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**Understanding Camden: The Revolutionary War Battle of Camden As Revealed Through Historical, Archaeological, and Private Collections Analysis**

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As Revealed Through Historical, Archaeological, and Private Collections Analysis

James B. Legg
Steven D. Smith
and
Tamara S. Wilson
2005
South Carolina Institute of Archaeology and Anthropology
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By

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and the

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Management Summary

This report presents the results of battlefield archaeology at the Revolutionary War Battle of Camden, August 16, 1780, located in Kershaw County, South Carolina. The analysis of historic documents, a controlled metal detector sampling survey, and relic collector artifacts are combined to present an interpretation of the battle as it unfolded across the landscape. The work was funded by two grants, Grant Agreement GA-2255-01-11 (2001) and GA-2255-03-015 (2003), from the National Park Service’s American Battlefield Protection Program through the South Carolina Palmetto Conservation Foundation.
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A large silent partner in our work is the Battle of Camden Project. We urge readers to visit their outstanding web site www.battleofcamden.org. Among many within this group we want to point out Mr. Lindsey Pettus, of the Katawba Valley Land Trust, Mr. Charles B. Baxley, President of the Kershaw County Historical Society, and Ms. Joanna B. Craig, Director of Historic Camden Revolutionary War Site. Lindsey, Charles, and Joanna are in the front lines of Kershaw County preservation efforts everyday. Thanks to each of you for all the assistance you have provided. We also thank John A. Robertson, Dr. Bobby Moss, John R. Maas, and Tony Scotti—just some of the many people who worked with the project.

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At the South Carolina Institute of Archaeology and Anthropology we thank Dr. Chris Clement, and the Director Dr. Jonathan Leader for their continued support. Our archaeological team at one time or another consisted of the authors, Mike Stoner and Mike Norris in 1998, and Rebecca Barrera, Brett Cullen, Mike Fields, Kevin Lindstrom, and David Jones.

Despite all this expert assistance, remaining errors remain the authors’ responsibility.
Introduction

The Battle of Camden, South Carolina, August 16th, 1780 was a disaster for the American cause, effectively destroying the Continental Army sent South by Congress in response to the British occupation. This report presents the results of an analysis of the Battle of Camden using a rarely employed, if not unique, approach to battlefield investigation. Two lines of evidence were integrated to develop this interpretation: 1) an historical analysis of primary and secondary documents describing the battle; and 2) a formal survey and the analyses of private collections in the possession of relic collectors who visited the site. These two types of evidence were used to draw conclusions regarding the initial placement of the opposing forces and their subsequent maneuvering across the modern landscape. This work is a critical component of a larger, ongoing effort to preserve and interpret the Camden battlefield. The conclusions drawn here are preliminary, based on limited data, and are expected to be refined through further research. However, this is the first intensive and systematic attempt to interpret the battle as revealed by both the historical and collector data.

Project Goals

On November 1, 2001, the South Carolina Institute of Archaeology and Anthropology (SCIAA) was awarded a grant from the Palmetto Conservation Foundation (PCF) for assisting the PCF with archaeological and historical research to delineate battlefield features associated with the Battle of Camden. The project was based on recommendations made to PCF by the authors in 2000. Four specific tasks were assigned:
1. Assist the Camden Archaeological Committee (CAC)\(^1\) in reviewing information from collectors regarding the artifact locations from previous metal detecting in order to define the battlefield area, core area, features, battle lines, and burial grounds.

2. Assist the CAC in the development of a GIS battlefield base map, using the data gathered in Task 1.

3. Inspect, identify, and analyze collectors’ artifacts.

4. Make recommendations for future archaeological research and park interpretation (Fields 2001).

A detailed history of the battle was necessary to the interpretation of the site, and this was prepared as a 5\(^{th}\) task. The results of the project’s first phase were reported as part of a strategic plan for the preservation of the National Historic Landmark, Battle of Camden site (Fields, Smith, and Legg 2003).

On December 8\(^{th}\), 2003, the SCIAA was awarded a second grant from the PCF to continue the research program begun in 2001. Specific tasks for this grant were to:

1. Review and analyze the findings from the previous grant and continue the analysis and interpretation of private collections obtained from the Camden battle site.

2. Advise the PCF in developing a plan for a two-foot interval topographic base map for the entire 1,300-acre Camden battlefield National Historic Landmark and another base map for a future 100-acre metal detector survey.

3. Conduct a controlled, GPS-plotted, metal detector sampling survey totaling three acres.

4. Complete a report of findings to include the results of the survey and analysis of seven private collections (Fields 2003).

Funding for both grants primarily was provided by the American Battlefield Protection Program, National Park Service, U.S. Department of the Interior, through the Palmetto Conservation Foundation, Grant Agreement Numbers GA-2255-01-11 and GA-2255-03-015,

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\(^1\) The Camden Archaeological Committee is a subcommittee within a larger consortium of private citizens, historians, archaeologists, relic collectors, preservationists, and 21 agencies, called the Battle of Camden Project, see www.battleofcamden.org.
respectively. Additional contributions came from 40 individuals, foundations and businesses in South Carolina.

The results of the first, third, and fourth goals of the 2003-2004 project are presented here, integrated with the results of the first project. This report is organized as follows. The remainder of this chapter provides background information regarding the present battlefield landscape, a history of past land-use at the battlefield, and a brief project history. Chapter 2 provides an expanded and revised version of the Battle of Camden history originally presented in the strategic plan. (This chapter is referenced with footnotes in order to present additional analysis and comment relevant to our battlefield interpretation, and to provide PCF with a stand-alone history for their use beyond this report.) Chapter 3 describes the Collector Survey, including its methods and results. Chapter 4 presents an interpretation of the battle and the battlefield based on the analysis of the history and collector data, Chapters 2 and 3. Chapter 5 describes the limited controlled metal detector sampling conducted in 1998 and 2004, including methods and results. Chapter 6 is a summary of the material assemblage from the Camden battlefield, drawn from both private collections and archaeological investigation. Chapter 7 offers conclusions beyond those drawn regarding the battle interpretation in Chapter 4.

**The Physical Setting of the Camden Battlefield**

The Battle of Camden site is located eight miles north of modern Camden, South Carolina, nearly a mile north of Gum Swamp Creek, and on both sides of State Road 58 (Figures 1.1, 1.2). The study area for this project may be defined within three different boundaries (Figure 1.2). The smallest is a six-acre Daughters of the American Revolution (DAR) property that includes a parking area, a monument to Baron de Kalb (Figure 1.3), a National Historic Landmark marker, and a South Carolina Highway Historic Marker. Surrounding this is a property owned by the Palmetto Conservation Foundation, with an easement owned by the Catawba Valley Land Trust. The property encompasses what is believed to be the core of the battlefield. This property and the DAR tract total about 316 acres. The PCF
Figure 1.1. Location of Camden battlefield (SCIAA).
Figure 1.2. Camden battlefield showing National Landmark Boundary, easement, and DAR property (SCIAA).
tract is in pine forest, much of it recently clear-cut and replanted. Longleaf pine has been replanted in some areas as part of an effort to restore the landscape to its 1780 appearance. Surrounding the PCF tract is a 1,229-acre area (inclusive) that defines the National Historic Landmark area. This area includes pine plantation, open pasture, private homes, a church, cemetery, communications tower, power line, and an unoccupied complex of buildings that formerly housed a county chain gang (Fields, Smith, and Legg 2003).

The local topography is critical to understanding the battle, as eyewitness accounts (see history) describe terrain features that assist in locating participating units on the present landscape. State Road 58 generally follows the historic route used by both armies, and bisects the battlefield. Traces of the original road still exist about 10 yards east of the modern road, running through the DAR property to a point about 100 yards south. The road traverses an upland area between drainages to the east and west that gently slope from north to south. At the battlefield’s northern extent the elevation is 402 msl, and it drops to 306 msl about a mile down slope, at the approximate south end of the battlefield. On the battlefield’s extreme north end, the road bisects a narrow ridge, about 300 yards wide, but the terrain then opens to a wide plain some 1,600 yards wide just north of the de Kalb monument. South of this broad plain, the landscape narrows again, constricted by swampy drainages on either side. The width of the plain here is confined to about 1200 yards. Traditionally, this is believed to be where the main battle lines were formed. South of this point the ridgeline falls gently into the Gum Swamp Creek floodplain.

Figure 1.3. DAR monument to Baron de Kalb erected in 1909. The monument replaced a pine tree where tradition held that de Kalb lay after being wounded (SCIAA).
The Camden battlefield is near the western edge of the Sandhills physiographic province, and soils in the area are primarily sand - Blanton, Lakeland, and Wagram types. The historic ground cover was a longleaf pine-wiregrass association. At the time of the battle, the old-growth longleaf pines were thick and tall, with the first limbs as much as 30 feet to 40 above the ground surface. Wiregrass covered much of the otherwise open forest floor, and a contemporary account claims that it was waist high in some areas (see Chapter 2). Today, the forest floor has an understory of young pines and blackjack oaks, and some areas exhibit thick growths of briars, hawthorn, sumac, wild raspberries, and strawberry bush. The swamp areas are overgrown with fetter bush, holly, sheepkill, myrtle, swamp azalea, muscadine, and greenbrier (Mitchell 1989).

The Battlefield Since 1780

The land use history of the Camden battlefield since 1780 is essential to understanding the archaeological resource today. In 1786, a visitor reported that “shattered trees, and the unburied bones of men and horses” were still visible, but an 1830 visitor reported that not a vestige of the battle remained (Whitfield 1980: 56). Historian Benson Lossing examined the Camden battlefield in January, 1849, and recorded the first substantial description of the site:

The hottest of the engagement occurred upon the hill, just before descending to Sander’s Creek [Gum Swamp Creek] from the north, now, as then, covered with an open forest of pine-trees. When I passed through it, the undergrowth had just burned, and the blackened trunks of the venerable pines, standing like the columns of a vast temple, gave the whole scene a dreary, yet grand appearance. Many of the old trees yet bear marks of the battle, the scars of the bullets being made very distinct by large protuberances. I was informed that many musket balls have been cut out of the trees; and I saw quite a number of trunks that had recently been hewn with axes for the purpose. Some pines had been thus cut by searchers for bullets that must have been in the seed when the battle occurred. Within half a mile of Sanders Creek [Gum Swamp Creek], on the north side, are some old fields, dotted with shrub pines, where the hottest of the battle was fought. A large concavity near the road, filled with hawthorns, was pointed out to me as the spot where many of the dead were buried (Lossing 1855: 460).

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2 The most complete history of the battlefield thus far has been R. Bryan Whitfield’s 1980 thesis, *The Preservation of the Camden Battlefield* (Department of History, Wake Forest University, Winston Salem, NC).
This suggests that parts of the battlefield’s southern end were already in fields in 1849, and the site of a mass grave was known in that vicinity. The south end of the battlefield is actually nearly a mile from Gum Swamp Creek, however. Unfortunately the only map accompanying Lossing’s description is a version of the Faden Map of 1787 (see Chapter 2).

The Camden battlefield was still substantially wooded at the beginning of the twentieth century, but Camden historians Thomas Kirkland and Robert Kennedy reported that the character of forest had changed:

If one today, in leafy August, were to visit the scene of the battle, he would exclaim: “Here indeed was a veritable ‘war of the woods.’” It has always been known locally as “Parker Old Field,” because of its ownership in former days by one Parker, although there are none of those badges in the vicinity always indicative of old fields. The present adjacent clearings are undoubtedly comparatively recent. At the date of the battle the ground was occupied by a close array of tall and stately pines, limbless to a height of forty or fifty feet. These, by the process of turpentining, have been reduced to a scanty few, so that not many of those remain that witnessed the battle. Their thinning has allowed to come up a growth of scrub oaks, which in summer obscure the view much more than did the pines.... Those living in that neighborhood have found amongst the leaves of the woods many an old buckle, button, bayonet, bullet, cannon ball, flintlock, and to this day diligent search will reveal some such *disjecta membra* of the encounter (Kirkland and Kennedy 1905: 169).

Kirkland and Kennedy found “grape shot and bullets in half-burnt and decayed trees” (Kirkland and Kennedy 1905:162n). The map of the Camden battlefield prepared by Kirkland and Kennedy (1905:160) does not indicate which areas were wooded and which were cleared. Their map does show the location of the “Pine where De Kalb lay wounded,” which was replaced by the monument to Baron de Kalb erected by the Hobkirk Hill Chapter of the Daughters of the American Revolution in 1909 (Whitfield 1980: 58-61).

Whitfield (1980:59n) notes that a newspaper photograph of the battlefield taken around 1910 “reveals that that there were a few clearings at the site,” and that a 1918 tourist guide reported that it “is largely wooded ground.” In March 1929, Lt. Col. H.L. Landers visited the battlefield while researching an history of the battle he prepared for the War Department (Landers 1929). Landers’ battlefield map (1929:40) (see Figure 2.4) is essentially copied from
that of Kirkland and Kennedy (1905:160), but it does show nearly all of the battlefield south of
the present DAR property as no longer wooded in 1929. Whitfield, however, indicates
considerably less clearing as late as 1941:

During the 1920’s or early 1930’s a family named Hearon acquired a tract of land
on the east side of Route 58, a few hundred yards south of the De Kalb marker.
Years later, J.W.Z. Hearon, who had helped to farm the land as a boy, recounted
how he had collected buckets full of musket balls from the soil....  An Aerial
photograph taken on January 29, 1941 shows a house, a barn, several smaller
structures, and approximately 40 acres of cultivated land. With the exception of a
few scattered clearings, however, the rest of the battlefield remained woodland

In 1930, the Hobkirk Hill Chapter of the DAR secured an option to buy 425.5 acres of the
battlefield for about $6500, but the land was not purchased. In 1942, the chapter did acquire five
additional acres around the de Kalb monument, adding to a single acre acquired there in 1912
(Whitfield 1980:64,65).

An aerial photograph taken in 1949 (Figure 1.4) shows that nearly all of the battlefield
south of the DAR property was under cultivation, while the areas to the north and west of the
DAR property were in woods, or pine savannah. By 1964 (Figure 1.5), the fields seen in 1949
and the farm site east of Route 58 are in pine plantation, while formerly wooded areas have been
timbered, but are not agricultural fields. The DAR property stands out as a small rectangle of
original (if thinned) longleaf pine forest. Figures 1.6 and 1.7 show the battlefield after a massive
clear-cutting program completed in 1998.

In summary, it is clear that the vegetation has gone through several changes since the
battle, but the topography has remained the same. Furthermore, relic collecting at the battlefield
began immediately after the battle and has continued since that time. Chapter 5 addresses the
effects that historic land use has had on the battlefield’s archaeological record.
Figure 1.4. The Camden battlefield and vicinity in 1949 (modified, on file, Thomas Cooper Library, University of South Carolina). DAR property in red.
Figure 1.5. The Camden battlefield and vicinity in 1964 (modified, on file, Thomas Cooper Library, University of South Carolina). DAR property in red.
Figure 1.6. The Camden battlefield and vicinity in 1999, after much of the site was clear-cut (modified, on file Thomas Cooper Library, University of South Carolina). DAR property in red.
Project History

As mentioned, this report presents the results of a collectors survey of materials gathered by private individuals, and also of a controlled metal detector survey conducted by professional archaeologists, all funded by two grants from the National Park Service’s American Battlefield Protection Program, through the Palmetto Conservation Foundation. The first known archaeological investigation of the Camden battlefield under the direction of professional archaeologists was attempted in 1998 when the first author conducted a volunteer effort over two weeks to sample the area’s archaeological potential. The impetus for this work was the unexpected logging of the site and the immediate danger posed by exposing the surface. The results of this work are detailed in Chapter 5.

The origin of the Camden Battlefield Collector Survey was in December 2000, when the first author was asked by the Palmetto Conservation Foundation (PCF) to assess the Camden battlefield’s archaeological integrity and potential based on the 1998 effort, and to suggest ways in which archaeology might assist battlefield interpretation. It was obvious that the battlefield was undeveloped and relatively well preserved as a landscape, but as an archaeological resource it had suffered serious damage through decades of relic collecting. Among other recommendations, Legg suggested that a concerted effort be made to identify and interview individuals who collected artifacts from the site in a pragmatic effort to salvage whatever
information they could provide that might be helpful in interpretation (Legg 2000). This technique has proven very useful on intensely collected military sites that might otherwise yield far less information to archaeologists (e.g. Legg and Smith 1989; Legg and Espenshade 1991; Espenshade, et al 2001). This recommendation resulted in the two grants detailed in this report.

Given the project’s nature, there was not a single concentrated, continuous episode when project personnel were able to focus on the project’s goals. Identifying, locating, visiting, and arranging battlefield visits between collectors and project personnel extended over a three year period (2002-2004) leading up to drafting this report. Many site visits and interviews were conducted on weekends when collectors were available. Likewise, the controlled metal detector survey was conducted piece-meal over a period of two months in February and March 2004, when personnel were available. Collection analysis and artifact photography occurred as collections were made available to the project team. The report was assembled over the two years with a final month-long effort in August 2004.

It is impossible to accurately assess the number of person-hours expended on this project. A total of 864 person hours were budgeted for the two grants. However, it is a reasonable estimate that the actual total number of person hours was twice this amount.
Chapter 2: Battle of Camden, August 16th, 1780

History

Introduction

The following history describes the battle of Camden as seen by the historic record. This history is in no way intended to be the last word concerning exactly what happened on that hot August 16th, 1780. It serves to provide a basic historical understanding of the battle and to complement the archaeological record of the battlefield. Together, the ultimate goal of both this history and the archaeology described in the following chapters is to attempt to detail, to the extent possible, the sequence of maneuvers by both American and British military units across the battlefield landscape. As such, this history relies primarily on eyewitness accounts, especially those of: 1) American commander General Horatio Gates, 2) Colonel Otho Williams, Gates’ Adjutant, 3) Major Thomas Pinckney, aide-de-camp to Gates, 4) Colonel Guilford Dudley, a private soldier at the time serving as an aide to Colonel Porterfield, 5) British commander Lord Earl Cornwallis; and, 6) Lieutenant Colonel Banastre Tarleton, British light cavalry commander.1 While there are many secondary accounts,2 after study, most seem to rely

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heavily on the few eyewitnesses referenced herein. Therefore, unless they offer some additional insight or contrary interpretation of the sequence of events, or locate units on the battlefield, they will rarely be referenced (except for their excellent summaries of the overall strategic situation). As Battle of Camden Project research continues, a number of additional eyewitness accounts are being discovered in pension applications and at British archives. For that reason alone, this effort is not the final say on the Battle of Camden.

Prelude

Only a few days after the fall of Charleston, in May 1780, British infantry and cavalry detachments fanned out across South Carolina, capturing towns including Ninety Six, Camden, and Georgetown. Controlling these towns created a defensive front protecting Charleston, and from which the backcountry could be subdued. Both sides saw Camden, South Carolina, as the keystone in this arch. The only American forces in South Carolina were a few partisans, and for a short time a party of Virginians under Colonel Abraham Buford who were to be slaughtered by British Lieutenant Colonel Banastre Tarleton at the Waxhaws.

Prior to Charleston’s surrender, General George Washington recommended that a force of Continental soldiers be sent south to rescue the besieged or, if Charleston had fallen (it already had) to act to “arrest the progress” of the British and “save the Carolinas.” He further hoped that the Continentals’ presence would rally the cause and increase Carolina militia enlistments. Major General Baron de Kalb, commander of the Maryland and Delaware Division, eventually arrived near Buffalo Ford, North Carolina, encamping on July 19th after a difficult march south through Virginia and North Carolina. There, de Kalb awaited further orders, desperately needed.

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3 See, Landers, Battle of Camden, p. 4.
supplies, and reinforcements. Despite de Kalb’s pleas to Whig authorities in North Carolina, he got nothing but promises. Especially galling for de Kalb, and later Gates, was the lack of cooperation from Major General Richard Caswell who commanded North Carolina militia, and who was supposed to join de Kalb with supplies. Meanwhile, Congress sent General Horatio Gates, the hero of Saratoga, to take command of the Southern Army. Gates arrived at the American camp on the evening of the July 24th, with the good news that a force of Virginia militia was on its way to join the Continentals.4

At Buffalo Ford, Gates surveyed his army. His best unit was de Kalb’s Maryland (and Delaware) Division, which consisted of two brigades. General William Smallwood commanded the 1st Brigade; the 2nd was under General Mordecai Gist.5 The Delaware regiment, commanded by Colonel Vaughan, was an integral part of the 2nd Brigade. In addition, Gates expected the legionary corps of Colonel Armand, Marquis de la Rouerie, consisting of about 60 cavalry and an equal number of infantry. Critically, this little unit would be Gates’ only cavalry, aside from 20 men under Francis Marion who would act as a bodyguard for Gates in the upcoming campaign. Luckily for Marion, he was dispatched to take charge of the Williamsburg District militia only a day before the disaster at Camden. There were also three companies of Continental Artillery under Colonel Edward Carrington. Major Thomas Pinckney, already in camp as an aide to de Kalb, became Gates’ aide.6

With these forces, and expecting to be joined by Virginia militia under Brigadier General Edward Stevens and North Carolina militia under Caswell, Gates decided to focus his campaign on Camden, which General Thomas Sumter reported as vulnerable due to a reduced garrison. Gates made some hasty decisions that, in hindsight, appear to have contributed to the disaster on August 16th, 1781. To the amazement of his officers, Gates immediately ordered the weary and starved troops to be ready to march. Only three days after the order, the troops were on the

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4 Thomas Pinckney states that Gates joined de Kalb on the 25th, but he likely means that he took command on the 25th which is correct, see Pinckney’s reply to James, July 31, 1822.
move, leaving behind two artillery pieces for lack of horses. The army would travel toward Camden with ten field pieces. To the further consternation of some officers, Gates’ intended line of march was a direct route to Camden, through a part of the Carolinas widely known to lack forage--a veritable desert--occupied by an unfriendly population. Colonel Otho Williams, Adjutant General, first to de Kalb, and then to Gates, attempted to dissuade Gates from the intended march in favor of a more indirect approach that first turned west, through Salisbury, North Carolina, and then south toward Camden. This route would take the army across a landscape where the local population was friendly and forage was more available. Gates was not persuaded.

