra D., W. Sue Gross, Amy C. Earls, Johnney T. Pollan, Jr., and James L. Smith

- 1996 Nineteenth-Century Transfer-Printed Ceramics from the Townsite of Old Velasco (41BO125), Brazoria County, Texas: An Illustrated Catalogue. Prewitt and Associates, Inc., Consulting Archaeologists, Austin, Texas.

Price, Cynthia R.

- 1979 19th Century Ceramics ... in the Eastern Ozark Border Region. Center for Archaeological Research, Monograph Series No. 1, Southwest Missouri State University, Springfield.

Sayers, Edward B.,

- 1863 Untitled map of Signal Stations between Franklin and Murfreesboro. Map No. 71, McGaw Collection, Special Collections, Vanderbilt University Library, Nashville (see Footnote 2 above). Sketch copy on file at Tennessee Division of Archaeology.

Scott, H. L., Colonel

- 1864 Military Dictionary. D. Van Nostrand, New York.

Smith, Samuel D

- 1976 An Archaeological Assessment of the First Hermitage. Research Series No. 9, Tennessee Division of Archaeology and the Ladies Hermitage Association, Nashville.
- 1983 Excavation of a Mid-Nineteenth Century Trash Pit, Wynnewood State Historic Site, Sumner County, Tennessee. Tennessee Anthropologist, 8(2):133-181. Tennessee Anthropological Association.
- 1990 Buttons and Bricks; Some Artifactual Information from Smith County, Tennessee. Tennessee Anthropologist, 15(2):96-114. Tennessee Anthropological Association.
- 1994 Excavation Data for Civil War Era Military Sites in Middle Tennessee. In Look To The Earth, edited by Clarence R. Geier, Jr. and Susan E. Winter, pp. 60-75. The University of Tennessee Press, Knoxville.

Smith, Samuel D., editor

- 1993 Fort Southwest Point Archaeological Site, Kingston, Tennessee: A Multidisciplinary Interpretation. Research Series Number 9, Tennessee Division of Archaeology, Nashville.

- Smith, Samuel D. and Benjamin C. Nance
 2000 An Archaeological Interpretation of the Site of Fort Blount, A 1790s Territorial Militia and Federal Military Post, Jackson County, Tennessee. Research Series Number 12, Tennessee Division of Archaeology, Nashville.
- 2003 A Survey of Civil War Era Military Sites in Tennessee. Research Series Number 14, Tennessee Division of Archaeology, Nashville.
- Smith, Samuel D., Fred M. Prouty, and Benjamin C. Nance
 1990 Survey of Civil War Period Military Sites in Middle Tennessee. Report of Investigations No. 7, Tennessee Division of Archaeology, Nashville.
- Smith, Samuel D., Charles P. Stripling, and James M. Brannon
 1988 A Cultural Resource Survey of Tennessee's Western Highland Rim Iron Industry, 1790s – 1930s. Research Series No. 8, Tennessee Division of Archaeology, Nashville.
- Smith, Samuel D. and Stephen T. Rogers
 1979 A Survey of Historic Pottery Making in Tennessee. Research Series No. 3, Tennessee Division of Archaeology, Nashville.
- South, Stanley
 1977 Method and Theory in Historical Archaeology. Studies in Archaeology, Academic Press. New York.
- Sword, Wiley
 1992 Embrace An Angry Wind, The Confederacy's Last Hurrah: Spring Hill, Franklin, and Nashville. Harper Collins Publishers, Inc., New York.
- Thomas, Dean
 1981 Ready...Aim...Fire! Small Arms Ammunition in the Battle of Gettysburg. Osborn Printing Co., Biglerville, Pennsylvania.
- United States Department of Agriculture, Soil Conservation Service
 1961 Soil Survey: Williamson County, Tennessee. Series 1961, No. 5. United States Government Printing Office, Washington.
- Weaver, Guy
 1993 The Gowen Farmstead: Archaeological Data Recovery at Site 40DV401 (Area D), Davidson County, Tennessee. Garrow and Associates, Inc., Memphis.
- Wills, Brian Steel
 1992 A Battle from the Start: The Life of Nathan Bedford Forrest. Harper Collins Publishers, New York.

Willett, James R., Major

1874 Battlefield in Front of Franklin, Tenn. Office of the Chief Engineer, U. S. Army. Reproduced by the Carter House, Franklin, Tennessee.

Wilson, Charles W. and Robert A. Miller

1963 Geologic Map of the Franklin Quadrangle, Tennessee. Research Series No. 8, Tennessee Division of Geology, Nashville.

Witthoft, John

1966 A History of Gunflints. Pennsylvania Archaeologist, 36(1-2):12-49.

Additional Sources

Baugh Interview

Interview with Frank Baugh, former resident of the Roper's Knob site.

Davidson County Records

Tennessee State Library and Archives bound transcriptions and microfilm copies, Nashville. Originals in Davidson County Courthouse, Nashville.

Fultcher Interview

Telephone Interview with Richard Fultcher, local historian and collector.

Williamson County Records

Tennessee State Library and Archives bound transcriptions and microfilm copies, Nashville. Originals in Williamson County Courthouse, Franklin, Tennessee.

United States Census Reports

1830-1880 Microfilm copies for Tennessee Counties, Tennessee State Library and Archives, Nashville.