The army marched through a desert-like countryside until they arrived at Mask’s Ferry on the Pee Dee. Here the army found plentiful green corn and green peaches. Starving, the men ate the corn and peaches with obvious results. As the men suffered gastrointestinal reactions, a tremendous thunderstorm hit the army and delayed the crossing. In the meantime, Gates made a more rudimentary tactical error. Colonel Anthony White and Lieutenant William Washington, with what was left of the 1st and 3rd Light Dragoons after General Lincoln’s surrender, asked for aid in recruiting their corps and offered to join Gates’ army. But Gates turned them away. Although White and Washington’s commands were tiny and probably could not have prevented Tarleton’s cavalry from wreaking havoc at Camden, they would have been valuable nevertheless. Gates apparently placed little value on cavalry, and would later attempt to convert even Armand’s few cavalry horses to artillery draft horses.

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7 Williams, Narrative, p. 487. Gates has been roundly criticized for taking this route and it is probable that his decision had a lot to do with army’s poor physical health on the morning of August 16th. However, historian Charles Flood, repeating an argument first proposed by eyewitness Thomas Pinckney, offers a defense of Gates. Pinckney and Flood argue that the patriots in South Carolina would interpret the march west as abandonment. Second, according to Pinckney, the army had few provisions at Buffalo Ford and subsisted by daily foraging parties. Gates said, “We may as well move forward & starve, as starve lying here.” He maintained that the route to Masks Ferry was “known” to be fertile. Further, that de Kalb first, and then Gates second, could not get control of General Caswell and his North Carolina militia, who were acting independently in South Carolina. By marching southwest, Gates was drawing nearer to Caswell, hoping to take charge of the errant commander and his troops before they were lost in an unnecessary battle, see Flood, Rise, Chapter 44, and Pinckney’s “Southern Campaign,” pp. 250-25, and reply to James, July 31, 1822.

8 Some historians have wondered why there was green corn in August, but Otho Williams notes that the corn was a second crop, “…the preceding crop …was exhausted,” see, Williams, Narrative, p. 487.

9 Few references mention this request, but see Ward, Revolution, p. 719.
After some delay, Gates got his army across the Pee Dee on August 3rd to find Lieutenant Colonel Charles Porterfield and about 100 Virginia State Troops awaiting him. Porterfield was welcomed and his command began serving as scouts in front of the army. As the army marched west and south, Gates finally received two communications from Caswell. Caswell first wrote Gates saying he was planning an attack on a British outpost, and then on August 6, came a plea for help as Caswell himself was about to be attacked. Gates had had enough, and rode on ahead of the army to find the North Carolina militia and get them under control. Once he found Caswell, Gates was “graciously” received and the two forces were joined on August 7th. Together, with de Kalb on the right and Caswell on the left, the unified command marched to Lynches Creek. There they found the British had abandoned camp and moved to Little Lynches Creek. Proceeding on to Little Lynches Creek, on August 10th, the Americans found British Lord Rawdon and his command fortified on the opposite bank.

While Gates’ starving army straggled toward Camden, British commander Lord Francis Rawdon, well aware of Gates’ progress, was attending more pressing matters. General Thomas Sumter had been harassing the British outposts at Rocky Mount and Hanging Rock. Rawdon first marched out of Camden to reinforce these posts, but when he learned of Gates’ approach, he decided to concentrate his forces to meet the American army--first marching to Lynches Creek, and then, countermarching to Little Lynches Creek. Thus, when Gates arrived on the west branch of Little Lynches Creek, about 14 miles from Camden, there was Rawdon, with the 23rd, 33rd and 71st Infantry Regiments, his own Volunteers of Ireland, a militia corps under Lieutenant Colonel Hamilton, and 40 British Legion dragoons under Tarleton. Farther west, British Legion infantry was posted at Rugeley’s Mills. Meanwhile, as Gates assessed his chances of successfully attacking Rawdon at Little Lynches Creek, Lord Earl Cornwallis left Charleston, rapidly heading northeast to take command of the British forces.

Gates eventually thought better of attacking a fixed position across a causeway, despite de Kalb’s urging. Instead, Gates marched north and then west to Rugeley’s mills, effectively by-

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10 Williams, *Narrative*, p. 490.
passing Rawdon and threatening the British occupied Camden. The British Legion infantry left before Gates arrived. Rugeley’s plantation, also known as Clermont, was the home of loyalist Colonel Henry Rugeley, and included mills, store, home, and barn. At the fork of two creeks thirteen miles from Camden, Rugeley’s was also along the main road from Camden to Charlotte. As a result of Gates circling maneuver, Rawdon was and moved back toward Camden, posting his command at Logtown, a small hamlet one mile north of Camden. This move placed the British between Gates and Camden and concentrated the British forces. Throughout the 13th of August, units of Gates’ army stumbled into Rugeley’s Mills (Figure 2.1). Late that night, Lord Cornwallis arrived at Logtown, unbeknownst to Gates. The following day would find both Gates and Cornwallis making critical decisions leading to the Battle of Camden.

Phase I: Night March and Clash of Armies

August 14th saw the long awaited arrival of General Edward Stevens and the Virginia militia who followed behind Gates, never being able to catch up. Stevens brought some 700 additional, albeit exhausted, reinforcements. At the same time, Gates received a plea from General Sumter, operating to the west, for additional troops. Sumter saw an opportunity to capture a British supply train proceeding toward Camden. Rather than ordering Sumter to join the main force for an attack against Cornwallis, on the morning of the 15th, Gates sent Sumter 300 North Carolina Militia, 100 of the 5th Maryland Regiment Continentals, and two field pieces.13 Of less immediate consequence, but fortunately for future American partisan operations, Gates detached Francis Marion to the Williamsburg district.

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13 Gates, Report to Congress, p. 302 in Stevens. Otho Williams, does not mention the North Carolina Militia being detached, see, Narrative, p. 492. Historians, convinced of Gates’ military incompetence, have pointed to this decision as an example, see Ward, Revolution, p. 722. But again, Pinckney, an eyewitness, comes to Gates rescue. He argues that Gates had no real intention of an open battle with the British. In fact, Pinckney states that he asked Gates directly if Gates intended to attack the enemy. Gates responded “No!” In what turns out to be alarming irony, Gates’ reasoning was “the number of Militia who formed the bulk of his army.” Thus Gates was well aware that the militia was not to be relied upon. In any case, the decision to aid Sumter, and subsequent orders to march toward Camden (see below) were to “take post” there (as Gates states in his Report to Congress) probably to force Rawdon (Cornwallis) to abandon Camden or attack Gates in a fortified position. In this light, Sumter’s westward flanking maneuver to capture the supplies would have pressured the British southward if, as Gates and Sumter believed, the British were thinking of retreat, see Pinckney, Southern Campaign, pp. 244-246. Williams does not make this explicit, but his comment that “The colonel’s [Sumter] accurate knowledge of the geography of the country, and the qualities of the men who were his followers, favoured the execution of this enterprise,” Narrative, p. 492 can be interpreted to mean he approved of the decision.
Had Gates waited while the militia rested, perhaps history might have recorded the battle of Rugeley’s mills. Otho Williams believed that a few days rest at Rugeley’s would have seen the arrival of an outpouring of local militia and supplies. But neither Gates, nor Cornwallis at Logtown, saw the American camp as a good tactical position. Gates wanted to be closer to Camden.\(^{14}\) He sent Colonel John Senf and Lieutenant Colonel Porterfield down the road toward Camden to find a better, more defensible site, from which to “confine his [the enemy] operations, to cut off his supplies…and…harass him.”\(^{15}\) Senf found an “Advantageous Situation, with a Deep Creek in Front, Seven Miles from Camden.”\(^{16}\) This site, the destination of the

\(^{14}\) According to Colonel John Senf, Gates also wanted to be closer to Sumter operating on the western side of the Wateree, see, Colonel John Senf, “Extract of a Journal Concerning the Action of the 16\textsuperscript{th} of August 1780 Between Major General Gates and General Lord Cornwallis,” Library of Congress.

\(^{15}\) Pinckney, “Southern Campaign,” p. 245.

\(^{16}\) Gates, Report to Congress, p. 302 in Stevens. Landers states that it was about 5 ½ miles from Camden, see Landers, \textit{Battle of Camden}, p. 23.
American army’s march toward Camden, was either Gum Swamp Creek just south of the Camden battlefield, or more likely, Sanders Creek, about a mile south of Gum Swamp.

But Gates and his advisors were operating under a false assumption—that Cornwallis planned a retreat. Instead, Cornwallis was planning to attack. Cornwallis’ excellent intelligence informed him that Gates was “badly posted” at Rugeley’s. Furthermore, sickness had spread widely in the British army and a retreat from Camden would have left the sick behind, along with a large quantity of supplies. Further, abandoning Camden would leave the upcountry to the rebels. With confidence that Charleston was well protected, and that he had “little to lose by a defeat, & much to gain by a Victory,” Cornwallis prepared to march with the full intention of engaging and defeating Gates at Rugeley’s.

At the American camp, Gates called his officers to Rugeley’s barn on the afternoon of the 15th and issued orders to march south to the new position at ten that evening. According to Gates, he “communicated” his plans in this meeting and no one raised any objections. Williams confirms that Gates heard no objections in the meeting, but asserts that there were misgivings among the officer corps about a composite army of regulars and militia that had never maneuvered together in daylight, marching at night toward the enemy.

Otho Williams, in his narrative, has little good to say of Gates and takes every opportunity to point out poor decisions Gates made that led to the ultimate Camden disaster. Whether Gates was at fault for what happened the next day will continue to be debated. One thing that seems clear was that the army marching on the evening of the 15th was exhausted, sickly, and hungry. As mentioned earlier, Williams points out that waiting a few days at

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17 A loyalist spy had walked into the American camp under the guise of being a friend of the American cause. He was showed to Gates, and the spy promptly offered some information about the British outpost at Camden and left with promises of more. Then the spy reported to Cornwallis his observations of the American camp (Cornwallis to Lord Germain, in State Records of North Carolina, p. 270).
18 Ibid., p. 269.
19 Gates letter, August 20th, in Stevens, p. 302.
20 Williams, Narrative, p. 493.
Rugeley’s would have probably increased both the size of the army and also its food supply.\textsuperscript{21} However, unknown to Williams, Cornwallis would have arrived at Granny’s Quarters Creek the next morning, perhaps surprising and routing the American army anyway.

Nevertheless, Gates’ army prepared for the night march. He ordered the sick, heavy baggage, extra artillery stores, quartermaster supplies and those camp followers who had not already left, to move northeast to the Waxhaws. In keeping with his intent of moving to a better position, other supplies such as ammunition would accompany the army. Then he fed the men. The combined effects of exhaustion and tight stomachs make it startling today to read that Gates issued the men a full meal of meat, bread, and a gill of molasses. As should have been expected, the repast "operated so cathartically, as to disorder very many of the men, who were breaking ranks all night, and were certainly much debilitated before the action commenced in the morning."\textsuperscript{22}

Gates’ army moved out at ten that evening in the following order: Armand's cavalry took the advance along the sandy road. Two hundred yards on his right, marching through the woods in single file was Lieutenant Colonel Porterfield's Virginia Continental light infantry. On the left at an equal distance was North Carolina militia light infantry under Major Armstrong. Porterfield and Armstrong were reinforced with hand picked men from the Virginia and North Carolina Militia, respectively. On the road behind the cavalry were Armand’s light infantry followed by an advanced guard, then the 1st Maryland Brigade, followed by the 2\textsuperscript{nd}. Next in line were three brigades of North Carolina militia followed by the Virginia militia, and a rear guard of volunteer cavalry covered the baggage and ammunition wagons. Each continental brigade had two field pieces at its front.\textsuperscript{23} The rest of the artillery was with the Virginia Militia.

In the van, Gates ordered his few cavalry to be prepared to stand and absorb any attack on their front. Porterfield and Armstrong would then sweep in on the right and left to flank the

\textsuperscript{21} If Williams’ post-war narrative is accurate, the combined exhaustion of the troops and grumbling in the officer corps suggests low morale in Gates’ army.

\textsuperscript{22} \textit{Ibid.}, p. 494.

\textsuperscript{23} Gates, August 20\textsuperscript{th}, in Stevens.
attackers until more support could be brought up. Gates thought the cavalry’s position in the van was a positive move. But Armand was upset with the order. Armand complained that cavalry had never been placed in advance of troops marching at night before, and that Gates’ order was insulting. It is possible Armand was right about the insult. Gates did not seem to appreciate the cavalry’s value, having already dismissed William Washington, and he had wanted Armand's horses to pull the artillery. However, if Gates is guilty of misplacing the cavalry out front, the British did the same.

The landscape between Rugeley's and Camden was gently rolling and wooded. One eyewitness describing it as "thick" however, it is more likely that today it would be described as mature, since these woods in no way resembled modern forests of thin pines and heavy undergrowth. The virgin pine forests of colonial South Carolina consisted of giant mature trees with thick trunks and a canopy beginning perhaps as much as thirty to forty feet above the ground. In this environment, little underbrush could grow, so there were clear, open spaces between the trees that allowed good visibility and did not hinder maneuver. Colonel Guilford Dudley, attached to Porterfield, described the battlefield landscape as an “open piney wood plains, destitute of brush wood” which did not hinder visibility, even at night. No other eyewitnesses mention any problem in maneuvering, nor did the woods hinder British cavalry during the battle (Figure 2.2).

With a full moon shining through the high canopy, Armand's cavalry and Porterfield's light infantry kept visual contact throughout the march. The men were under orders not to make a sound. But the thump of hooves on the sandy road, creak of leather, squeak of artillery wheels, and occasional cough probably carried farther than Gates would have wanted. Still, at 2:30 A.M., four and one half hours into the march and only two miles from his destination, Gates must have been gaining confidence that his maneuver would work. He would reach Sanders Creek, send Armand across to scout, and deploy the army along the ridge above the creek.

24 Williams, Narrative, p. 493.
25 Landers, Battle of Camden, p. 28.
26 Dudley, Sketch, p. 146.
27 But see discussion, footnote 64.
28 Calvin Keyes has calculated that the moon was 99% full that evening, and at 2:30 A.M., the moon was 39.2 degrees above the horizon shining out of the southwest skies at 201.3 degrees. This would place it behind the British giving them the advantage, see http://jrshelby.com/camdenproj/moon.htm, accessed August 26, 2002.
Colonel Armand's vedette was 300 yards in front of the army, pushing down a long gentle hill that would bottom out at Gum Creek. Suddenly, out ahead there was a shout, and the vedette fired his pistol, the crack ringing through the night forest. Armand hurried over to Porterfield on the right flank, and still maintaining silence, whispered “there is the enemy, Sir—must I charge him.”

Unknown to Gates, Cornwallis marched at the same hour up the same road hoping to reach Rugeley’s mills on the morning of the 16th for a surprise sunrise attack. Lord Cornwallis placed a British legion dragoon troop in the British van. Behind them were mounted infantry and four companies of light infantry. The regular infantry, 23rd and 33rd Regiments of Foot followed, behind them was Lord Rawdon's brigade consisting of the Volunteers of Ireland, British legion infantry, and Hamilton's corps of North Carolina Loyalists. Two battalions of the 71st regiment and a few wagons and dragoons brought up the rear. Cornwallis also brought six

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29 Dudley, *Sketch*, p. 146. Although this seems to be a question, there is no question-mark in the quote.
field pieces, four with the forward elements and two with the reserve. The British march had also been a silent one, but when the two armies clashed, the British were probably in better order than the Americans. While crossing Sanders Creek, the British experienced some confusion. But they quickly reformed and were in good compact order when they met Colonel Armand's cavalry.

The British cavalry charged immediately when their challenge went unanswered. Armand's command took the British charge and the two forces crashed together, pistols cracking and sabers clanging. Porterfield's light infantry reacted to the first shots exactly as ordered and ran up the right flank, returning fire. This surprised the British dragoons and forced them back, but simultaneously, the British light infantry advanced, deployed, and laid down a solid fire, throwing back the American center. Armand’s cavalry recoiled, turned and retreated down the road, and most of the militia on both sides of the road followed, all crashing down on the American column, into the advanced guard and then the 1st Maryland Brigade. Gates had ridden to the front at the first shots and was “urged to retire” by Armand, but he remained in front while other officers worked to get the troops under control and formed into a hasty battle line. Out in front of the confused Americans, not all the militia had left the field; some remained on either flank, held by their commanders, and put up a good fight. Porterfield and about 50 men on the right flank fired as many as five rounds before being forced back when the British moved up the road. At this point, Porterfield was wounded and a retreat was ordered.

Covered by the British light infantry, the 23rd and 33rd also deployed across the road. Random firing continued for about 15 minutes, and then both sides ceased firing. It appears that both sides withdrew just beyond sight of each other, neither wishing to continue the battle in

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31 Senf, Extract.
32 Williams, *Narrative*, p. 494. Porterfield was mortally wounded in the exchange. Colonel Guilford Dudley, serving in the North Carolina Militia, helped carry off the Porterfield and stayed by his side, well forward the main line, until daylight when the cannon called Dudley back to the fight, see Dudley’s pension deposition in John C. Dann, *The Revolution Remembered: Eyewitness Accounts of the War for Independence* (Chicago: University of Chicago Press, 1980), pp. 221—228.
33 Senf, Library of Congress. Senf was sent to Congress by Gates with news of the defeat.
35 Dudley, Sketch, p. 231.
37 Williams, *Narrative*, p. 494. The length of this night action will never be decisively determined. Most sources indicate that both sides ceased firing until daylight. On the other hand, Williams states there were “frequent skirmishes” between “advanced parties” until the battle began, and this is supported by Colonel Dudley’s account, see Dudley’s *Sketch*. 
the dark. But the night action was not over. For the next two hours, British dragoons probed the forests, scouting the lay of the land and probing the American front. Likewise, the few American horse were busy, but not so venturesome. Scattered fire by pickets continued throughout the night.

In the sharp night action, both sides took prisoners, and now as the armies prepared for battle, their commanders discovered who was in their front. Gates unhappily learned, for the first time, that Cornwallis’ and his entire force was just down the gentle slope. Cornwallis, probably much happier, learned he had Gates in the open and it would be nearly impossible for Gates to avoid battle. The landscape gave neither side a particular advantage. In open wood, both sides could deploy in linear battle order with their flanks protected. On either side were low swamps and marshes, where cavalry and infantry would have difficulty out-flanking their opponents. Both sides anchored their flanks on these natural features. Gates held higher ground. Cornwallis had Gum Swamp to his rear. This would seemingly give Gates some slight tactical advantage, but only if he forced Cornwallis to retreat. Cornwallis initially had some concern about a road leading off to the west that might be used in an American flanking maneuver, but after posting a guard there, he gave it no further consideration. While his men formed for battle, Gates called a council of war behind the line. He asked his officers, “Gentlemen, what is best to be done?” After a pause, General Stevens spoke. “Gentlemen,” he said, “is it not too late now to do any thing but fight?” It was a very good question. With wagons blocking the road behind them, his troops formed into a ragged battle line that needed further attention, no cavalry to screen a retreat, and with daylight approaching rapidly, it would have been suicide for Gates to do anything but fight. No one commented further and Gates asked all to return to their units and await the daylight.

Perhaps here was where Gates made his greatest mistake. When the troops were formed

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38 Colonel Dudley assisted in getting Porterfield to the rear and was almost found by one of these roving British patrols. See Dudley, Sketch, p. 234.
40 Williams, Narrative, p. 495.
41 Williams apparently disagreed that it was too late to retreat. Although he does not say so, outright, he states that when he went to get de Kalb for the council of war, de Kalb replied “Well, and has the general given you orders to retreat the army?” However, de Kalb did not oppose Stevens comment, so it is difficult to determine what de Kalb meant by his question. It could have been a sarcastic comment to the effect that “What else is there to do but fight?” rather than Williams’ interpretation that de Kalb thought they should retreat. Here Pinckney’s interpretation of events seems more reliable. He notes that sunrise was expected at 5:34 A.M. and that twilight was expected 4:30. Given the nearness of the British, and lack of cavalry for screening a retreat, and perhaps only an hour and a half until daylight, Gates had no choice but to fight.
for battle, the militia displayed to the left and the Continentals to the right. The newly arrived Virginia militia was on the far left. Thus the entire American left consisted of exhausted, sick, militia. Gates placed the 1st Maryland Brigade 200 yards behind the 2nd Maryland Brigade and extending across the road. When morning came, the American lines stood as follows. On the extreme right were the four regiments of the 2nd Maryland Brigade (with the Delawares near the road) totaling about 500 to 550 men. Under the command of General Gist, their right flank was anchored on a creek line called Macdonald’s Branch. In the center were the North Carolina Militia under Caswell, approximately 1200 men in three brigades commanded by Gregory, Butler and Rutherford. On the left, the Virginia Militia consisted of about 700 men under Stevens. Stevens’ left flank was protected by a low swamplike area, with Porterfield’s command and some North Carolina light infantry under Major Armstrong covering a small gap between the end of the line and the swamp (less than 400 men). Further support came from Armand’s cavalry (around 100 men) behind the left flank. Two hundred yards to the center rear of the front line, straddling the road, was the 1st Maryland Brigade under General Smallwood (approximately 400). Artillery along the front line was arranged with two guns between the Marylanders and the Delawares, three straddling the road, and two in the rear line with Smallwood’s command (Figures 2.3 and 2.4).

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42 It might be that there simply was no time to rearrange the line. With more time available, perhaps another formation would have had greater success.

43 Williams, Narrative, p. 495. Williams states that the American front was too narrow to include the 1st Maryland Brigade. This is an important clue to exactly where this front can be found on the battlefield today—see the archeological discussion in this report. Dr Lawrence Babits offers another possibility for Gates placing the 1st Maryland Brigade in the rear. His research leads him to hypothesize that the 1st Maryland Brigade was somewhat disordered in the night battle and was held in reserve to recover from that engagement.

44 The exact number of Americans in the battle needs additional research. These figures are from Landers, Battle of Camden, p. 40. Dr. Lawrence Babits suggests that Landers’ estimates of strength in the 1st and 2nd Maryland is too low, while the number in Armstrong’s light infantry and Armand’s cavalry is too high. He believes that Porterfield had only had 200 men and Armand around 60, he references Williams and Dudley as support.

45 There is great consistency among the eyewitnesses regarding the order of battle, see Williams, Gates, and Tarleton. The placement of the artillery however is not. Tarleton states that “The principal part of the American artillery was posted to the left of their right wing of continentals: the remainder was placed in the road, under the protection of the reserve,” see Tarleton, History, p. 106. This seems to agree with Stedman’s map. Senf however, states that there were two field pieces “on his [Gist] right” and two on the road, between the NC militia and the Continentals, and two more between the NC militia and the Virginia militia. Williams remembers that they were “removed from the center of the brigades, and placed in the center of the front line,” Williams, Narrative, p. 495. Dr. Lawrence Babits believes the artillery was posted with two guns in the center of the 2nd Maryland Brigade, two guns were along the road, and two others were on the left flank (ie. along the road) of the 1st Maryland Brigade in the rear. See footnote 78 for evidence of the majority of the artillery being along the road. Total American officers and men on the battle line were in the neighborhood of 3,700 according to Landers, Battle of Camden, p. 28.
Figure 2.3. Detail of the William Faden Map, Battle of Camden, ca. 1787 (modified from American Map Company, Inc., No. 2113). This map appears in Tarleton (1787) and Stedman (1794). Note Saunders Creek should be Gum Swamp Creek.
Down slope only a few hundred yards away,\textsuperscript{46} Cornwallis did not fully deploy his troops. Instead he had ordered his men to lay down where they were and await daylight. With an army of regulars and well-drilled loyalists, he could leave most of his units in columns along the road, knowing they would deploy quickly when the time came.

**Phase II: Opening Gambits**

Just before daylight, Gates paraded down the line saying a few words to the men, encouraging them for the coming battle.\textsuperscript{47} From Camden, came the boom of the morning gun.\textsuperscript{48} He had only just finished speaking to Smallwood’s reserve and had posted himself behind them

\textsuperscript{46} Another area of dispute, Williams says 500 to 600 yards, see Williams, *Narrative*, p. 494, Pinckney says they were only 200 to 300 yards away, see Pinckney, “Southern Campaign,” p. 249.

\textsuperscript{47} Pinckney, “Southern Campaign,” p. 249.

\textsuperscript{48} Dudley, *Sketch*, p. 234.
when he heard his front line artillery fire. Captain Singleton, in command of the artillery along the road, had spotted the British emerging in column from the gloomy morning mist about two hundred yards away. He informed Colonel Williams. 49 Williams immediately ordered him to fire and then spurred his horse back to General Gates. Finding Gates, he told of the British advance and added that the British were “displaying their column by the right.” 50 According to Williams, Gates did nothing, so Williams offered the suggestion that, if the British were displaying to the right, then an advance by the Virginia militia, already in line, might have a “fortunate effect.” Gates said to him, “that’s right—let it be done,” and Williams spurred his horse toward Stevens’ militia to relay the order. 51 Gates then turned to Pinckney and sent him to order de Kalb to advance in concert with Stevens. 52 Gates also ordered the second line, Smallwood’s 1st Maryland Brigade, to move left and advance behind the Virginia militia. 53 Williams soon reached Stevens and relayed Gates’ order. Williams then made a request of Stevens that indicates excellent tactical understanding. He asked for 40 or 50 volunteers to run forward, take to the trees and start a “brisk fire,” enticing the British to return fire, and thereby blunting the effect of their first volley on the militia. 54 The request was granted and the men advanced as close as 40 to 50 yards from the enemy but it did little good against the on-coming disciplined British who were now in line and advancing with bayonets. 55 Stevens, seeing the British advance, “put his men in mind of their bayonets,” 56 which unfortunately, had only been issued to them the day before.

49 Senf states that the American pickets were driven back before the artillery opened fire.
50 Williams, Narrative, p. 495.
51 Pinckney, who was with Gates at the time, tells a similar tale. However, he says he did not hear the exchange between Williams and the General and states that there was no hesitation in the General. He acted quickly to order Stevens to attack while the British were still maneuvering.
52 Senf states that Gates rode to Gist to give him the order to advance. Given Pinckney’s account, this must be discounted.
53 Senf, p. 277.
54 Williams’ account of the battle makes Williams sound like he was a brilliant officer hamstrung by an incompetent Horatio Gates. While his account is obviously self serving, Williams was well appreciated by Gates’ replacement Nathanael Greene, and his account provides the most details about the battle, see Williams, Narrative, p. 495.
55 By the time Williams got to Stevens, his hope of catching the British in column was gone. Williams records, “The right wing of the enemy was soon discovered in line—it was too late to attack them in displaying; nevertheless, the business of the day could no longer be deferred” italics in original, see Williams, Narrative, p. 495.
56 Ibid., p. 495.
While Gates was parading in front of his troops, Lord Cornwallis was busy completing his deployment. East of the road, he deployed a brigade under the command of Lt. Colonel Webster in the following order. On his extreme right, he placed his four light infantry companies (148 men) anchored by the swamps on their right, then from right to left, the 23rd Regiment (292 men) and 33rd Regiment (238 men). Behind them, the 1st Battalion, 71st (144 men) stood ready as a reserve. Left of the road, Cornwallis deployed his other brigade under Lord Rawdon. From right to left, this brigade consisted of the Volunteers of Ireland Regiment (303 men), the British Legion infantry (126 men), and Colonel Hamilton’s North Carolina Loyalists anchored by another swamp on the left (267 men). More volunteer militia (322 men) formed behind Hamilton. Cornwallis’ artillery, consisting of two six pounders and two three pounders, were placed on the right of the Volunteers of Ireland in the road. The 2nd Battalion, 71st (110 men) was placed behind the Volunteers, each 71st battalion had a six pounder artillery piece. The British Legion dragoons under Tarleton (182 men) formed a reserve along the road. With a few pioneers and artillerists (28 and 19 men, respectively), Cornwallis’ force consisted of 2,179 officers and men. This disposition placed Cornwallis’ best, the light infantry, 23rd and 33rd Regiments, against Gates’ weakest units, the Virginia and North Carolina militia.

Cornwallis had just completed his deployment and was ready to advance when, “I perceived that the Enemy, . . . were formed in two lines opposite & near to us, and observing a movement on their left, which I supposed to be with an intention to make some alteration in their order, I directed Lt. Colonel Webster to begin the attack.” Cornwallis may have been informed of the American movement by Captain Charles Campbell who was in command of a Highland light infantry company on the extreme British right. Captain Campbell had stationed himself on

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57 Another key to the placement of the troops on the battlefield is indicated here. A secondary source, but apparently from a eyewitness account states that the British provincials lined up “with the marshy ground in their front (see interpretive chapter this report)” Colonel David Stewart, *Sketches of The Character, Manners, and Present State of the Highlanders of Scotland*, Volume II (Edinburgh: John McDonald Publishers, Ltd., 1977), p. 67.


60 Cornwallis report, in *State Records of North Carolina*, p. 271. It is interesting to note that Cornwallis was able to see the second line by this point in the morning, indicating that visibility for both sides must have been very good. Loyalist North Carolina Governor Joseph Martin states that the enemy was discovered “advancing in a heavy Column and very near to the right of our line,” see Governor Martin to the Secretary of State, 18th August, 1780, in *State Records of North Carolina*, p. 54. He may be referring to the 1st Maryland (since the militia should have already been in line), and if so, this indicates excellent visibility at this instant.
an old stump and when he noticed the American’s move is reported to have said “I’ll see you damned first,” and ordered his men forward.61

Like most battles, the sequence of combat events quickly becomes confused. However, it is interesting to attempt to sort out the various eyewitness accounts and the following is offered as a possible reconstruction battles first few minutes. At dawn Cornwallis ordered his forces to deploy. As daylight broke, Williams and Singleton saw the British maneuver and Singleton opened fire with his artillery. At least part of the British right line was still in column at that point.62 Williams raced back to Gates while the British rushed to complete their eastward deployment; their light infantry skirmishing in front to cover the deployment of the 23rd and 33rd. Gates and Williams met and after Williams told Gates that the British were in column, Gates ordered Stevens to advance. Williams then rode to Stevens to relay the order. As artillery and light infantry fire spread, Williams and Steven conferred. Williams at that point realized that it was too late to gain an advantage by attacking the deploying British. Instead, he quickly rounded up a few volunteers and moved out in front of Stevens’ line to attempt to dull the impending British attack. Cornwallis noticed Williams’ volunteers moving forward, which he took as an attempt to change formation, and ordered the British advance to begin, first Webster then Rawdon.63 By then, de Kalb had his orders and also started forward. In that instant, the British were advancing on their right against the militia, and the American right and British left were advancing toward each other. Stevens, on the American left, soon realized that his Virginia militia will not gain any advantage by advancing and prepared the militia line to hold against the on-coming British, reminding the men that they too have bayonets. But it would do no good.64

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62 William states this twice, see Williams, *Narrative*, p. 495.
63 Dr. Lawrence Babits hypothesizes the British troops had not completed their deployment eastward when Cornwallis noticed the Americans on the move and decided he had to attack immediately. This is supported by some sources, see for example, Senf, *Extract*.
64 Stevens rallying cry is reported by Williams.
Phase III: Flight of the Militia and Advance by Continentals

All eyewitnesses agree that the militia broke immediately. Many, probably most, fled without firing a shot. Seeing the British bayonets and hearing their cheers, the tired, untried militiamen, “at least two thirds” of the army, turned and ran. The Virginians fled first, “almost instantly followed by the North Carolinians.” One North Carolinian, Garret Watts, unashamedly claims to have been the first to fire, and flee:

I can state on oath that I believe my gun was the first gun fired, notwithstanding the orders, for we were close to the enemy, who appeared to maneuver in contempt of us, and I fired without thinking except that I might prevent the man opposite from killing me. The discharge and loud roar soon became general from one end of the line to the other. Amongst other things, I confess I was amongst the first that fled. The cause of that I cannot tell, except that everyone I saw was about to do the same. It was instantaneous.

Watts is probably referring to being the first of the North Carolinians to fire and run, not the first in the whole of Gates’ force. Obviously, if Williams did get a few volunteers out in front of the Virginia line, they fired first, and quite possibly fled first. In this scenario, the skirmishers may have precipitated the collapse of the Virginia line by running back to, and

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65 Governor Abner Nash adds to the shame of the militia by pointing out that the militia were drawn up in two lines while the British “from a defect in numbers, were only a single file five feet apart, yet the Militia, tho’ so much superior in numbers, gave way on the first fire, and fled with the utmost precipitation.” Governor Abner Nash to the Delegates in Congress, Hillsborough, August 23rd, 1780 in Walter Clark, editor, State Records of North Carolina, Volume XV, (Goldsboro: Nash Brothers Book & Job Printers, 1898), p. 60. Dr. Lawrence Babits estimates that the British were forced to thin their lines as much as possible to cover the American front, thus advancing in the famous thin red line.

66 Williams, Narrative, p. 496.

67 Ibid., p. 495. Three months after the battle, Virginia militiamen apologized in a petition to the legislature stating that they were “Panic-struck by the noise and terror of a battle which was entirely new to most of us; we...were so unhappy as to abandon the field of battle.” In, “Petition and memorial of Sundry Militiamen of the Tenth Division of Amherst County to Virginia House of Delegates, November 9, 1780, Virginia State Library, Richmond.

68 Garret Watts, pension account, quoted in John C. Dann, Editor, The Revolution Remembered: Eyewitness Accounts of the War for Independence (Chicago: The University of Chicago Press, 1980), p. 195. Despite Watts candid confession, it is doubtful he was the first to fire or flee.
through, the main line instead of falling back slowly.

In any case, it would appear that the flight of the militia was like a line of dominos, with the far left collapsing first, following through the Virginians and then along the North Carolinian line. Most were gone in an instant, but not all. Just to the left of the 2nd Maryland Brigade, Dixon’s North Carolina regiment held firm, firing as many as three volleys, before they left the battle.69 Or perhaps they did not run until the very end. Pinckney, returning after delivering Gates’ order to de Kalb, saw these brave few standing firm but “in small squads in the rear of the left of the artillerists.”70 Guildford Dudley testifies that Dixon’s men not only stood firm, but actually drove the enemy opposite them (the 33rd) “out of line.”71 This is supported by other sources, including reports that the American center advanced with the right.72 Furthermore, Sergeant Lamb of the British 23rd Regiment recorded that the men under Gregory “kept the field while they had cartridge to fire. Gregory himself was twice wounded by a bayonet in bringing off his men.”73 Thus, it is clear that the extreme right of the North Carolina line held for quite sometime, perhaps as long as the American right.

Nevertheless, in the short time it took Pinckney to ride to de Kalb, witness the commencement of their advance, and return, the Virginia and most of the North Carolinians were fleeing northward toward Rugeley’s. The 1st Maryland Brigade, ordered forward to support the militia, must not have gotten far to the left before the militia collapsed back into them. The Marylanders opened their ranks to allow the militia through, reformed and checked the British advance. One eyewitness, Colonel Guilford Dudley saw them take post on Dixon’s left, which means they advanced near or along the first line or that the front line was forced back into them.74 As the Marylanders engaged the British 23rd Regiment and light infantry, Pinckney

69 Williams, Narrative, p. 496. Dr. Lawrence Babits has discovered a pension account by one Willoughby Blackard who indicates that he served at the battle with a company of North Carolina Continentals under a Captain Edward Yarborough attached to Dixon. This may help to explain the resolve of Dixon’s unit.
71 Dudley, Sketch, p. 281.
72 Stewart, Sketches of Highlanders, p. 68.
73 Lamb, Journal, 1809.
74 Dudley, Sketch, p. 281. There is even one eyewitness account from the 4th Maryland Regiment (within the 2nd Maryland Brigade) who implies that the 1st Maryland Brigade advanced beyond the 2nd. Colonel Josias C. Hall
rejoined them only to be wounded. He was carried to an ammunition wagon that was “then endeavoring to escape, into which I was thrown.”

Pinckney’s goal before being wounded was to rejoin Gates, but Gates was not with the 1st Maryland Brigade. Gates, Caswell and other officers were quite busy attempting to rally the militia. Twice, according to Gates, he and Caswell attempted to stop the militia on the battlefield, but to no avail. Pressed by the British, the mass of humanity “ran like a Torrent” up the road to Rugeley’s. Gates was swept along with the flood. Guilford Dudley, making his way along the American line saw the militia run and asked an officer in Caswell’s command where Gates was. The officer replied that “He’s gone,” and showing contempt for his General added “He has fled and is probably past Rugeley’s by now.”

Dudley, with the help of several North Carolina militia officers, attempted to stop the flood. Amazingly, they managed to get about 150 men to face about in line, only to discover that none had weapons. In their panic to get away, the militia not only fled up the road to Rugeley’s, but others “kept straight forward through the plain and over the sand hills, to gain the Cheraw road on their right.”

**Phase IV: Destruction of the Continentals**

As the militia collapsed on the left, and Smallwood’s Brigade was holding back the British 23rd and light infantry, Gist’s command on the American right were in a furious battle with the British loyalists and unaware of the danger they were in. Advancing against the

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75 Pinckney’s aside that the ammunition wagon was attempting to escape must mean that even before Smallwood was flanked, the militia flight had convinced those support troops in the rear that all was lost.
76 Gates, Report, August 20th, 1780.
77 Dudley, Sketch, p. 281.
78 Ibid., p. 281.
79 Ibid., p. 282. If the fleeing militia took the Cheraw road, that would mean they ran east and over some of the roughest terrain surrounding the battlefield.
80 Its possible that Dixon’s command advanced also.
British legion, North Carolina Loyalists and Volunteers of Ireland, the American right pushed the British back, capturing some British and an artillery piece. One eyewitness states that even Lord Rawdon was a prisoner for a moment; another source states that the American right gave three cheers for victory.\(^8^1\)

Essentially, the Americans on the right were winning their half of the field. But what exactly happened along that portion of the line probably will never be known. Few Continentals have told their side of the story, and as the battle raged, smoke hung over the battlefield, obscuring observation by either side.\(^8^2\) According to Guilford Dudley, when Smallwood’s reserve brigade took post to the left of Dixon’s command, “the contest was renewed with redoubled vigor, the American right led on by the brave De Kalb.”\(^8^3\) Even the self-confident Tarleton admits that de Kalb, “made a vigorous charge with a regiment of continental infantry through the left division of the British.”\(^8^4\) Furthermore, he noted that the 33\(^{rd}\) regiment took “heavy and well-directed fire” along with the British left.\(^8^5\) The battle was fierce and in some instances hand-to-hand, and for a moment, the British left was in trouble.

For perhaps as long as thirty minutes, the contest remained in the balance on the western

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\(^8^1\) Dudley, Sketch, p. 281, Stewart, Sketches of Highlanders, p. 68.

\(^8^2\) Cornwallis states that there was “a little haziness in the Air, which, preventing the smoke from rising, occasioned so thick a darkness that it was difficult to see the effect of a very heavy & well-supported fire on both sides.”

\(^8^3\) Tarleton’s account is almost identical noting that “both armies in such a cloud, that it was difficult to see or estimate the destruction on either side,” and finally, a soldier of the 23\(^{rd}\) notes that the smoke “occasioned such thick darkness, …” Obviously, both the soldier and Tarleton saw and copied from Cornwallis. See Cornwallis, Report to Lord Germain, August 21, 1780, Tarleton, History, p. 107, and Roger Lamb, An Original and Authentic Journal of Occurrences During the Late American War from its Commencement to the Year 1783, Dublin, 1809, p. 303.

\(^8^4\) Dudley, Sketch, p. 281.

\(^8^5\) Tarleton, History, p. 107.
side of the battlefield. As the militia fled north, the disciplined British did not follow them immediately. Instead, the British right turned on the left flank of the 1st Maryland Brigade. The 1st Maryland Brigade had no choice but to give ground. As the 23rd and the light infantry continued to press the Marylanders’ exposed left wing, the officers of the 1st Maryland Brigade sought out General Smallwood, for orders to retreat. But Smallwood had left the field. Undaunted, they rallied the Brigade, only to be forced back again. Again they rallied and again were driven back under pressure from the British right. The British 33rd Regiment took a tremendous fire, but perhaps its right pivoted against Dixon’s North Carolina militia. Meanwhile, the 2nd Maryland Brigade was increasing its pressure against the British left. Although bending, and even giving ground, the British provincials ultimately held. The 1st Maryland Brigade was now almost at a right angle with the American right, and there was perhaps as much as a two hundred yard gap between the two. Williams rode to the 2nd Maryland Brigade, only to find them fully engaged and about to break. He called to them to stand, but Lieutenant Colonel Ford of the 6th Maryland Regiment answered, “They have done all that can be expected of them—we are outnumbered and outflanked—see the enemy charge with bayonets.”