United States Court of Claims

National Archives, Record Group 123, Washington, D.C.

APPENDIX A

ANALYSIS OF PREHISTORIC MATERIAL FROM THE TEST EXCAVATIONS ON ROPER'S KNOB (40WM101), WILLIAMSON COUNTY, TENNESSEE

Michael C. Moore

The Roper's Knob excavations yielded a moderate assemblage (n=886) of prehistoric artifacts (Table 1). Knapping debris comprised the vast majority (n=880, 99%) of items obtained from the 2000 fieldwork. Four thick biface fragments, one core, and one projectile point fragment were also recovered.

Each of the prehistoric artifacts was made of local Fort Payne chert. This result seems appropriate given the extensive chert deposits (originating from the Mississippian Fort Payne Formation) across Roper's Knob. Quarry cortex visible on recovered primary and secondary decortication flakes confirmed the prehistoric inhabitants use of these locally available sources. In addition, a substantial amount of natural Fort Payne chert was observed within each of the excavation units. All natural debris was sorted from the cultural material during the initial laboratory analysis.

Lithic Artifacts

Core (n=1)

One small, somewhat rectangular cobble fragment (weighing 53.5g) was assigned to this category. This particular specimen displayed a lateral edge with flake scars indicative of flakes removed in a unidirectional and sequential manner. There was no evidence for edge preparation on the objective piece prior to flake removal.

Thick Bifaces (n=4)

These artifacts were small cobble fragments with bifacial flaking and a variable amount of cortex. Specimens in this category displayed large flake scars, sinuous edges, and thick cross-sections.

Flakes (n=621)

All unmodified flakes created by the manufacture or maintenance of chipped stone artifacts have been included in this category. Flakes were classified as primary, secondary, and blank flakes based on a cobble reduction sequence and the

amount of cortex remaining on the flake's dorsal surface. Primary flakes (n=41) had cortex over their entire dorsal surface. Secondary flakes (n=162) exhibited less than 90% cortex over their dorsal surface. Blank flakes (n=418) had no cortex except occasionally over their striking platform.

One blade, with parallel dorsal ridges and a truncated pyramid cross-section, was included within the blank flake classification. Whether or not this specimen represents the product of a true blade technology cannot be confidently answered with the available information. No other evidence for such a technology, such as blade cores or additional blades, was obtained from the excavations.

Blocky Debris (n=259)

Blocky debris comprised all angular and blocky fragments from the manufacture or maintenance of chipped stone tools. These fragments were likely produced as shatter during percussion flaking.

Projectile Point (n=1)

This unidentified dart blade and tip fragment represented the only formal tool recovered from the 2001 excavations. The blade edges have been extensively resharpened, presenting an almost serrated appearance. One note of interest was that this specimen had been exposed to heat. This heating was probably intentional since none of the other lithic artifacts were heated.

Summary Statement

The prehistoric assemblage recovered from the 2001 excavations presents a picture of native inhabitants utilizing the local chert resources along Roper's Knob to manufacture (and possibly refurbish) stone tools. Native occupation of the 40WM101 site area appears limited to intermittent visits just long enough to obtain needed chert resources. Such use of this locale was likely conducted in conjunction with hunting and/or gathering forays throughout the prehistoric occupation of middle Tennessee.

TABLE 1
DISTRIBUTION OF PREHISTORIC MATERIAL

| | South Terrace | West Terrace | East Terrace | House | | Yard | | Platform | | Ramp | Redoubt | West Side of Redoubt | East Side of Redoubt | Feature 1 | Feature 2 | Feature 3 | Feature 4 | Feature 6 | Feature 7 | Feature 10 | Feature 11 | Feature 12 | SITE TOTAL | % | |
|-----------------------|---------------|--------------|--------------|-------|------|------|------|----------|-----|------|---------|----------------------|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------|-----|
| | | | | Z I | Z II | Z I | Z II | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| Thick Biface | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0.5 |
| Primary Flakes | 7 | 1 | 3 | 3 | 0 | 5 | 5 | 0 | 1 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 4.6 |
| Secondary Flakes | 42 | 1 | 7 | 0 | 1 | 17 | 22 | 1 | 11 | 49 | 6 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 162 | 18.3 | |
| Blank Flakes | 113 | 1 | 7 | 10 | 2 | 71 | 49 | 2 | 22 | 106 | 14 | 0 | 0 | 1 | 0 | 8 | 0 | 2 | 0 | 0 | 0 | 10 | 418 | 47.2 | |
| Blocky Debris | 71 | 1 | 3 | 8 | 4 | 49 | 30 | 2 | 20 | 55 | 8 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 259 | 29.2 | |
| Projectile Point | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 | |
| TOTAL | 235 | 4 | 20 | 21 | 7 | 142 | 109 | 5 | 54 | 224 | 31 | 0 | 0 | 3 | 0 | 12 | 0 | 3 | 0 | 0 | 0 | 16 | 886 | 100 | |
| Percent of Site Total | 26.5 | 0.5 | 2.3 | 2.4 | 0.8 | 16.0 | 12.3 | 0.6 | 6.1 | 25.3 | 3.5 | 0.0 | 0.0 | 0.3 | 0.0 | 1.4 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.8 | 100 | | |