It is at this point that the Americans paid for Gates disdain of cavalry. Cornwallis, seeing the gap between the Maryland brigades, ordered his front line to open their ranks. Then he threw forward his reserves, and most critically, ordered the cavalry into action. A detachment of British cavalry under Major Hanger attacked the left flank of the 1st Maryland Brigade. The rest, under Tarleton, “completed their confusion.” Exactly what Tarleton means by this is not

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86 Cornwallis noted that there was an “obstinate resistance during three quarters of an hour,” Cornwallis, Report to Lord Germain, August 21, 1780.
87 Guilford Dudley states that the 1st Maryland Brigade was driven “out of line” first, then Dixon’s command, much like the domino effect first seen with the militia units, see Dudley, Sketch, p. 282.
88 Williams, Narrative, p. 496.
89 There may have been a pause at this point, allowing the smoke to clear revealing to both sides the positions of their forces. Shortly after the American right gave three cheers of victory, “. . . the smoke clearing up, they quickly saw their mistake; and a party of the Highlanders turning upon them, the greater part threw down their arms, while the remainder fled in all directions,” Sketches of Highlanders, p. 68.
known. Although most sources say the British cavalry attacked the American left flank, (meaning that they attacked the exposed left flank of the 1st Maryland brigade), either Hanger or Tarleton probably shot the gap between the 1st and 2nd Maryland Brigades, turning right and left, and getting behind both. In the process, they also captured the American artillery. Behind them came the 71st battalions, filling the gap between the British 33rd and 23rd Regiments. Now the American 1st Maryland Brigade was being pressed on both flanks and its rear.

Phase V: Rout of the Americans

With cavalry in their rear, and the 71st battalions thrown into the British line, the Americans began to lose cohesion. Many Continentals stayed and were slaughtered on the battlefield. One Sutherland Highlander, who is said to have killed as many as seven Americans, ended the battle with his bayonet “twisted like a corkscrew.” Others were able to surrender, and still others broke into small clusters and attempted to fight their way off the battlefield. Williams claims that “not even a company retired in any order” giving the false impression that the Continentals ran like the militia. In making such a statement, he must be speaking only of the battlefield, otherwise, he contradicts himself by observing that Major Anderson, “rallied, as he retreated, a few men of different companies; and whose prudence and firmness afforded

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91 Senf also states that Colonel Armand’s cavalry attempted to oppose this charge but was too weak. More likely, Armand was with Gates using his cavalry to cover the militia.
92 Tarleton, History. p. 107; There is much support for the hypothesis that the British cavalry shot the gap between the two American units, although the main eyewitness are not clear on this point. For instance, see William Seymour, “A Journal of the Southern Expedition, 1780-1783” in The Pennsylvania Magazine of History and Biography, Volume VII(1883), p. 288. Seymour was with the 2nd Maryland Brigade. He states that the British got entirely around them before being discovered, and that this caused the American rout. It is not clear if he means cavalry or infantry or both. Senf says the cavalry “wheeled to the right and left, took the 1st and 2nd Maryland Brigades in their flank and rear.” Finally, another eyewitness, American officer Major McGill, states clearly that there was a “chasm” between the two brigades “through which the Enemy’s Horse came and charged our rear.” McGill, letter to his father, August 1780, from Appendix, Stevens, “Gates at Camden,” p. 278. There is some on-going debate about the cavalry’s participation at the present time. Dr. Lawrence Babits is skeptical that the cavalry would maneuver too far off the main road since the battle was fought in a woods and a man on horseback would be wary of overhanging limbs. However, we believe that the trees were not a significant obstacle, the tall pine of the virgin colonial forests created wide open spaces with little understory to hinder maneuver. Certainly, the cavalry would have preferred the road, and would not have ventured far alone in the woods without the support of the infantry.
93 Dr. Chisholm quoted in Stewart, Sketches of Highlanders, p. 69.
94 Williams, Narrative, p. 496.
protection to those who joined his party on the rout.”\textsuperscript{95} Furthermore, Williams recorded that along the line of retreat the Continentals reformed and made their way to safety in little groups. “Colonel Gunby, Lieutenant Colonel Howard, Captain Kirkwood, and Captain Dobson, with a few other officers, and fifty or sixty men, formed a junction on the rout, and proceeded together.” All of these officers were in the 2\textsuperscript{nd} Maryland Brigade.

There is good evidence that even on the battlefield, Continental units did not completely dissolve but, again, broke into small groups, some attempting to surrender and others fighting their way out. Tarleton recorded that General Gist retired into the swamp with about 100 Continentals “in a body….in a compact state.”\textsuperscript{96} This group waded into the swamps on the American right where the British cavalry could not follow. A few weeks after the battle, American Colonel John Banister wrote to a Colonel Bland, that some of the Maryland line actually broke through the British.

Instead of all the Maryland line being killed and taken, near five hundred are come in, with most of the officers, particularly Smallwood, Cist [sic] and Gunby, who were said to have been slain. This veteran corps, after having sustained the attack of the enemy, with the assistance of only one regiment of North Carolina Militia, by a bold and well conducted attack on the enemy forced a passage through their main body and retreated. On their retreat they totally demolished a party of horse sent to harass them, except two only that escaped by flight.\textsuperscript{97}

If this is Gist’s command, it appears that Tarleton underestimated the number that got out through the swamp. If not, it means that separate groups of Americans fought their way off the battlefield as a semi-cohesive force.

\textsuperscript{95} Ibid., p. 497.
\textsuperscript{96} Tarleton, \textit{History}, p. 108.
Perhaps another final stand was made by the remnants of the 1st Maryland Brigade on the north ridge (see Chapter 3). Once the battle was won and the Continentals killed, captured, or pushed into the swamps, the British cavalry was ordered north to pursue the fleeing Americans. They did so with their usual vigor.

There is an eyewitness account that the Baron de Kalb was one of the final casualties of the conflict. A North Carolina militiaman stated in his memoir that after he had surrendered, he witnessed the General’s final moments. De Kalb, on horseback was riding along the line when intercepted by a British officer, who demanded de Kalb’s sword in surrender. De Kalb supposedly spoke French to the officer, apparently wanting assurances that the man was an officer—a proper individual to accept his surrender. The British officer again demanded his sword, and de Kalb for some reason decided to ride on. The British ranks then fired volleys by platoons and hit de Kalb several times. Stood against a wagon, or placed on an tree stump depending on sources, de Kalb was dying when Cornwallis rode up and seeing him said “I am sorry, sir, to see you, not sorry that you are vanquished, but sorry to see your so badly wounded.”

De Kalb was taken to Camden and died three days later.

Gates, Caswell, and Armand, forced off the battlefield by fleeing militia and pursuing British cavalry, continued to Rugeley’s attempting to stop the flood. However, “the militia were struck with a panic and obeyed no more command.” At Rugeley’s, Gates with the assistance of Colonel Armand and his cavalry, again attempted to rally the militia. There they found another problem. The wagon train that had been ordered north before the march to Camden had not gotten far. As Gates, Armand, and other American officers attempted to send them off, and rally the militia streaming by, Tarleton’s cavalry appeared across the creek. Fortunately for the Americans, the British cavalry were widely dispersed. Tarleton had to assemble his cavalry before mounting an attack toward Rugeley’s. But the respite for the Americans was temporary. Tarleton quickly recalled his troopers and pushed across the creek. “Colonel Armand’s dragoons and militia displayed a good countenance, but were soon borne down by the rapid charge of the

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99 Senf.
legion; The chase again commenced. . .”¹⁰⁰ Tarleton pursued the militia some twenty-two miles up the road to Hanging Rock where he halted. Along the way his command captured one hundred and fifty wagons¹⁰¹ and many American officers and men, including North Carolina militia under General Rutherford.

General Gates, however, was not one of them. Seeing that it was impossible to rally the militia, hearing no more firing in the direction of Camden, and being hard pressed by British cavalry, Gates and Caswell rapidly proceeded up the road to Charlotte. Once in Charlotte, he decided to ride on to Hillsborough to report the defeat, leaving Caswell at Charlotte to wait for stragglers to come in.¹⁰² Gates’ flight, covering 180 miles in three and one-half days, did nothing for his reputation; Alexander Hamilton quipping, “It does admirable credit to the activity of the man at his time of life. But it disgraces the general and the soldier.”¹⁰³

North Carolina militia melted into the countryside to make their respective ways home. Some of the Virginia militia eventually reassembled at Hillsborough, but soon after were released as their time of service was complete. The Continentals likewise made their way to Charlotte, then Salisbury and Hillsborough, North Carolina. Many Continentals would show up in the next few weeks and with each returning soldier, the enormity of the catastrophe lessened. On August 24th, Francis Marion surprised a guard of British soldiers escorting 147 Continental prisoners of war from Camden to Charleston. Amazingly, close to half refused to be rescued, but instead wanted to continue on to Charleston under British escort. A few joined Marion, and the remaining were sent to Wilmington.¹⁰⁴

¹⁰⁰ Tarleton, History, p. 108. Williams has a different opinion of Colonel Armand command and their behavior on the retreat. He asserts that Armand did not take any part in the action of the 16th, retiring early in the battle and plundering the baggage trains heading north. It is possible that he is correct and Tarleton misidentified whom he fought against at Rugeley’s Mill. Williams, quite candidly notes that he too, requisitioned some Madeira wine from General Caswell’s mess wagon, which was the only sustenance he had that day. See Williams, Narrative, p. 498.
¹⁰¹ There were 22 ammunition wagons captured—and it is not clear if this is part of the 150 wagons captured, see Cornwallis, Letter to Lord Germain, August 21, 1780.
¹⁰² Gates, Report, August 20th, 1780.
¹⁰⁴ Letter, Marion to Gates, September 15, 1780, in the State Records of North Carolina, volume 14, p. 617.
Casualty figures for the Camden battle will never be exact. Cornwallis reported 800 to 900 Americans killed and around 1,000 prisoners captured—but Landers states that this is “so far from correct that they are valueless as a guide. The militia broke early in the day and scattered in so many directions upon their retreat that very few were made prisoners.”\textsuperscript{105} He is probably right about the Virginia militia as many simply went home.\textsuperscript{106} But there were many North Carolina prisoners. Landers reports the loss of the “regulars” at about 300, a seemingly very low figure. Williams states that 832 failed to answer muster. Gates wrote from Hillsborough, North Carolina, on August 29\textsuperscript{th}, that as many as 700 of the Maryland Division rejoined the Army.\textsuperscript{107} Among the most critical American losses were those Continental officers and noncommissioned officers, including General de Kalb. Around 32 Continental officers were taken prisoner including Lt. Colonel Porterfield (who later died of his wounds) and Thomas Pinckney, who survived.

Meanwhile, on the British side, it is clear that, although the British won a resounding victory, they paid dearly for it. Cornwallis’ casualty figures indicate that he had 68 killed, 245 wounded, and 11 missing. The 33\textsuperscript{rd} and Volunteers of Ireland took much of the American fire. The Volunteers of Ireland suffered a 28% casualty rate (87 of 303), and the 33\textsuperscript{rd} fared even worse. The 33\textsuperscript{rd} had only 238 effectives, and 100 were casualties, making a casualty rate of 42%.\textsuperscript{108} That was a tremendous blow, and they were all veterans that would be difficult to replace.

\textbf{Aftermath}

Despite the many that escaped and would later reform in Hillsborough, the battle was a costly defeat for the Americans. For the next few months, there was no American Southern

\textsuperscript{105} Landers, \textit{Battle of Camden}, p. 62.  
\textsuperscript{106} Reverend Dr. Gordon, who wrote of the battle in 1788 states that 300 North Carolina militia, besides 63 wounded, were made prisoner, while only three of the Virginia militia were “left wounded on the field,” and “but few” were captured. He gives a casualty figure of 604 rank and file. See Gordon’s account in John Austin Stevens, “Gates at Camden,” p. 250.  
\textsuperscript{107} Gates to Congress, August 29, 1780, quoted in Tarleton, \textit{History}, p. 153.  
\textsuperscript{108} Landers, \textit{Battle of Camden}, p. 62.
Army. Cornwallis can be excused for feeling confident that South Carolina was won and that he could move north to Charlotte. But he was mistaken. Camden was not a fatal blow to the American cause in South Carolina. It what must have been exasperating for the British, the victory did not at all translate into a subdued South Carolina. Only a day after Camden, on August 17th, the Americans won a small victory at Musgrove’s Mill. Soon Francis Marion and Thomas Sumter—the latter barely surviving a costly defeat at Fishing Creek--quickly picked up the slack and began a partisan campaign against the British occupation. Then, on October 7th, Major Patrick Ferguson was surrounded on Kings Mountain and Cornwallis was forced back into South Carolina. On November 20th, Sumter checked Tarleton at Blackstocks. By December, Gates had been replaced by General Nathanael Greene. The Americans would gain a major victory at Cowpens in January, doing much to erase the stain of Camden.

After Camden, Gates career was ruined. In Hillsborough, North Carolina, Gates attempted to reconstruct the army, writing letters to Congress in an attempt to gain supplies and men to reform his army. But he understood that his time was short. North Carolina Governor Abner Nash wrote Congress to remove him and his fellow officers lost confidence in him. But while Congress replaced him with Nathanael Greene, a congressional committee exonerated his conduct. Overall, historians would be harder than his contemporaries. Perhaps his successor should have the last word on Gates’ performance. In January 1781 Greene wrote Alexander Hamilton:

The battle of Camden is represented widely different from what is to the Northward. Col Williams thinks that none of the General Officers were entitled to any extraordinary merit. The action was short and succeeded by a flight wherein every body took care of themselves as well Officers and soldiers. . . .The Col also says that General Gates would have shared little more disgrace than is common lot of the unfortunate notwithstanding he was early off, if he had only halted at the Waxhaws or Charlotte”

Later, in October 1781, Greene would personally write Gates that:

I had the opportunity of viewing the ground where you fought, as well as the disposition and Order of Battle, from all which I was more fully confirmed in my former sentiments, that you were unfortunate, but not blameable; and I am confident, from all the inquiries I have since made, you will acquit yourself with honor.\footnote{General Nathanael Greene to General Horatio Gates, October 4th, 1781, in Dennis M Conrad, Roger N. Parks, and Martha J. King, editors, \textit{The Papers of Nathanael Greene}, Volume IX, 11 July 1781-2 December 1781 (Chapel Hill: The University of North Carolina Press, 1997), pp. 425-436.}
Chapter 3: The Camden Battlefield Collector Survey, 2000-2004

Introduction

The primary goal of the Camden Battlefield Collector Survey was compilation of maps recording artifact distributions from private collections that might help tie the Battle of Camden, as understood from the historical record, to the present landscape. Secondary goals included locating un-marked battlefield burials, and documenting (if not public acquisition) a large sample of the material assemblage used by the opposing armies in 1780. While the Collector Survey is by no means complete, it has long since yielded far more information than originally envisioned. There are currently 12 fully documented collections and three partially documented; at least three additional collectors have been identified (see Appendix A). In addition, three important Camden collections have been donated to public ownership, and two more are informally promised.

Methods

Data collection methods have been simple and informal, involving on-site visits (Figures 3.1, 3.2), phone conversations, and e-mail. Seven collectors were already known to the authors, PCF, or the Camden Battlefield Project, and these collectors introduced others. Initially, not knowing how best to proceed with the collectors, or what level of data to expect, it was hoped at a minimum to accomplish the following tasks with each informant:

1. A meeting on the site, with a walking discussion/interview regarding the collector’s finds and impressions, and his collecting history.
2. Recording on a standard base map of the “find spots” of as many particular, described artifacts as possible, together with any general observations.
3. Examination of the collection, if available, and photographic documentation of selected artifacts.
Figure 3.1. Collectors Calvin Keys and Merle McGee at the de Kalb monument, 2001 (SCIAA).

Figure 3.2. Collector Steve Mahoney with a French musket lock and collector Arnold Stone with a French bayonet, 2002 (SCIAA).
In the event, there was considerable variation among the interviews and the results, largely dictated by the information offered by each informant. All the collectors interviewed to date have shown great enthusiasm for both the battlefield preservation project and the archaeological project, in spite of the fact that the public effort has put an end to artifact digging. Only two collectors who were contacted ultimately did not follow through with a formal recording, and there is still hope for both of those individuals. Two collectors (#’s 1 & 2) insisted on anonymity, but were very helpful, and both donated their entire, intact collections to the project. Once it was clear around the collector community that our goals were to preserve and understand the battlefield, as opposed to taking collections or prosecuting for artifact removal, more collectors were happy to cooperate with the project. Overall, our informants were pleased to see the project results and some will be willing to donate their collections as long as the artifacts go to a local public facility that will properly curate and display their materials.

As might be expected, the quality of the data recorded varies considerably. No collector provided specific proveniences for ammunition specimens, but other battle artifacts of any sort were relatively rare finds, and consequently, their provenience was memorable. In every case, informants were able to map nearly all individual finds other than lead shot. The confidence with which artifacts were plotted varied. On the poor end of the scale, a collector might indicate an artifact’s location with a wave of a hand in the direction of a clump of trees – perhaps a 20-meter margin of error. Much uncertainty here is the result of major portions of the battlefield being clear-cut in 1998 (Figures 1.5, 1.6). This eliminated the visual frame of reference over large areas. On the opposite end of the scale, two collectors used GPS instruments to record their finds, which they cataloged, photographed, and presented on CD ROM (Figure 3.3). Other collectors had previously mapped their finds on their own sketch maps (Figure 3.4) and their information was easily transferred to a base map. Even the most general “plots” of individual items were recorded as points, and all such proveniences were considered adequate for the overall, large-scale
distributional information that was sought. While some may question the precision of the provenience data, it is argued that even if every plotted item were reassigned to a random location within 100 meters of its original plot, it would not change any conclusions inferred from the large-scale artifact distributions provided by the data.

All data, from generalized ammunition distribution maps to precise GPS locations were transferred onto enlarged details of the USGS Camden North quad map, and each plotted artifact was described in an accompanying catalog. The catalog system is common to both the Collector Survey and the archaeological metal detector survey effort detailed in Chapter 4. The first two-digit element in the code indicates a discrete collection (an individual collector, a bounded metal detector sample area, etc.). The second, three-digit element indicates a provenience within the collection (an artifact findspot, or a described general provenience), while the last, three-digit element indicates artifacts within the provenience. Appendix B lists the collection code numbers assigned to date. Each
artifact is also assigned a functional class code, including:

S: Lead shot - musket balls, buckshot, and intermediate shot for pistols, rifles, etc.
A: Arms and accoutrement parts – gun parts, gun tools, bayonets, scabbard and cartridge box hardware, etc.
C: Clothing objects – military and civilian buttons, knee buckles, shoe buckles, neck stock buckles.
G: Iron and lead canister balls.
M: Miscellaneous objects that may or may not be battle artifacts, but which plausibly date to the 18th century – eating utensils, wrought iron hardware, iron and brass frame buckles, etc.
N: Miscellaneous objects that are clearly not battle artifacts, but were
nevertheless recorded in a private collection or collected during the metal detector survey (e.g., an 1829 dime, 22.058.001).

Results of Collector Survey

By far the most common artifacts recovered by all of the collectors were lead shot, chiefly musket balls and buckshot from musket buck and ball cartridges (Figure 3.5). These mundane projectiles were ubiquitous, and as a result none of the collectors recorded to date maintained specific locational information for particular ammunition specimens. More than 2,000 musket balls and buckshot were collected by the informants, but their provenience is remembered only in very general terms. Two collectors (#1,2) bagged most of their lead shot by various described proveniences (e.g. “west of highway, head of ravine”). Three other collectors (#3,5,7) maintained sketch maps that indicated quantities of lead shot recovered from different parts of the battlefield, but these notations were not linked to particular specimens. The remaining collectors combined their shot in a single collection covering the entire battlefield. The collector ammunition data is rough and incomplete. Nevertheless, data from the five collections about which something is known, together with observations from several collectors concerning lead shot distribution, has been combined to prepare a generalized lead shot density map (Figure 3.6). This distribution necessarily combines fired and unfired shot of all calibers, but it includes no areas that were dominated by unfired ammunition, which would indicate a camp or other non-combat episode. In the private collections, as well as in the metal detector survey (Chapter 4), the ratio of fired to unfired balls is consistently about two or three to one.

The collector data has been applied to a series of GIS map layers that illustrate plotted finds in each collection. The most useful product of the Collector Survey is the next step – maps showing combined finds, by functional class, of all collections to date. Figures 3.7 to 3.9 illustrate the results of plotting arms and accoutrement artifacts, clothing artifacts, and artillery canister balls. These are the three most meaningful categories of plotted artifacts in terms of overlaying the Battle of
Figure 3.5. Lead shot from Camden Battlefield combined in a general provenience by Collector #1 (SCIAA).

Camden on the present site. Combined with the admittedly less precise data on the ammunition density map (Figure 3.6), this information is proving extremely valuable in reconstructing the battle (see Chapter 5).

An important limitation in the Collector Survey results to date has been the failure to locate any informant who seriously collected the site prior to 1979 or 1980, when “Anonymous Collector #1” (Collection 01) first visited the battlefield. By that time metal detectors had been in use on Civil War battlefields for about 30 years, and indeed the most active and “productive” era of battlefield metal detecting was already over (Sylvia and O’Donnell 1979). However, an unprotected site as obvious as the Camden battlefield must have been heavily collected by a number of individuals before 1979. Collector #1 reported that by then the entire battlefield as he understood it showed the
Figure 3.6. Generalized density of lead shot recorded by the Camden Battlefield Collector Survey (SCIAA).
Figure 3.7. Distribution of weapon and accoutrement parts recorded by the Camden Battlefield Collector Survey (SCIAA).
Figure 3.8. Distribution of clothing artifacts recorded by the Camden Battlefield Collector Survey (SCIAA).
Figure 3.9. Distribution of iron canister balls recorded by the Camden Battlefield Collector Survey (SCIAA).
Figure 3.10 Combined artifact distributions (SC1AA).
tell-tale signs of heavy collecting in the past – small, eroded holes, discarded non-battle artifacts on the ground surface, and a scarcity of “easy” artifact readings. Thus, even the present collector data must be considered only a representative “shadow” of the material originally present before the advent of metal detectors. The search for earlier informants continues.

**Burials**

Some of the men killed in action in the Battle of Camden were buried on the field in unmarked graves, and a number of graves, confirmed or probable, have been reported by collectors. The burial information they have provided is not detailed in this report, but a general discussion of this sensitive issue is in order.¹ In no case were burials deliberately sought – all were quite shallow, and were discovered in the course of excavating metal detector readings. In some cases, all associated artifacts were removed, while in other cases the burials were backfilled with some material *in situ*. So far as can be determined, no human remains were removed. The informants were understandably reticent about reporting burials. To encourage the sharing of their information, they were assured anonymity, and to that end burial information has been disassociated from any identification with particular collectors. In each case, burials were mapped as well as possible, and a list of associated artifacts recorded. Each burial was assigned its own collection number in the catalog system, distinct from the number assigned to any private collection (Appendix A).

To date, the Collector Survey has recorded the existence of eight burials, six of them certain and two more that are “probable.” Of the six certain graves, only three can presently be plotted with any certainty – the others are now only generally located, due to the clearcutting of 1998. Of the eight burials, one was British, four were Continentals, and three were indeterminate. There are rumors of additional burials and this is likely, but as yet the additional information has not been forthcoming. There are probably

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¹ Information on the provenience of known burials is on file at the South Carolina Institute of Archaeology and Anthropology. This information will be kept confidential until appropriate preservation plans have been arranged.
between 200 and 300 burials on the field, but the only ones found happened to include metallic artifacts shallow enough to detect. Others may be too deep to detect, or the remains may have been stripped of clothing, shoes and equipment – one of the “indeterminate” individuals bore no artifacts at all other than the musket ball embedded in his chest (61-001-001).

Conclusions

As will be detailed in Chapter 4, the Collector Survey and other information have indicated an interpretation of the battlefield that the authors believe is essentially correct. That interpretation is not free of controversy, but as the Collector Survey and other research efforts continue, it is hoped that a consensus can be reached that all interested parties (not merely the authors) can agree upon. The Camden Collector Survey has already resulted in three important conclusions that are not controversial:

1. Regardless of initial unit placements and subsequent movements, the outermost density boundary depicted on Figure 3.6 encompasses the area of significant action during the Battle of Camden.
2. A minority, but substantial part of the battlefield is located outside of the present conservation easement, to the north and northwest, on property that is currently unprotected.
3. Unmarked battlefield graves exist both within the conservation easement and on unprotected private property.
Chapter 4: Camden Battlefield Interpretation

Introduction

The most important goal of the combined Collector Survey and the metal detector sampling effort has been to better understand the Battle of Camden, especially how it unfolded across the present terrain. Where were the armies initially deployed, and how did they maneuver across the landscape we see today? The answers to these questions are best revealed through a combination of historic research, informant information (the Collector Survey), and archaeological investigation, as detailed in the previous chapters. This chapter synthesizes what has been learned into a battle scenario tied to the modern geography. As will be seen, each type of data supplements and complements the others, and permits construction of a plausible argument regarding what happened on August 16th, 1780. As new data emerges, it is hoped that this scenario will be refined, improving our understanding of historical events, illuminating factors such as visibility, timing and duration of movements, and firepower effectiveness. Obviously, this is not the last word about the Battle of Camden, but this scenario is offered as a ‘line of departure’ for future debate.

Defining Features

A key component in the American Battlefield Protection Program’s methodology for battlefield survey and analysis is the identification of Defining Features. Defining features are “any feature mentioned in battle accounts or shown on historic maps that potentially can be located on the ground.” (Lowe 2000: 19). A defining feature may either cultural, such as a house, or natural, such as a ridgeline or river. It may not even exist today, but if it can be located on a modern landscape and may have value in

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battlefield analysis, then it is a defining feature. For the Camden battle the following defining features were found useful:

1. Rugeley’s Mill.
2. The north/south road from Rugeley’s to Camden with existing remnants.
3. The east/west path north of the battlefield.
4. Drainages on both sides of battlefield.
5. Swampy draw west of battlefield.
7. Scattered graves seen by collectors.
8. Sutton’s Tavern.
9. Gum Swamp.
10. De Kalb monument.
11. Sanders Creek.²

The significant action in the Battle of Camden can be confidently located within the outermost boundary depicted on Figure 3.6. On this point, there is little debate among battle historians and collectors. This area encompasses the traditional battlefield, and while there has been very little battle material found beyond the boundary, thousands of battle artifacts have been recovered within it. Unfortunately this leaves more than enough terrain for a variety of possible interpretations, and the historical and material evidence is admittedly complex. Two possible interpretations have emerged, which for clarity, are called the Southern and Northern Solutions. The authors strongly favor the Southern Solution, while some other serious students of the battle champion the significantly different Northern Solution. Both interpretations are outlined below, followed by an analysis of why the authors favor the Southern Solution.

² Citations for these defining features may be found in numerous sources referenced in Chapter 2.
The Southern Solution

In this interpretation, the dense concentration of material in the south-central portion of the battlefield (Figures 3.7 to 3.11) marks the protracted fight between the American right wing under Baron de Kalb and the British left wing (and 33rd Regiment) under Lord Rawdon. The DAR property vicinity is the site of the struggle between the American reserve--the 1st Maryland Brigade--and the British right wing, under Colonel Webster. The heavy scatter of material stretching west of the DAR property probably represents the envelopment and rout, and/or capture of the remnants of both American brigades. The small, isolated concentration in the extreme northwest appears to represent an undocumented “last stand” by some portion of the American army – on this last point both factions agree.

Figures 4.1 to 4.3 illustrate three phases of the Battle of Camden, beginning with Phase I, the initial deployment of both armies at the moment that both sides begin to maneuver (Figure 4.1). The British right is fully deployed and for the moment the American militia are in line. Phase II (Figure 4.2) depicts the initial engagement and the flight of the American militia - the British right moves through the militia position to engage the 1st Maryland Brigade, which is advancing to restore the American left vacated by the militia (the 1st Maryland Brigade may have moved further south than depicted). The American right also advances. In Phase III (Figure 4.3), the American right attacks and at least briefly breaks the British left, while the American left wavers under increasing pressure. Although the British cavalry advance is not shown, they were ordered forward in Phase II or Phase III, apparently attacking the left of the 1st Maryland Brigade, and exploiting the gap between American brigades. In Phase IV (not mapped), both American wings are completely defeated and the survivors flee to the north.
Figure 4.1. The Battle of Camden Phase I: Initial positions of the opposing forces (SCIAA).
Figure 4.2. The Battle of Camden Phase II: The American militia flees and a general engagement is joined (SCIAA).
Figure 4.3. The Battle of Camden Phase III: The British left is nearly defeated while the American left is near collapse (SCIAA).
This interpretation provides a plausible reading of the artifact densities in Figures 3.7 to 3.11 - the southern artifact concentration represents the intense combat between the British left and the American right, while that in the area of the DAR property represents the struggle of the American left as they advance, fall back, rally and stand again, ultimately ending up entirely behind the American right, where they are overrun and many surrender.

**The Northern Solution**

The alternate interpretation, the “Northern Solution,” begins the battle with the two armies positioned several hundred yards further north (Figure 4.4). In this scenario, the extensive concentration of artifacts running west from the vicinity of the DAR property (Figures 3.8, 3.9) represents the entire day battle, with the artifact concentration to the south interpreted as the site of the night meeting engagement only. The Northern Solution is favored by several collectors (including Collectors #5 and #7) who found the bulk of their artifacts in the battlefield’s northern section. These informants assisted with the American Battlefield Protection Program’s Revolutionary War Historic Preservation Study of the battlefield in 2000, and their map was used in the ABPP Camden file as the principal battle map (Keys 2000). Figure 4.4 is adapted from that map.

**Resolution**

These “Southern” and “Northern” interpretations are so different that one or the other must ultimately be discounted as incorrect if the battle is to be tied to the present landscape. The strongest argument favoring the Northern Solution is the remarkable array of artifacts recovered by several collectors in an area running west from the DAR property for some 500 yards (Figures 3.8, 3.9). This area yielded artifacts that were rare or absent on other portions of the field, including numerous complete shoe buckles (some in matching pairs), large gun parts, bayonets, and clusters of uniform buttons, as well as fired and unfired musket ammunition. In contrast, these same collectors found
Figure 4.4. The Battle of Camden: Initial positions of the opposing forces in the “Northern Solution” (adapted from Keys 2000).
relatively little further south, where the Southern Solution places the hardest fighting. In
despite these intriguing findings, a careful study of all available evidence, including the
artifact distributions, strongly favors the Southern Solution. Four important areas of
evidence support the Southern Solution, including: 1) primary historical sources
regarding the battle’s placement; 2) artifact distributions in light of land use history; 3)
artifact distributions in light of the chronology of relic collecting; and, 4) projectile
distributions.

There is no single, primary historical source that describes the battlefield in
sufficient detail to place the action on the current terrain. Taken as a whole, however, the
contemporary sources provide a location for the initial dispositions of the armies that can
only match the Southern Solution (Figure 4.1). Of the six eighteenth century maps of the
battle known to the authors, one (Finnegan n.d.) is completely incoherent, and the other
five all suffer from significant distortions of scale, among various other problems (Senf
1780; Barrette 1780; Barron n.d.; Vallancey/DesBarre n.d.; Faden 1787). Errors aside,
all five usable maps share certain important consistencies, including reasonable
agreement in the relative placement of units,5 and the basic orientation of the two armies
astride, and perpendicular to, a north-south road. All five maps show the right flank of
the 2\textsuperscript{nd} Maryland Brigade and the left flank (at least) of the British line resting on
swamps. Eyewitnesses on both sides consistently state that their flanks were protected by
swamps. Otho Williams reported, “It happened that each flank was covered by a marsh,

3 The Northern Solution would also seem to be favored by the location of the de Kalb monument, which
was erected at the location of a pine tree where tradition held that de Kalb “fell.” There is other traditional
evidence, however, that de Kalb fell on the west side of the road, “at the head of a little bay, in the deep
shades of the forest” (Kirkland and Kennedy 1905:188). This would fit de Kalb’s position at the climax of
the battle in the Southern Solution; that being with the American right front. Still another account of de
Kalb’s death is found in the same source, quoting one Humphrey Hunter, that de Kalb was riding away
when shot (see Chapter 2). This account supports the contention that the de Kalb monument is the
traditional location of his fall.

4 These maps can be seen at www.BattleofCamden.org.

5 The major exceptions are the Vallancey and DesBarre Maps, which are actually manuscript and engraved
versions of the same map. These are the best of the lot cartographically, but the American unit dispositions
and identifications are wildly incorrect. Among other problems, they depict half of the American militia
west of the drainage on the American right.
so near as to admit the removing of the First Maryland Brigade to form a second line...” (Williams in Johnson 1822: 495). Gates reported that Gist’s Second Maryland Brigade took position “upon the Right – with His Right close to a Swamp,” while Col. Senf recalled “an almost impassable swamp” on the American right (Gates 1780; Senf 1780). Lord Cornwallis was “...well apprized by several intelligent Inhabitants that the ground on which both armies stood, being narrowed by swamps on the right & left, was extremely favorable for my numbers...” (Cornwallis in Clark 1898:270). Stedman reiterated, “A swamp on each side secured [Cornwallis’] flanks, and narrowed the ground in front...” (1794: 208). A nineteenth century narrative based on now-unknown primary sources provides an additional, critical detail: “The ground... was a sandy plain with straggling trees, but a part of the ground on the British left was soft and boggy ...the Provincials were on the left, with the marshy ground in their front” (Stewart 1977: 67). This same detail is depicted in the front of the Loyalists on the Faden Map (1787). An examination of Figures 4.1 and 4.4 readily reveals that the Southern Solution fits very well with the historical sources cited above, while the Northern Solution does not. The Northern Solution places the American army on a broad ridgeline with their right flank exposed and not anchored on any drainage, and places the British left with a swamp behind them (Figure 4.4). This swammy drainage begins around 310 and 320 msl and is nearly impenetrable today, and it is unlikely that the British would have maneuvered into or around it during the late morning hours prior to the battle.

The second consideration has to do with land use after 1780. The historic land uses detailed in Chapter 1 have certainly impacted the available artifact evidence and have affected distributions seen in Figures 3.7 to 3.11. Although more recently wooded, the southern portion of the battlefield is an expanse of old agricultural fields (Figure 1.4), with a plow zone as much as a foot in depth. At least one resident collected “buckets full of musket balls,” suggesting substantial surface collecting (Whitfield 1980:65n). In contrast, the northern part of the battlefield apparently remained in old-growth turpentine trees through much of the 20th century, and it generally does not exhibit an old, agricultural plow zone, as distinct from evidence of logging and pine-plowing. This would help to explain why artifacts such as bayonets, musket locks and pairs of shoe
buckles survived undamaged as well as undiscovered by farmers and visitors in this northern area.

The history of relic collecting with metal detectors on the Camden battlefield is another important consideration, because the battlefield was not collected uniformly. A site as obvious as the Camden battlefield was almost certainly collected with metal detectors in the 1960’s, if not in the 1950’s. This is supported by our earliest informant to date (Collector #1), who began collecting the battlefield in 1980. He reported that in 1980, the southern and northeastern parts of the battlefield already had been intensely collected by unknown parties. Although those areas were still quite productive in 1980, the artifacts removed before then are not reflected in the Collector Survey distribution data. Four of the earliest collections currently known, gathered mostly in the early- and mid-1980s, were derived substantially from the southern concentration. These four collectors (#’s 1, 2, 3, 4) combed the southern battlefield for several years, and found a seemingly endless supply of fired and unfired musket ammunition. Other artifacts were generally small objects, or fragments of larger items, contrasting with the larger, well-preserved objects and clusters of related objects later found to the northwest. While they collected the evidence heavy fighting to the south, none of the four earlier collectors wandered far enough west and north to discover the artifact concentration that supports the Northern Solution. By the time the authors of the Northern Solution arrived on the scene about 1986, the southern locus presented only a weak ammunition scatter, while the as-yet uncollected northwestern concentration (which they discovered) yielded an impressive trove of artifacts. Given their late arrival on the battlefield, their battle interpretation is not unreasonable, but it is not supported by a full understanding of land use and the history of collecting at the site.6

6 It has been the authors’ experience that when collectors locate an area abundant with artifacts they will stay in that area until the finds become rare. Only then do they radiate outward from the core area. Collectors have told the authors that today, some military sites may exhibit a reversal of actual historic density. In this phenomenon the central historic location of a camp, battlefield, or skirmish has been collected to such an extent that it is nearly devoid of archaeological evidence, while the site peripheries still retain artifacts. Archaeologists should mindful of this manifestation when assessing heavily collected sites.
Next there is archaeological evidence in the form of lead shot and clothing artifacts. As discussed in Chapter 3, the musket ball provenience data from the Collector Survey is poor – only five collections include any plotting of musket balls, and no actual specimens are tied to particular locations. In spite of these limitations, an important observation can be made regarding the location of the heaviest small arms fire during the battle. The concentration of arms and clothing artifacts running west from the DAR property (Figures 3.7 and 3.8) was accompanied by relatively few musket balls in comparison to the musket ball concentration to the south. The ratio of musket balls to other objects is dramatically higher in the southern concentration, where the Southern Solution places de Kalb’s protracted struggle. This can be demonstrated in spite of the poor quality of the musket ball provenience data. For example, Collectors #5 and #7, who discovered the northern concentration, recorded finding a total of 212 musket balls in the area. These were accompanied by 99 arms and clothing artifacts, including (for example) 13 shoe buckles and 46 buttons. In the southern concentration, Collectors #1, #2 and #3 together recovered at least 538 musket balls (actually many more), but only 29 arms and clothing artifacts, including no shoe buckles and only five buttons. These are ratios of about 2.1 to 1 and 18.5 to 1, respectively. Furthermore, the ratio of fired to unfired balls appears to have been higher in the southern area, although we have no objective measure of this. This suggests that there was comparatively less firing in the northern concentration west of Highway 58. The concentration of arms and accoutrement material found in the northern concentration, and the musket ball ratios may be related to combat behavior. It may mean less intense combat in the north than the south. Instead of intensive combat these distributions may represent headlong flight, slaughter and surrendering, and the subsequent processing of prisoners. On the other hand may indeed represent intensive combat, but not firing. Instead, it represents hand to hand combat as fouled muskets required the use of bayonets, while the musket tools represent Americans desperately attempting to change flints. Either way, the artifact

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7 For the purposes of this example the “northern concentration” is the area bounded by Highway 58 on the east, by the dirt roads on the north and west, and on the south by a line running west from the southwest corner of the DAR property; the “southern concentration” is the larger, dense contour on Figure 5.6.

8 These totals do not include burial artifacts – currently, two burials are recorded from the southern concentration, none from the northern sample discussed here.
distributions and ratios support more intensive firing to the south and less firing to the north, with end of battle behaviors seen the north.

Finally, there is the distribution of canister balls. In contrast to the far more abundant musket balls, the location of individual canister balls were more precisely remembered by Collector Survey informants and their distribution is significant in our battlefield interpretation (Figure 3.9). There is a heavy concentration of canister along the road in the battlefield’s southern portion. In either interpretation, most canister balls would be behind the British lines; but in the Northern Solution, many would be 600 to 800 yards behind the British lines. While it is physically possible to fire canister from six-pounder guns (the heaviest in use at Camden) to these ranges, the effective range was only about 200 to 300 yards, with only a minority of the balls traveling further downrange – this assuming they did not encounter trees, personnel, or other obstacles. It is well documented that American guns were deployed along the road at dawn, and that they caused heavy British losses with their initial fire, apparently at a range of about 200 yards (Pinckney 1822; Williams 1780:1130). The southern concentration of canister in Figure 3.10 fits much better with the Southern Solution, the guns being located in the road on the American front line (Figure 4.1)

The canister’s location on the battlefield also argues against the Northern Solution’s interpretation that the southern artifact concentration is the site of the night battle. We have yet to find an historic account that indicates either side used artillery

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9 In the metal detector survey, a canister ball was found even further south than any recorded on Figure 3.9 (see Area 27, Figures 5.1 and 5.12).
10 The question of canister range is critical to the correct interpretation of the Camden Battlefield. According to Brent Nosworthy, “Canister was generally limited to targets within 350 yards, and the absolute range of the heaviest canister was less than 700 yards.” Here Nosworthy is discussing Civil War field guns, which were generally heavier than Revolutionary War guns. See his The Bloody Crucible of Courage: Fighting Methods and Combat Experience of the Civil War (New York: Carroll and Graf, 2003), pp.64-65. Lawrence Babits suggests that individual canister balls from an elevated six-pounder gun might conceivably travel 800 yards, (personal communication, February 2004), but certainly most would come to rest at much shorter ranges. Firing over nearly level ground at targets 200 yards away would have required little or no elevation of the gun, which would have brought most of the canister balls to ground at minimal ranges. See also Garry Wheeler Stone, Daniel Sivilich and Mark Edward Lender, “A Deadly Minuet: The Advance of the New England “Picked Men” against the Royal Highlanders at the Battle of Monmouth, 28 June 1778,” Brigade Dispatch, XXVI (2), Summer 1996. They found a few canister balls and “grape shot” more than 600 yards from presumed gun positions, but 500 yards was more typical, and the firing was over open terrain, and from higher to much lower topography.
during the night meeting. Admittedly, Cornwallis’ inventory of captured arms states that one American gun was damaged during the night engagement, probably a result of the confusion of the American van’s retreat into the 1st Maryland (see Chapter 2). However, there is again, no indication that the piece was used.

**Conclusions**

The authors are convinced that the initial positions of the opposing forces in the Battle of Camden are those depicted on Figure 4.1, and that Figures 4.2 and 4.3 offer a plausible interpretation of how the battle unfolded. It is hoped that the arguments marshaled above will sway those individuals who have disagreed thus far, and that this interpretation can be refined in the future with additional historical and archaeological research.
Chapter 5: Camden Battlefield Metal Detector Sampling, 1998 and 2004

Introduction

The original Camden battlefield management recommendations provided to PCF recommended that:

A 100%, piece-plotted, metal detector collection should be made over the entire easement tract. …it is important to secure whatever items remain accessible by metal detector before they too are removed by collectors – even the remnant of material now remaining should reasonably reflect the original artifact distribution on the site (Legg 2001).

The Camden battlefield has developed a reputation among collectors as being very nearly “hunted out,” and some of the Collector Survey informants were politely amused that a controlled metal detector survey was under consideration at this late date. There was clear evidence, however, that a representative vestige of material remained. In 1998, soon after the clear-cutting of much of the site, James Legg organized a brief volunteer project to test a sample area in the center of the battlefield west of Highway 58 (Figures 5.1 and 5.2). Over the course of two weekends, three experienced detector operators covered a total of 8100 square meters, and recovered 47 battle artifacts, including lead shot and one small musket part (the 1998 sample is now provenience 20 of the current project – see Appendix C). This was a modest but useful return of data, and demonstrated that in 1998, at least, the Camden battlefield was not “hunted out.” Unfortunately no funds were available at that time to follow up on this opportunity, when large areas of the battlefield were entirely stripped of ground cover. It is not known how much additional artifact attrition occurred between 1998 and 2004.

The 1998 experience, combined with the successful collector survey results of the first grant, convinced PCF that a controlled metal detector survey was worth the attempt and this led to the present effort. Thus, the 2004 metal detector project was designed to
sample a variety of areas across the terrain in an effort to assess the validity of a far more ambitious effort. The 2004 project was not intended to yield a sufficiently large or well-distributed body of data to contribute substantially to the interpretation of the battle. However, as will be seen, this small sample did not contradict any conclusions drawn in Chapter 4 and may contribute to future battle interpretation.

**Field Methods**

The original plan called for covering eight 20x100 meter sample areas dispersed across the battlefield, a total of 16,000 square meters. In the event, only five of the eight standard sample areas were collected, but two larger areas were also covered for a total of about 35,000 square meters (Figure 5.2). This change became necessary when the DAR property was cleared of ground cover along with an area immediately to the west, across Highway 58 (Areas 22 and 26, below). This clearing by PCF occurred shortly before the metal detector sampling was begun, January 2004, and it was immediately recognized
Figure 5.2. Metal detector sample areas, 1998 and 2004 (SCIAA).
that the newly exposed areas were vulnerable to unauthorized metal detecting. While the total area covered in 2004 was much larger than planned, the distribution of samples was less than ideal - the sample areas were all within 200 meters of Highway 58, and extended no further north than the DAR property. This left large areas of the battlefield to the east, west and north entirely unsampled. As noted above, however, this phase of collecting was intended only to demonstrate the potential of further work, and that goal was accomplished.

The sample areas were numbered in the same provenience sequence as earlier Camden collections (Appendix C). Numbers 22 through 28 were assigned to the seven sample areas collected in 2004. The corners of each sample area were marked with flagged survey stakes, and the boundaries were delineated as necessary with survey tape or pin flags to orient the detector operators. Given the challenge presented by decades of previous metal detecting, every effort was made to optimize recovery. Much effort was made to improve ground conditions, including mowing with a bush hog where needed (Figure 5.3), and removal of logs, branches, and metallic trash – in short, whatever preparation helped to facilitate careful metal detector coverage of the entire surface of each sample. Discussions of the individual sample areas (below) describe the particular surface conditions in each. Coverage was total within each sample, with the exception of portions of the DAR property (Area 22, below). The method of conducting transect survey within the sample area (e.g., detecting only every third lane, or alternate blocks) was not entertained. These approaches add unnecessary complexity to the fieldwork, and leave behind artifacts that might provide significant information. This latter consideration is particularly important on a heavily collected site like Camden, where only a thin remnant of the original material remains. On the Camden battlefield, the goal was to recover all battle artifacts within each sample area. The sample areas received slow, systematic coverage by two different detector operators with a combined 55 years of detecting experience. Each operator covered all of each sample with overlapping transects, such that the total coverage was in excess of 200% (Figure 5.4). Area 20, the

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1 Number 21 was reserved for miscellaneous artifacts found in and around the battlefield, see Appendix A.
Figure 5.3. Brigadier General George Fields (USA Ret.) of the Palmetto Conservation Foundation clearing Area 22 prior to the metal detector survey (SCIAA).

Figure 5.4. Operator Brett Cullen detecting in Area 23 (SCIAA).
1998 sample, was covered only once, with overlapping transects.

All metal detector readings were investigated, with the exception of diagnostic aluminum readings and very small iron readings. Readings were excavated by the detector operator at the time of discovery – this is by far the most efficient recovery method, as only the operator can readily find the object, and it avoids cluttering the sample area with flags that mark, more often than not, unwanted trash (Figure 4.5). With rare exceptions such as nineteenth century coins, non-battle artifacts were not collected. Artifacts to be retained were bagged by the detector operator in zip locks marked with the sample area number and the sequentially assigned artifact number within the sample. The bags were collected and replaced with survey pin flags bearing the same number. After detecting in a sample area was completed, the pin flags were mapped using a GPS instrument (Figure 5.6), resulting in the GIS provenience maps in Figures 5.8-5.12. The artifact plots for Area 20, the 1998 sample area (Figure 5.7), were originally determined with compass and tape, but they have since been converted for inclusion with the 2004 GIS data.

A variety of metal detectors were used over the course of professional investigation of the Camden battlefield. In 1998 (Area 20), all three detector operators used Double Eagle ® metal detectors with 15” or 20” search coils (see Fig. 5.1). The Double Eagle is a hand-built detector that has been made in various forms by two individuals in Wilmington, NC since the 1960’s. It is a very basic detector with only rudimentary discrimination and ground balance, but with remarkable penetration in un-mineralized soil. Until recently no commercially made detector matched the Double Eagle for depth in sandy soils like those in the vicinity of the Camden Battlefield. In 2004, detector operator Brett Cullen continued using a 15” Double Eagle (Fig. 5.4), while the first author used a White’s Sierra Madre ® “Blue Max Deep Scan 950” detector with a 9” search coil (see Fig. 5.5). The White’s machine is a very basic model with no discriminator or other specialized controls, but like the Double Eagle, it has excellent penetration in sandy, un-mineralized soil. The detector operators agreed that the two devices were very similar in performance. Generally speaking, maximum depth
penetration by any detector in un-mineralized soil is achieved when discrimination and
ground balance features are not used at all. In a few areas that were very trashy,
especially along the modern highway, Brett Cullen supplemented the Double
Eagle/White’s coverage with careful use of a Tesoro ® discriminating detector . This
machine has relatively unimpressive depth penetration in any soil, but it is capable of
isolating lead and brass readings in fields of nails or metallic trash that would completely
defeat most other detectors. Cullen recovered several battle artifacts with the Tesoro ®
that were missed by the coverage with the other machines.

Two GPS instruments were used. Both were Trimble, Inc. models; Geoexplorer
and Geoexplorer 3 ®. Both were set to the following defaults: 1) PDOP mask 6, 2) SNR
mask 6, 3) Elevation mask 15 degrees, and 4) Satellites, 4. As a rule, 120 positions were
taken for each find. This should have provided for sub-meter accuracy after data
processing, however, some positions were obviously a meter beyond their actual location.
Pathfinder Office ® software was used for processing. The GIS software used for the
analysis was ArchGIS ® version 9, Suite.

Lab Methods

Artifacts were returned to SCIAA for processing and analysis. Iron objects were
washed with a toothbrush, sketched and described, then consigned to a base water
solution to await conservation. Lead and lead alloy objects were washed, soaked briefly
in a weak lye solution to remove soil staining, washed again, and dried. Copper alloy
objects were simply washed and dried. Dried artifacts were placed in fresh, archival zip
lock bags marked with the catalog number. The catalog system is the same three-part
code used for the Collector Survey catalog, described in Chapter 3. The functional class
codes are also common to both projects (see Appendix A). The artifacts themselves are
not marked with catalog numbers.

Information recorded in analysis varied depending on the sort of artifact under
examination. The great majority of artifacts were lead shot. These were classed as fired
Figure 5.5. James Legg recovering a musket ball in Area 22 (SCIAA).

Figure 5.6. Steven D. Smith recording artifact locations with GPS instrument in Area 22 (SCIAA).
Figure 5.7. Metal detector sample Area 20 (SCIAA).
or unfired, and all were weighed to 10ths of a gram. Unfired shot were measured for diameter (not caliber) to 1000ths of an inch (the standard for small arms measurement), perpendicular to the ball’s mold seam (this to eliminate any distortion caused by misaligned mold halves or lead flash along the mold seam). A few very asymmetrical balls were measured at the usual perpendicular point, as well as very near (but not on) the mold seam. Additional details were recorded, including black powder remnants on unfired balls, evidence of rolling (smoothing after manufacture), and various sorts of damage. The catalog description includes a conclusion regarding each shot’s function based on its diameter or former diameter as implied by weight (e.g., a .690” shot is a .75 caliber musket ball). Melted lead was weighed, as it sometimes matched the weight of a common shot size. Iron canister balls were measured for diameter and weighed. Other artifacts were described as appropriate, usually with at least one representative metric measurement, but were not weighed.

A total of 18 iron objects from 1998 and 2004 have been conserved or are still in the conservation process, including all iron items that are certain battle artifacts. For most items, this involved thorough reduction in electrolysis alternating with manual cleaning, followed by distilled water baths, boiling in distilled water, baking, and sealing with microcrystalline wax. A few fragile items lacking solid iron cores have been treated with baths and boiling in distilled water, baking, and sealing.

Results

A total of 235 certain or probable battle artifacts were recovered from the eight sample areas collected in 1998 and 2004. Given a total collection area of about 43,100 square meters, this yields an average density of about one artifact per 183.4 square meters. Among the sample areas, however, the actual artifact densities varied radically, as did factors such as collecting history and current collecting conditions. The sample areas are discussed individually below.
**Area 20**

Area 20 (Figures 5.2, 5.7) was the original 1998 metal detector collection, now subsumed by the present project. This sample was placed to cross the area that was then (and is now) considered the most heavily fought-over ground on the Camden Battlefield. Prior to clearcutting in 1998, collecting conditions were good, although the area was somewhat overgrown in spots, and twentieth century refuse was abundant. The area was formerly in agricultural fields, and artifacts were often deeply buried in the old plow zone. The vicinity was well known to collectors as a ready source of musket balls and buckshot, and there is no doubt that Area 20 was very heavily collected before 1998. Conditions for the archaeological metal detecting were ideal – the clearcutting removed all ground cover, and the area chosen for the sample was free of logging trash.

Area 20 yielded 47 battle artifacts, including 24 buckshot from musket buck and ball cartridges (four unfired), four .69 caliber musket balls (two unfired), four .75 caliber musket balls (all fired), three probable pistol balls (one unfired), and one fired ball that appears to show rifling. Also recovered were nine melted lead specimens, a fragment of an iron French musket trigger guard, and a brass tack that was probably hardware on a cartridge box or other accoutrement.

**Area 22**

Area 22 is the Daughters of the American Revolution (DAR) preserve, including the de Kalb monument, the National Landmark monument, and the South Carolina highway historical marker (Figures 5.2, 5.8). As discussed in Chapter 1, this area has never been plowed, but the gradual thinning of the old long leaf pine forest has allowed the growth of a fairly thick understory of turkey oaks and other scrubby trees and brush. PCF began thinning this undergrowth in late 2003, in an effort to restore the battlefields best preserved and most visited area to a semblance of its 1780 appearance. The western 60% or so of the DAR property was eventually cleared (Figure 5.8). This exposed ground surfaces that had been difficult to reach with a metal detector, and the entirety of
Figure 5.8. Metal detector sample Area 22, the DAR property (SCIAA).
the newly cleared area was intensively collected as part of the 2004 metal detecting project. The un-cleared, eastern portion of the DAR property was also covered, but that area was still relatively overgrown and it cannot be considered as thoroughly collected as the cleared area.

As the only obvious expression of the Camden battlefield, as well as being a convenient place to park, the DAR property has probably been the first place that most relic collectors used their metal detectors. It appears, however, that the area was not as intensively collected as some other areas. Two factors may have contributed to this condition, other than the sometimes-thick ground cover mentioned above. First, the DAR property was popularly (and correctly) understood by collectors to be off limits for metal detecting. While there was no enforcement of this prohibition, most Collector Survey informants would not admit to ever having detected on the property - there may have been a real reluctance to work in such an obvious, public location. Second, the area is heavily strewn with recent metallic trash, particularly around the monuments. Once the easy artifact readings were exhausted (by 1980, apparently), these factors probably combined to preserve an unusually dense concentration of small battle artifacts on the DAR property.

For the 2004 project, surface conditions in the western portion of Area 22 were generally excellent, thanks to the cutting and bush hogging by PCF. The only serious problem was metallic trash, which consumed many hours of field time and left patches incompletely covered – Area 22 will continue to yield small battle artifacts to persistent detector operators. An artifact void in the west-central edge of Figure 5.8 demonstrates that detecting was nearly impossible near the monuments and the gravel drive. This small area probably retains many battle artifacts.

Area 22 produced 135 certain or probable artifacts associated with the battle. Most were ammunition specimens, including 43 fired and 30 unfired buckshot from musket buck and ball cartridges, six fired and 11 unfired .69 caliber musket balls, eight fired and five unfired .75 caliber musket balls, three indeterminate lead shot, and eight
pieces of melted lead. Among these shot were two complete sets (and three partial sets) consisting of an unfired .69 caliber musket ball and three buckshot, representing buck and ball musket cartridges. Other arms artifacts included a fragment of .60 caliber gun barrel, two musket screwdrivers, a musket worm, two French barrel band springs, an iron cartridge box finial, a brass bayonet scabbard frog stud, an iron bayonet scabbard tip (?), two brass tacks (probably from accoutrements), and what is thought to be the brass filler cap from a powder horn or flask. Clothing artifacts included two brass shoe buckle fragments and a single, small Britannia metal button (South Type 7). Miscellaneous artifacts included most of a two-tine fork, a wrought iron frame buckle, and two brass ornaments, probably leather bosses, one round and one shield-shaped. A number of horse shoes and horse shoe fragments were found along the west edge of Area 22, along the sunken road bed that parallels Highway 58. While they are not thought to be battle artifacts, the shoes verify the route of an early road, and they were mapped and collected.

Areas 23 and 24

These areas were standard, 20x100 meter samples placed end to end, in the southern battlefield, south of Area 20 and west of Highway 58 (Figures 5.2, 5.9). Like Area 20, this is an area of old agricultural fields, and it exhibits a deep plow zone. Before it was clear-cut in 1998, the area was a fairly open field of planted pines that would have made for easy metal detecting. The area was completely stripped after the clear-cutting, when it was probably subjected to an additional round of collecting. It can only be assumed that Areas 23 and 24 were very heavily collected over the years. Since 1998, the clear-cut has grown up in planted longleaf pines, young hardwoods, briars and weeds. To facilitate careful detecting in 2004, the sample areas were mowed with a bushhog, cutting all vegetation except the planted pines. This provided fairly good surface conditions, although in some areas thick stubble kept the metal detector coils several inches above the ground. Metallic trash was only a minor problem.

Area 23 yielded only two battle artifacts, while Area 24, further north, produced six. These included one fired and one unfired buckshot from musket buck and ball
Figure 5.9. Metal detector sample Area 23 and 24 (SCIAA).
cartridges, three fired .69 caliber musket balls, two fired .75 caliber musket balls, and one piece of melted lead. It appears that Area 23 is essentially outside (south) of the area of intense combat.

Area 25

Area 25 was a standard 20x100 meter sample, located east of Highway 58, south of Area 22, in a former agricultural field (Figures 5.2, 5.10). The western 70% of Area 25 is in a fairly open stand of mature pines that has been selectively cut in recent years. The eastern end is in an area clear-cut in 1998. Until then, the entire sample was in an expanse of very open pine forest that presented little in the way of physical obstacles to metal detecting. In 2004, Area 25 was still fairly open, and required only selective brush clearing and removal of logging trash to facilitate careful detecting. A greater challenge was presented by large quantities of cut and wire nails and other metallic material from the early twentieth century farm complex located northeast of the sample area.

Area 25 produced nine battle artifacts, including two iron canister balls, one fired and two unfired buckshot from musket buck and ball cartridges, one fired .69 caliber musket ball, one unfired pistol (?) ball of .58 or .60 caliber, one fragment of a French musket side plate, and a piece of melted lead.

Area 26

Area 26 is an irregular sample located immediately west of Area 22, on the opposite side of Highway 58 (Figures 5.2, 5.11). Like Area 22, Area 26 was cleared by PCF in an effort to improve the appearance of the battlefield’s most visited area. The area was heavily thinned some years ago, and in 2004 presented a mix of mature pines and tangled second growth. A bulldozer was used to remove the undergrowth and smaller trees in Area 26, exposing surfaces that had not been readily detectable for many years – this called for inclusion of the entire cleared area in the 2004 project.
The vicinity of Area 26 has long been in fairly thick woods, a factor that may have protected some artifacts. Another discouragement to detecting is a dense mantle of old and new highway trash along the northeastern third of the sample – the absence of artifacts there in 2004 (Figure 5.11) is probably attributable to metallic trash rather than some other factor. Excepting the trash, detecting conditions in the sample were excellent after the clearing by PCF.

Twenty certain or probable battle artifacts were recovered from Area 26. These included one iron canister ball, three fired and four unfired buckshot from musket buck and ball cartridges, one fired (?) .69 caliber musket ball, six fired and one unfired .75 caliber musket balls, a fired .41 caliber rifle ball, fragments of an iron mess knife, and
Figure 5.11. Metal detector sample Area 26 (SCIAA).
two pieces of melted lead. Also found was a 1753 Spanish Two-Reale piece, but the coin appears too heavily worn to have been lost in 1780.

**Area 27**

Area 27 was placed to the south of the Camden battlefield conservation easement, west of Highway 58, in an effort to determine the battlefield’s southern limit (Figures 5.2, 5.12). Collector Survey informants provided virtually no information about this area. Landowner Mr. Larry Slade granted permission to sample the area. The area is a former agricultural field, now a fairly dense stand of pines. No vegetation clearing was undertaken, but surface conditions were generally good for detecting. Area 27 was intended as a standard 20x100 meter sample, but the southern 20 meters of the block encountered a dense, twentieth century surface dump that precluded metal detecting, and the sample was actually 20x80 meters.

Only three certain or probable battle artifacts were recovered from Area 27. These included one iron canister ball, a fired pistol (?) ball of about .60 caliber, and a wrought iron frame buckle. Mr. Slade requested possession of these artifacts, which will be photographed and returned to him.

**Area 28**

Area 28 was a standard 20x100 meter sample placed east of Highway 58, in the battlefield’s south-central portion (Figures 5.2, 5.13). Like Area 25, Area 28 is in an old agricultural field, and is now an open stand of mature pines. The woods have been open and free of ground cover for many years, and the area must have been very heavily collected. Ground surface conditions were good for detecting in 2004, and no clearing was undertaken other than removal of branches, logs, and surface trash from Highway 58.

Area 28 produced 13 battle artifacts, including six fired and two unfired buckshot from musket buck and ball cartridges, one fired and one unfired .69 caliber musket ball,
Figure 5.12. Metal detector sample Area 27 (SCIAA).
Figure 5.13. Metal detector sample Area 28 (SCIAA).
two probable pistol balls, and a piece of melted lead.

**Conclusions**

The artifact recovery totals from the 1998 and 2004 metal detecting projects are modest, with the exception of the surprisingly productive Area 22. Even if Areas 24 or 28 are more typical, however, that same density of material extrapolated across the entire battlefield represents a significant material record of the Battle of Camden. Furthermore, the archaeological metal detecting is producing the *only* hard data available for ammunition distributions on the battlefield. At the level of effort conducted for this report, we were not able to extrapolate, except in the broadest sense, any useful distributional information that would aid battlefield interpretation. Nothing revealed in the controlled metal detector survey supports or contradicts the arguments made in Chapter 4. As discussed above, the present work was intended as a feasibility test rather than a sample sufficient to aid in interpretation. However, we are convinced that a large-scale metal detector collection *would* yield sufficient data to help with interpretation, and the resulting collection would improve our understanding of the material used by British and American forces in 1780.
Chapter 6: Material Culture

Introduction

An important secondary accomplishment of the Camden Collector Survey and the metal detector sampling is the documentation of a large assemblage of the material used by the two armies in 1780. Revolutionary War weapons, equipment and clothing are not nearly so well understood as those of the Civil War. Historical records are fragmentary, and documented, non-excavated specimens are rare. To date, antiquarians and collectors have published the most substantial and useful works on Revolutionary War material (e.g. Calver and Bolton 1950; Peterson 1968; Neumann and Kravic 1997; Troiani 2001). A few excavated collections are covered in professional archaeological reports (e.g. South 1974; Ferguson 1975; Hanson and Hsu 1975; Hamilton 1976; Starbuck 1999), but such are rare. Reported collections from battlefields and short-term bivouacs (as opposed to forts and winter camps) are especially rare, and are typically confined to musket balls and a perhaps a few clothing artifacts (e.g. Cornelison 2002; Poplin 1999; Sivilich 1996; Smith and Legg 2004). The Camden battlefield assemblage is large and varied, and will be an important contribution to the understanding of Revolutionary War material culture. This chapter presents a preliminary overview of the assemblage, with sample illustrations.

Arms

This class includes firearms and edged weapons and their accoutrements, as well as artillery.

Small arms

In 1780, regular British and American Continental infantry units had standard muskets, while the firearms used by the militia and cavalry on both sides were probably a
mix of many different types and calibers. British infantry used the .75 caliber, brass-mounted “Long Land Pattern” and “Short Land Pattern” flintlock muskets, both improved models of the so-called “Brown Bess” musket introduced in the early eighteenth century (Peterson 1968: 27-29; Darling 1970; Neumann 2001). American forces used British muskets and American-made copies thereof early in the War, and certainly some militia at Camden were still armed with them. Parts from British muskets have been found throughout the battlefield (Figure 6.1) and musket balls of appropriate size for the .75 caliber bore are abundant (below). Complete and partial British musket bayonets have also been recovered, including one with a clear “US” surcharge, either carried into the battle by an American, or perhaps captured in Charleston and returned to British service (Figure 6.3E).

In 1777, large quantities of French muskets began arriving in American ports as covert (and later overt) aid to the Revolution. The French muskets were of many different (but essentially similar) year models, generally iron mounted, and all were .69 caliber. They soon became the Continental infantry’s standard weapon (Peterson 1968: 36-38; Neumann 2002; Moore 1967: 63, 93-99). Parts from French muskets are widely distributed on the Camden battlefield (Figure 6.2), and musket balls for the French .69 caliber bore are even more common than those for the British .75 bore (below). French bayonets have also been recovered (Figure 3.2). Other firearms probably used in the Battle of Camden include a variety of military and civilian pistols (carried by cavalry and mounted officers), carbines (short muskets carried by cavalry), fusils (light-caliber muskets carried by some officers and NCO’s), fowlers (civilian shotguns sometimes employed as muskets by militiamen), and rifles (which may have seen limited use by some militiamen) (Peterson 1968: 38-53; Neumann and Kravic 1997: 64, 65, 125-127, 219-224, 232-235; Moore 1967). Such weapons are represented by several gun parts in the Camden assemblage (Figure 6.3) as well as by a very diverse range of lead shot that falls between buckshot and musket ball diameters.
Figure 6.1. **British musket parts:** A. Cock with lead flint grip; B. Ramrod pipe; C. Ramrod pipe; D. Front ramrod pipe; E. Escutcheon plate (partial); F. Trigger guard front tang; G. Trigger guard (partial) with sling guide; H. Nose cap.

*Small arms ammunition*

Small arms projectiles (spherical lead shot) dominate the Camden battlefield collections (Figure 6.4). The lead shot fall into three categories, including musket balls, buckshot, and intermediate-size shot for pistols, carbines, rifles, etc. Most of these projectiles, and certainly the musket balls, were wrapped in paper cartridges that included a full propellant (barrel) powder charge as well as a priming (pan) charge (Peterson 1968:24, 25, 61, 62; Neumann and Kravic 1997: 13; Klinger and Wilder 1967: 39). Cornwallis reported capturing “80,000 musquet cartridges” as the result of his victory at Camden (Tarleton 1787: 139). Unfired balls from Camden often exhibit patches of black powder corrosion from long burial with their powder charge (Figures 6.4B,G).
The musket balls from Camden are readily grouped into two diameter ranges that correspond to the standard French (.69 caliber) and British (.75 caliber) musket bores.\footnote{The correct usages of the firearms terms “caliber” and “diameter” are rarely encountered in archaeological literature, but they are essential in any discussion of ammunition. “Caliber” refers to the diameter of the bore of a weapon, while the “diameter” of a projectile is its actual diameter (both expressed in hundredths of an inch). In muzzle-loading weapons, the diameter of a projectile is generally substantially smaller than the caliber, while in breechloading weapons the projectile is usually a little larger. Thus, for example, a musket ball for a British .75 caliber musket is typically about .680” or .690” in diameter. The musket ball caliber groups from Camden are very similar to those found by Sivilich (2004: 4) in a large sample of musket balls from the 1778 Monmouth Battlefield. His histogram of diameter distributions shows that .630” is the typical diameter for .69 caliber balls, while .680” is the most common diameter for .75 caliber balls.} While this suggests that the musket balls from Camden can be sorted by belligerent, the

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**Figure 6.2. French musket parts:** A. Cock; B. Rear sling guide; C. Trigger; D. Middle barrel band with sling guide; E. Barrel band spring; F. Trigger guard rear tang.
reality is more ambiguous - there were certainly some British muskets used by Americans in the battle, and it is possible that some of the thousands of French muskets captured at Charleston had been issued to provincial or loyalist militia units. With that said, most .75 caliber musket balls are of a distinctive British type, well made and quite spherical, and rolled (tumbled) to remove virtually all signs of the sprue scar and mold seam (Figure 6.4A, B). These have a fairly tight diameter range of about .680” to .695,” and average weight is about 30.5 grams. These are slightly smaller on average than the large sample of musket balls from “two sites purely British of Revolutionary date” measured by Calver and Bolton (1950: 80), which yielded a minimum diameter of .687,” and an average of .694.” In addition to these probable British balls, the Camden battlefield has yielded a few .75 caliber balls that are not rolled, and which exhibit the manufacturing irregularities seen on American musket balls of .69 caliber. There is no evidence that any .75 caliber musket balls from the Camden battlefield were in cartridges with buckshot, and there is abundant evidence from elsewhere that the British did not use “buck and ball.”

The .69 caliber balls from the Camden battlefield are more diverse in finish and in diameter, suggesting a wide variety of sources probably ranging from Continental and state “laboratories” or contracts to balls molded by soldiers during the campaign (Figure 6.4C-F). The diameters of these balls range from about .620” to .660,” beyond which they might be usable candidates for a .75 caliber bore (although there are very few examples in the .660” to .680” range). Most .69 caliber balls are well molded, and unrolled or lightly rolled. Also classed here as .69 caliber musket balls, however, are a large group of distinctive, remarkably crude balls that are about .585,” although they are

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2 James Legg is in the process of examining samples of musket balls from a number of sites for a study of small arms ammunition in the Southern Campaign. Known British musket balls examined to date consistently match the description of the Camden British examples offered here.

3 See note 2. While there is documentary evidence of Americans being wounded by buckshot (Lawrence Babits, personal communication 2004), none of the several samples of known, unfired British musket balls examined has been associated with buckshot. The sample most pertinent to the Battle of Camden is that recovered from the British camp of 16 and 17 August, 1780, on the south side of Granny Quarter Creek – that collection included more than 200 unfired British musket balls, with no buckshot in association (Joe Henderson, personal communication, 2004). Buck and ball is apparently unknown on European battlefields of the French Revolutionary Wars and the Napoleonic Wars, 1792-1815 – it would seem to be an American practice (Brad Posey, personal communication, 2004).
so asymmetrical as to require minimum and maximum measurements (e.g. .576/.588,” .585/.612”) (Figure 6.4H-J). These balls were made in very poor molds with cavities that were less than hemispherical, and they retain badly trimmed sprue remnants and mold seam flash. They are not the product of some militiaman’s personal mold – they are common across the Camden battlefield, and were clearly mass-produced, widely issued, and fired during the battle.  

An unknown but heavy proportion of .69 caliber musket cartridges carried into the Battle of Camden included buckshot in addition to the musket ball, and buckshot is the most abundant single artifact type from the site generally. In October, 1777, General Washington ordered that “Buckshot are to be put into all cartridges which shall hereafter be made,” although he did not specify the

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4 It has been suggested that these projectiles were canister balls, but some unfired examples have cartridge powder marks, and fired examples do not show the characteristic scalloping of lead canister (Figure 6.8). It is possible that they were made for use as canister, and were later pressed into service as undersized but usable musket balls. At about 20 grams in weight, they are smaller than the known lead canister balls from Camden, which weigh about 28 grams.
quantity (Peterson 1968: 60,61). During the 2004 metal detector sampling, two complete, undisturbed loads of one .69 caliber musket ball and three buckshot were found in the unplowed context of the DAR property (Area 22), and collectors report additional, identical recoveries elsewhere on the field (Figure 6.4G; Keys 1992:38 Fig. 49). In one case, a group of nine, unfired .69 caliber balls was recovered with 27 buckshot.\(^5\) However, several unfired, .69 caliber musket balls were found in Area 22 without buckshot, suggesting that at least some cartridges were not buck and ball. The great majority of Camden buckshot, including those found with musket balls, fall in the range of .270” to .310” in diameter (Figure 6.4K-P). A sample of 1028 buckshot measured by Henderson (n.d.:2) found 913 examples within the range .2812” to .3125,” with 12 smaller and 103 larger. The oversize buckshot examples grade into the “intermediate shot” range for pistols, rifles, etc. at about .35” or .36.” Intermediate-size balls comprise a small but diverse minority of the Camden assemblage (Figure 6.4Q-V). As fired balls exhibiting rifling or patch marks are very rare, most intermediate specimens were probably for smoothbore pistols, carbines, and fusils. Half of a crude, white metal mold casting a ball of about .480” was also recovered from the battlefield (Figure 6.4W).

Gun flints are also an ammunition component, although only a few are known to have been recovered from the Camden battlefield because they are, of course, non-metallic. The unused British examples in Figure 6.5A,B were recovered with a quantity of unfired .75 caliber balls. At least one French example was found because it was still wrapped in a sheet lead flint grip (Keys 1992: 28 Fig. 38). Lead grips (Figures 6.1A, 6.5C) were recommended in a British manual of 1768 as “having a more certain hold than leather” (Henderson, Robert n.d.), but they were apparently not in general use at Camden, as they are not common finds.

**Small arms accoutrements**

Small arms accoutrements are defined here as those accessories and items of

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\(^5\) Some fired .69 caliber musket balls from Camden show distinct concavities from the buckshot they were fired with.
equipment that are directly related to the soldier’s weapons. These include gun tools, cartridge boxes and bayonet scabbards, and the shoulder belts and waist belts they are suspended from, as well as gun shoulder slings, pistol holsters, and civilian accessories such as powder horns and shot pouches.

Gun tools from the Camden battlefield include both worm and screw devices that attached to the ramrod for cleaning and ball removal, respectively (Keys 1992: 38, Fig.48). The most common gun tool from the site is an American musket screwdriver of a distinctive design that is apparently rare except at Camden (Figure 6.5D,E) (Neumann and Kravic 1997: 264, Fig.6; Keys 1992: 26 Fig.37). Screwdrivers made from a key and a common spike have also been recovered (Figure 6.5F,G), as well as a few examples of a British-style combination tool (Klinger and Wilder 1967:36; Keys 1992: 28 Fig.39).

Paper cartridges were normally carried in a cartridge box suspended from a leather shoulder belt or waist belt. The variety of Revolutionary War cartridge boxes is remarkable, but the box usually consisted of a rectangular wood block drilled to accept a quantity of cartridges (ranging from 18 to 36), set in a leather pouch with a heavy exterior flap that could be secured by a finial or latch at the bottom (Peterson 1968: 64-69; Neumann and Kravic 1997: 66-80; Klinger and Wilder 1967: 32-34). The Camden battlefield assemblage includes two varieties of probable cartridge box finials, one brass and one iron (Figure 6.6A,B), and examples of iron turn latches (Keys 1992: 46 Fig.56; Neumann and Kravic 1997: 67, Fig.12). Numerous small, iron frame buckles have been found on the battlefield (Figure 6.6C-F), and most are probably from cartridge boxes – many varieties had two iron frame buckles sewn onto the bottom of the box to secure and adjust the ends of the shoulder belt (Neumann and Kravic 1997: 54, Fig. 18; Peterson 1968: 64, 65). The leather cartridge box was often attached to the wood cartridge block by small iron nails or brass tacks, and the shoulder belt or the waist belt loops were sometimes attached to the box with tacks (Neumann and Kravic 1997: 71, Fig. 27;72, Figs. 28, 30; Klinger and Wilder 1967: 32, 34). A number of brass tacks have been found on the Camden battlefield (Figure 6.6O), and one reasonable explanation for their presence is that they were cartridge box hardware (but see artillery, below).
Cartridge box and bayonet shoulder belts typically had one or two brass adjustment buckles (Klinger and Wilder 1967: 33; Neumann and Kravic 1997: 53 Figs.2-4, 68 Fig.14a, 80 Fig.54). These are not common finds on the Camden battlefield, but a few examples are recorded (Keys 1992: 12 Fig.18).

Bayonets were carried in leather scabbards suspended on waist belts or shoulder belts. In many American varieties, the scabbard was sewn to the belt or to the leather frog that attached to the belt, and no metal hardware was used (Klinger and Wilder 1967: 38; Neumann 1973: 25 Figs.5,6; Peterson 1968: 77). The standard British scabbard, however, employed a brass clip or stud riveted near the throat, which hooked into a cut in
the leather frog (Neumann 1973: 29 Fig.6-III; Bower 2004); these scabbard clips are relatively common finds on Revolutionary War sites (Hanson and Hsu 1975: 69 Fig. 44k; Stone 1974: 279 Fig.170k, l; Starbuck 1999: 73 Fig.3-23), and more than a dozen examples have been found at Camden (Figure 6.6G-I; Keys 1992:24 Fig.35). The British scabbard also featured a brass tip or finial, with a distinctive triangular shank; these have been recovered at Camden, along with a variety of other brass and iron types that are probably American (Bower 2004: Figs. 8, 9) (Figure 6.6J-M).

**Edged Weapons.**

Few artifacts from swords or sabers are present in the Camden assemblage. These include the brass throat of a saber scabbard (Keys 1992: 24 Fig. 34), and a very worn brass drag (tip) from a saber scabbard (Figure 6.6N), as well as a complete set of brass hardware from the sword shoulder belt of an officer of the British 71st Regiment, Fraser’s Highlanders (Figure 6.7). A similar 71st Regiment sword belt is seen in a contemporary portrait reproduced by Troiani (2001: 69). A single light belt axe (or “tomahawk”) head is known from the battlefield (Peterson 1968: 104).

**Artillery**

The British artillery fielded two three-pounders and four six-pounders in the Battle of Camden, while the Americans appear to have employed (and lost) four six-pounders, two three-pounders, and two two-pounders. How many of these pieces were actually fired during the battle is not known. In addition to the American guns, the British captured “fixed ammunition for six pounders, 160; ditto for three pounders, 520…” (Tarleton 1787: 139). This “fixed ammunition” probably included both solid shot (cannon ball) cartridges, and canister cartridges, then called “case shot.” Solid shot would have been a very ineffective round on a wooded, short-range battlefield like Camden, and indeed no examples are known to have been recovered there - case shot was

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6 By the time of the American Civil War, the term “case shot” was applied to explosive shells containing musket balls for anti-personnel use; still later, such projectiles were called “shrapnel shells.”
probably the only round employed. A standard British six-pounder case shot of the Revolutionary War period consisted of a sheet iron can (or “case”) containing 56, 1.5 ounce cast iron balls. The can was attached with copper tacks to a wooden base or sabot, which in turn was secured to a cylindrical flannel powder bag – the whole comprised a “fixed” round, or cartridge (Caruana 1979: 3). Most iron canister balls recovered from the Camden battlefield are close to 1.5 ounces in weight, and are slightly less than an inch in diameter. These are probably from British or American six-pounder rounds; a few smaller examples have been recovered that may be from three-pounder canister, which used 1.25 ounce iron balls (Figure 6.8) (Caruana 1979: 15). The Camden battlefield collections also include small numbers of lead canister balls, which

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7 Case shot is distinct from grape shot, which consisted of larger iron balls bolted together in a stack, or secured in a bound (“quilted”) cloth cover. Grape shot was normally a naval ammunition but was used on land (Caruana 1979: 2).
8 Here is another possible source for the tacks found on the Camden Battlefield (Figure 6.6O).
were .75 caliber musket balls, probably fired from a two- or three-pounder gun. These balls are readily distinguished from balls fired from muskets by the deep scallops and flats that mark their surfaces (Figure 6.8).  

**Clothing**

This artifact class includes all durable objects related to uniforms including shoes.

**Military Uniform Buttons.**

It might be imagined that uniform buttons would comprise an extensive, diverse, and especially useful category in the Camden battlefield assemblage. Unfortunately, such buttons are rarely found at Camden, with most examples derived from clusters that are probably associated with burials. The 1998 and 2004 metal detector collections yielded no military buttons, and some collectors with extensive Camden experience reported finding none. British uniform buttons are especially rare, due in part to their tendency to disintegrate in the ground.  

A few recognizable examples have been recovered, including enlisted men’s types from the 23rd Regiment, the 71st Regiment, and the King’s Orange Rangers, the latter a Provincial unit that contributed members to the Volunteers of Ireland in 1778 (Figure 6.9F,G) (Keys 1992: 8 Fig.13; Troiani 2001: 35, 36, 68, 69, 83). A single 62nd Regiment button was recovered with a quantity of “USA” buttons - it may have been a souvenir worn by an American veteran of Saratoga, where the 62nd was captured (Troiani 2001: 64). American uniform buttons from Camden include at least two examples of the brass Delaware Regiment officer’s button, a Continental Artillery button, several Continental Navy buttons, and numerous Continental enlisted men’s “USA” buttons (Figure 6.9A-E) (Keys 1992: 8 Fig.13; Troiani 2001: 35, 36, 68, 69, 83). A single 62nd Regiment button was recovered with a quantity of “USA” buttons - it may have been a souvenir worn by an American veteran of Saratoga, where the 62nd was captured (Troiani 2001: 64). American uniform buttons from Camden include at least two examples of the brass Delaware Regiment officer’s button, a Continental Artillery button, several Continental Navy buttons, and numerous Continental enlisted men’s “USA” buttons (Figure 6.9A-E) (Keys 1992: 8 Fig.13; Troiani 2001: 35, 36, 68, 69, 83).
1992: 2 Figs.1-3, 4 Figs.5,6; Troiani 2001: 97-101, 105, 107, 112). An unidentified button with a “3” over “D” device has also been recovered – this button is typical American construction (one piece pewter with integral shank) and may have been worn by a former or detached member of the 3rd Continental Dragoons.\footnote{Alternately, it may be a British button (of atypical construction) for the 3rd (King’s Own) Dragoons, who wore brass buttons with a “3” over “D” device. The 3rd did not serve in North America (Troiani 2001: 74).}

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{figure67.jpg}
\caption{Brass hardware from an officer’s sword belt, 71st Regiment of Foot (Fraser’s Highlanders).}
\end{figure}
Civilian Buttons.

Civilian eighteenth century buttons are more numerous at Camden than military uniform buttons, at least in non-burial contexts. Most of these buttons are probably from militia clothing, although Continental and British troops may have used them occasionally. Britannia metal (tombac) buttons (South Type 7) are the most common, followed by cast pewter and lead (South Type 11), and several types of one-piece and two-piece shanked brass buttons (Figure 6.10A-H). At least two white metal molds for casting pewter or lead buttons have been recovered (Keys 1992: 4 Figs. 7, 8). A few 2-hole and 4-hole brass utility buttons are known– these may be clothing artifacts, or they may have been on equipment such as knapsacks or haversacks (Figure 6.10I, J).

Clothing Buckles

Three kinds of clothing buckles are found at Camden battlefield, including shoe buckles, knee buckles, and a neck stock buckle. Many shoe buckles and fragments have been recovered, including several matching pairs. Some are plain or decorated civilian examples, most of which had brass frames and iron interior parts (Keys 1992: 12 Fig. 17, 14 Figs. 19, 20, 16 Figs. 24-26). A few simple, all-iron shoe buckles are recorded that may be military (Figure 6.11A). The collection is dominated by a distinctive, plain, all-brass type that collectors call “Continental” or “Delaware” shoe buckles (Figures 6.11B, 3.3) (Keys 1992: 9-12). At least 10 examples are known, including three matching pairs. At least one standard British shoe buckle has been recovered– this type is also plain and of all-brass construction, but is more oval than rectangular in shape (Peterson 1968: 230 Fig. 2, 231). Several knee buckles and fragments are recorded, including examples with both brass and iron frames (Figure 6.11D-F). None are of any known, military pattern. Finally, a single, all-brass neck stock buckle is recorded (Figure 6.11G).

It is important to note that finding buttons in clusters, bayonets, complete (sometimes paired) shoe buckles all point to the lack of significant ground disturbance in the northern portion of the site--certainly not agricultural plowing (see Chapter 1). Also, button clusters and shoe buckle pairs may be evidence of burials.

Hanson and Hsu (1975:91, Fig. 50d) illustrate the type from Fort Stanwix, and state only that it is “probably military issue.” Peterson (1968:230 Fig.1,231) illustrates a very similar example from the Philadelphia.
Miscellaneous Artifacts

As discussed in the methods in Chapters 3 and 4, the artifacts recorded by the Collector Survey and found during the metal detector sampling include a category of miscellaneous objects that are not necessarily battle artifacts, but which are probably of the period. In most cases an entirely reasonable or likely explanation for their presence is that they were left behind on August 16, 1780. This class is not discussed in detail here, but some mention of the range of artifacts encompassed is in order. The category “miscellaneous artifacts” includes (but is not confined to) wrought nails and spikes, other wrought iron hardware, iron two-tine forks, table knife blades, pewter spoon fragments, iron frame buckles, a pewter whistle finial, a Jesuit ring, Jew’s harps, stirrups, pocket knives, a snuff can, a signet, a corkscrew, and eighteenth century horse shoes. A few examples are illustrated in Figure 6.12.

Figure 6.8. Iron and lead canister balls.
Figure 6.9. Military buttons (not to scale): A. and B. Continental enlisted men’s buttons; C. Continental Artillery button; D. Delaware Regiment officer’s button; E. Continental Navy button; F. British 71st Regiment button; G. British King’s Orange Rangers button. (Photos courtesy of Calvin Keys).

Figure 6.10. Civilian buttons: A. South Type 7, tombac, convex face; B. South Type 7, tombac, flat face; C. South Type 7, tombac, convex face with decoration; D. South Type 7, tombac, convex face; E. South Type 7, tombac, flat face; F. South Type 9, brass with silver plate or wash, decorated; G. Two-piece brass with domed face; H. Sleeve button, brass, with portrait; I. Two-hole button, embossed brass with bone back; J. Four-hole button, brass with tin plating.
Figure 6.11. Clothing buckles: A. Iron shoe buckle; B. Brass “Continental” or “Delaware” shoe buckle; C. Brass shoe buckle part; D. and E. Brass knee buckle frames; F. Iron knee buckle; G. Brass neck stock buckle.

Figure 6.12. Miscellaneous artifacts: A. Pocket knife; B. Wrought iron staple; C. Jew’s harp; D. Pewter whistle finial; E. Brass seal holder; F. Iron snuff can.
Chapter 7: Conclusions

To reiterate the project goals, the authors were tasked with continuing the analysis and interpretation of private collections obtained from the Camden battle site, and conducting a controlled, GPS-plotted, metal detector sampling survey totaling three acres. These tasks were to assist in the overall research goal of better understanding where the two opposing forces were arrayed on the battlefield and how the battle unfolded, and to ascertain whether an intensive metal detector collection would be useful. The results of these research goals have been presented in Chapters 3, 4 and 5. This chapter provides a summary of additional conclusions.

Our first major conclusion (and recommendation) concerns the use of collector data from the Camden Battlefield, and more generally at battlefields across the Southeast. We believe that this is the first time archaeologists have formally collected informant data and used it in conjunction with historical records to develop a battle interpretation. Further, we believe this report has clearly demonstrated the value and utility of collector data in reconstructing the battlefield landscape and battle history. Like metal detecting technology, however, the “collector informant” technique may be some time in gaining general acceptance. There was a time, perhaps twenty-five years ago, when most archaeologists objected to the use of metal detectors in any archaeological context, thanks to the association of the technology with “looting,” and a general ignorance of its potential. With the exception of a few pioneers such as Roy Dickens, the archaeological community was slow to recognize the great utility of metal detecting on non-architectural military sites, together with the futility of certain traditional methods such as shovel testing and block excavation. Metal detectors are finally in general use, however, and the literature of successful applications has grown dramatically over the last 20 years While metal

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1 We certainly are not the first to use a collector’s knowledge of a battle for battlefield analysis, however we are not aware of anyone else who has interviewed multiple collectors and attempted to impose an overall provenience analysis on such data. We apologize to anyone who has.

detectors now appear to be acceptable tools for many archaeological applications, most archaeologists still appear to have a poor understanding of the scope and time depth of non-professional metal detecting on military sites. Questions such as, “Has this battlefield been metal detected?” or, “Will our work encourage metal detecting pot hunters?” might have been pertinent 30 or 40 years ago, but they are merely naive today. With rare exceptions all reasonably accessible battlefields, field fortifications, and campsites in North America have been collected for several decades by numerous individuals. Nearly all such sites have lost most of their “detectable” metallic artifacts (particularly large artifacts). This condition extends to even the most obscure skirmishes and bivouacs, thanks to the rigorous historical research conducted by thousands of collectors. The exceptions are those few sites or portions of sites that have both legal protection and 24-hour security, and sites where the use of metal detectors is not practical (e.g. developed areas or trash dumps). While the literature of archaeological metal detecting on military sites is growing, most reports of such work fail to address or even mention the “missing collections” that were removed long before any archaeological effort was undertaken. It is not surprising, then, that few archaeologists have recognized the collector community as a resource that can and should be carefully tapped for information. Legg and Smith (1989), Smith (1994), and Espenshade et al. (2001) are some exceptions. Admittedly, archaeologists would prefer that metal detecting at battlefields, camps and skirmish sites had not happened in the past, and that it


3 A remarkable overview of battlefield relic collecting as it was during its peak can be found in Stephen Sylvia and Michael O’Donnell, A History of American Civil War Relics (Orange, Virginia: Moss Publications, 1979).
were not so popular today. To ignore it, however, is to put one's head in the sand, and to settle for a less informed interpretation of previously detected sites. In many cases, collector data is the now the best (or only) distributional evidence available. Thus we feel it is the obligation of the archaeologist to salvage what information can be gained from relic collectors and integrate it into their work. While the quality of the provenience data is usually not as precise as we would like, it is unique and very usable information that is otherwise entirely lost. We encourage archaeologists to develop strong relationships with the collectors in their region. We also encourage relic collectors to allow professional archaeologists access to their material, and urge them to make arrangements for their collections to be protected in perpetuity.

A second conclusion is that the battle of Camden site, despite years of collecting, still retains some archaeological integrity. The controlled metal detector sampling has demonstrated that there is a representative sample of artifacts associated with the battle still in situ across the battlefield. This suggests that additional, more intensive archaeological investigations can reveal artifact patterns that will increase our knowledge of the battle. Management planning should take into consideration the fact that this battlefield is still an archaeological site, and not merely a traditional landscape. There is still much to be learned from additional archaeology. We again recommend, as we did in 1998 and 2001, a 100% metal detector coverage of the Camden Battlefield as defined by the current easement. The many graves on the battlefield, known and unknown, are also a significant archaeological resource. There are also ethical and legal issues to be considered. An effort to find and secure these graves should be a priority.

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4 Here we define the battle site as being within the present National Landmark Boundaries. Ideally, the battlefield could be defined as that within the present boundaries and extend up the road all the way to Rugeley’s Mill. However, the present boundaries are sufficient for interpretive purposes and present preservation planning.
5 The statement that the Camden Battlefield still retains some archaeological expression may appear to contradict our previous assertion that all battlefields have lost most of their battle related artifacts. However, our argument is that: 1) archaeologists must keep in mind that what they find today is only a remnant of what was there at the time of the battle, 2) although only a remnant, the artifacts still are the only tangible, in situ, evidence now available for battlefield interpretation.
6 It must be pointed our American Battlefield Protection Program does not recommend this goal. The program recommends “additional sampling” with “research driven investigations of specific areas” (Kristen Stevens and Tanya Gossett, comments on the draft report, March 10, 2005). We agree with Stevens and Gossett that a true 100% collection would affect the site’s archeological integrity. We also agree that additional sampling will be the most reasonable approach for future work at Camden given funding limitations. However, we still feel that recovery of as much of the remaining material culture as possible be an important goal. What integrity is left of Camden should be salvaged before it is lost. Funding limitations will prohibit 24 hour protection of this exposed site for the foreseeable future and it is our argument that each day presents an opportunity for unauthorized visitation.
A third conclusion concerns the value of private-public, avocational-professional collaboration in battlefield preservation and interpretation. This report focuses on the interpretation of the Camden Battlefield using archaeological and historical evidence. But it is part of a much larger effort to preserve the battlefield and ultimately develop the site into a public interpretive park. While funding was very limited, the positive results of this project were magnified as a result of numerous individuals and organizations that assisted with historical research, accommodation, volunteering, and sharing of information. The level of work reported here could not have been accomplished by the authors alone.

Finally, we believe this project has once again demonstrated the value of combining history and archaeology in understanding battle. Further, we believe that informant interviews with relic collectors add yet another invaluable perspective.
References Cited

Note: Complete bibliographic information for sources cited in Chapter II are provided within that chapter’s footnotes. The following bibliographic information is for all other chapters.

Babits, Lawrence E.

Barrette, Lt. Col. Thomas George Leonard

Barron, Ed

Baxley, Charles B.

Bower, Ernest Richard

Brown, M.L.

Calver, William Lewis, and Reginald Pelham Bolton

Caruana, Adrian B.

Conner, Melissa, and Douglas D. Scott
Cornelison, John E., and Tammy D. Cooper

Cornwallis, Lord Earl

Darling, Anthony D.

DesBarres, J.F. W.

Espenshade, Christopher, T., Robert L. Jolley, and James B. Legg

Ferguson, Leland G.

Fields, George


Fields, George, Steven D. Smith and James B. Legg

Fox, Jr., Richard A.

Geier, Clarence R., Jr., and Susan E. Winter, eds.
1994 *Look to the Earth: Historical Archaeology and the American Civil War.* University of Tennessee Press, Nashville.

Haecker, Charles M., and Jeffrey G. Mauck  

Hamilton, T.M.  

Hanson, Lee, and Dick Ping Hsu  

Henderson, Joe  

Henderson, Robert  

Keegan, John  

Keys, Calvin  
1992  *A South Carolina Historical Collection of Revolutionary War Artifacts.* Published by the Author.


Kirkland, Thomas J. and Robert M. Kennedy  
1905  *Historic Camden, Part One, Colonial and Revolutionary.* The State Company, Columbia, South Carolina.

Klinger, Robert L., and Richard A. Wilder  
1967  *Sketch Book ’76: The American Soldier, 1775-1781.* The authors, Arlington, Virginia.
Landers, Lieutenant Colonel H. L.

Lees, William B.
1994 When the Shooting Stopped, the War Began, in Clarence R. Geier, Jr., and Susan E. Winter, eds., *Look to the Earth: Historical Archaeology and the American Civil War*. University of Tennessee Press, Knoxville.

Legg, James B., Christopher T. Espenshade and Lynn M. Snyder

Legg, James B., and Steven D. Smith


Lossing, Benson

Lowe, David W.

Mitchell, Cleveland J.

Moore, Warren

Neumann, George C.

Understanding Camden


Neumann, George C., and Frank J. Kravic

Noel-Hume, Ivor

Noel-Hume, Ivor, ed.

Nosworthy, Brent

Peterson, Harold L.


Poplin, Eric C.

Pratt, Michael G.

Scott, Douglas D.

Scott, Douglas D., Richard A. Fox, Jr., Melissa A. Connor, and Dick Harmon

Scott, Douglas D. and William J. Hunt, Jr.
Senf, Colonel John

Simes, Thomas

Sivilich, Daniel M.


Sylvia, Stephen W., and Michael J. O’Donnell

Smith, Steven D.
1994  Archaeological Perspectives on the Civil War: The Challenge to Achieve Relevance, in, Clarence R. Geier, Jr., and Susan E. Winter, eds., Look to the Earth: Historical Archaeology and the American Civil War. pp. 3-20, University of Tennessee Press, Knoxville.

Smith, Steven D. and James B. Legg

Smith, Steven D. and James B. Legg

South, Stanley

1974  Palmetto Parapets: Exploratory Archaeology at Fort Moultrie, South Carolina, 38CH50. Anthropological Studies #1, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
Starbuck, David R.  

Stedman, C.  

Sterling, Bruce B. and Bernard W. Slaughter  

Stewart, Colonel David  

Stone, Garry Wheeler, Daniel M. Sivilich, and Mark E. Lender  

Stone, Lyle M.  

Thomas, Dean S.  

Troiani, Don  

Troiani, Don, Earl J. Coates and James L. Kochan  

Vallancy, Charles  
http://battleofcamden.org/vallancy2.jpg.

Whitfield, R. Bryan  
Williams, Colonel Otho
Appendix A. The Catalog/Provenience System.

The number assigned to each object includes three elements, and will appear thus: 00-000-000. The elements include:

**Collection Code** – 2 digits.

The Collection Code has been assigned as follows:

01 Anonymous Collector 1.
02 Anonymous Collector 2.
03 Joe Henderson.
04 Bruce Meyer.
05 Calvin Keys.
06 Merle McGee (not recorded).
07 Ken Hamilton.
08 Arnold Stone.
09 Steve Mahoney.
10 Ray Hunt.
11 Don Knight.
12 Anonymous Collector 3 (not recorded).
13 William C. Major.
14 Dale Williams.
15 Cantey Haile.
20 1998 metal detector sample area.
21 Reserved for misc. artifacts found during the present project.
22 2004 metal detector sample area (DAR property).
23 2004 metal detector sample area.
24 2004 metal detector sample area.
25 2004 metal detector sample area.
26 2004 metal detector sample area.
27 2004 metal detector sample area.
28 2004 metal detector sample area.
29-59 Reserved for additional metal detector sample areas.
60 Burial #1.
61 Burial #2.
62 Burial #3.
64 Burial #4.
65 Burial #5.
66 Burial #6.
67 Burial #7.
68 Burial #8.

**Provenience Code** – 3 digits.
The provenience code signifies GPS coordinates or a described provenience in a particular collection.

**Item Code** – 3 digits.

The item code numbers multiple objects within the same provenience.

A Functional Class Code is also assigned to each artifact to facilitate topical map layers. The codes assigned include:

S  Lead shot, including musket balls, buckshot, etc.
A  Arms and accoutrements artifacts, excluding ammunition.
C  Clothing artifacts.
G  Iron and lead canister balls.
M  Miscellaneous artifacts, possibly or probably from the battle.
N  Miscellaneous artifacts unrelated to the battle.
### Appendix B: Metal Detector Catalog

<table>
<thead>
<tr>
<th>Prov</th>
<th>Description</th>
<th>Code</th>
</tr>
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<tbody>
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<td>20 001 001</td>
<td>Melted lead, 1.9g.</td>
<td>S</td>
</tr>
<tr>
<td>20 002 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 003 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 004 001</td>
<td>Lead shot, unfired, .555,&quot; 16.1g. (Pistol, carbine or rifle ball, unfired but crudely cast, rolled).</td>
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<tr>
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<td>Melted lead, 1.9g.</td>
<td>S</td>
</tr>
<tr>
<td>20 006 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 007 001</td>
<td>Lead shot, fired, 16.9g. (Pistol or carbine ball, about .60 cal.).</td>
<td>S</td>
</tr>
<tr>
<td>20 008 001</td>
<td>Lead shot, fired, 3.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 009 001</td>
<td>Lead shot, unfired, .333,&quot; 3.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 010 001</td>
<td>Lead shot, fired, 30.7g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
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<td>Melted lead, 1.5g.</td>
<td>S</td>
</tr>
<tr>
<td>20 012 001</td>
<td>Melted lead, 2.5g.</td>
<td>S</td>
</tr>
<tr>
<td>20 013 001</td>
<td>Lead shot, chewed, 27.7g. (.75 cal. musket ball, thoroughly chewed, probably by a hog).</td>
<td>S</td>
</tr>
<tr>
<td>20 014 001</td>
<td>Lead shot, fired, 30.5g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>20 015 001</td>
<td>Lead shot, fired, 9.4g. (Rifle ball (?), badly mushroomed but appears to show rifling.</td>
<td>S</td>
</tr>
<tr>
<td>20 016 001</td>
<td>Lead shot, unfired (?), 23.0g. (.69 cal. musket ball, deliberately battered over entire surface).</td>
<td>S</td>
</tr>
<tr>
<td>20 017 001</td>
<td>Lead shot, fired, 18.0g. (Pistol or carbine ball, about .60 cal.).</td>
<td>S</td>
</tr>
<tr>
<td>20 018 001</td>
<td>Melted lead, 2.6g.</td>
<td>S</td>
</tr>
<tr>
<td>20 019 001</td>
<td>Lead shot, fired, 3.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 020 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 021 001</td>
<td>Lead shot, fired, 3.8g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 022 001</td>
<td>Lead shot, fired, 2.9g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 023 001</td>
<td>Melted lead, 4.5g.</td>
<td>S</td>
</tr>
<tr>
<td>20 024 001</td>
<td>Lead shot, fired, 30.1g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>20 025 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 026 001</td>
<td>Melted lead, 2.0g.</td>
<td>S</td>
</tr>
<tr>
<td>20 027 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 028 001</td>
<td>Tack, copper alloy, convex head, diameter 9.6mm.</td>
<td>M</td>
</tr>
<tr>
<td>20 029 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 030 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 031 001</td>
<td>Lead shot, fired, 2.0g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 032 001</td>
<td>Lead shot, fired, 3.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 033 001</td>
<td>Lead shot, fired, 3.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 034 001</td>
<td>Lead shot, fired, 23.6g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>20 035 001</td>
<td>Lead shot, fired, 22.5g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>20 036 001</td>
<td>Lead shot, unfired, .300,&quot; 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 037 001</td>
<td>French musket trigger guard fragment, iron, section of rear tang with portion of forward screw hole, length 81mm.</td>
<td>A</td>
</tr>
<tr>
<td>20 038 001</td>
<td>Lead shot, unfired, .301,&quot; 2.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 039 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 040 001</td>
<td>Lead shot, unfired, .303,&quot; 2.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 041 001</td>
<td>Melted lead, 6.0g.</td>
<td>S</td>
</tr>
<tr>
<td>20 042 001</td>
<td>Melted lead, 3.5g.</td>
<td>S</td>
</tr>
<tr>
<td>20 043 001</td>
<td>Lead shot, fired, 1.9g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 044 001</td>
<td>Lead shot, fired, 1.9g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 045 001</td>
<td>Lead shot, unfired,.656,&quot; 28.7g. (.69 or .75 cal. Musket ball, cast in mis-aligned mold, rolled).</td>
<td>S</td>
</tr>
<tr>
<td>20 046 001</td>
<td>Lead shot, unfired, .298,&quot; 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>20 047 001</td>
<td>Lead shot, fired, 1.7g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 001 001</td>
<td>Lead shot, fired, 22.9g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 002 001</td>
<td>Lead shot, unfired,.300,&quot; 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 003 001</td>
<td>Lead shot, fired, 19.7g. (Undersized .69 cal. musket ball?).</td>
<td>S</td>
</tr>
<tr>
<td>22 004 001</td>
<td>Lead shot, unfired,.304,&quot; 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 005 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 006 001</td>
<td>Button, Britannia metal, South Type 7, flat face, diameter 13.4mm.</td>
<td>C</td>
</tr>
<tr>
<td>22 007 001</td>
<td>Lead shot, fired, 29.9g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 008 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 009 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 010 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 011 001</td>
<td>Lead shot, fired, 1.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 012 001</td>
<td>Percussion cap.</td>
<td>N</td>
</tr>
<tr>
<td>22 013 001</td>
<td>Bayonet scabbard frog stud, copper alloy, missing blade, remaining length 25.2mm.</td>
<td>A</td>
</tr>
<tr>
<td>22 014 001</td>
<td>Lead shot, fired, 30.7g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 015 001</td>
<td>Frame buckle, iron, 34.0mm square, tongue length 35.6mm. (Possibly a bayonet belt buckle - found adjacent to 22 013 001).</td>
<td>M</td>
</tr>
<tr>
<td>22 016 001</td>
<td>Shield ornament, cast copper alloy, with two integral pins (broken off) for attachment to leather, height 23.0mm, width 12.7mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 017 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 018 001</td>
<td>Musket screwdriver, iron, American (?) type, top missing - blade only, remaining length 45.8mm.</td>
<td>A</td>
</tr>
<tr>
<td>22 019 001</td>
<td>Horse shoe fragment.</td>
<td>N</td>
</tr>
<tr>
<td>22 020 001</td>
<td>Horse shoe fragment.</td>
<td>N</td>
</tr>
<tr>
<td>22 021 001</td>
<td>Lead shot, fired, 29.4g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 022 001</td>
<td>Lead shot, fired, 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 023 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 024 001</td>
<td>Melted lead, 4.7g.</td>
<td>S</td>
</tr>
<tr>
<td>22 025 001</td>
<td>UID wrought iron hook, remaining length 87.7mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 026 001</td>
<td>Lead shot, unfired,.630,&quot; 22.6g. (.69 cal. musket ball, unfired but with sand scarring - road damage).</td>
<td>S</td>
</tr>
<tr>
<td>22 027 001</td>
<td>Lead shot, fired, 29.2g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 028 001</td>
<td>Lead shot, unfired,.655,&quot; 26.0g. (.69 cal. musket ball found in situ with three buckshot, from a buck and ball cartridge, shows gunpowder corrosion. See 22 028 002 to 004).</td>
<td>S</td>
</tr>
<tr>
<td>22 028 002</td>
<td>Lead shot, unfired,.290,&quot; 2.4g. (Buckshot from complete buck and ball set - see 22 028 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 028 001</td>
<td>Lead shot, unfired, .306,&quot; 2.6g. (Buckshot from complete buck and ball set - see 22 028 001).</td>
<td>S</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>22 028 004</td>
<td>Lead shot, unfired, .297,&quot; 2.4g. (Buckshot from complete buck and ball set - see 22 028 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 028 005</td>
<td>Lead shot, unfired, .639,&quot; 25.5g. (.69 cal. Musket ball, with very clear gunpowder stain. Found adjacent to 22 028 001 to 004, but without buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 029 001</td>
<td>Lead shot, unfired, .299,&quot; 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 030 001</td>
<td>Lead shot, unfired, .661,&quot; 24.7g. (.69 or .75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 031 001</td>
<td>Lead shot, unfired, .631,&quot; 23.8g. (.69 cal. musket ball, found in situ with three buckshot, from a buck and ball cartridge, shows gunpowder stain and corrosion. See 22 031 002 to 004).</td>
<td>S</td>
</tr>
<tr>
<td>22 031 002</td>
<td>Lead shot, unfired, .297,&quot; 2.4g. (Buckshot from complete buck and ball set, shows gunpowder corrosion - see 22 031 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 031 003</td>
<td>Lead shot, unfired, .300,&quot; 2.5g. (Buckshot from complete buck and ball set, shows gunpowder corrosion - see 22 031 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 031 004</td>
<td>Lead shot, unfired, .304,&quot; 2.6g. (Buckshot from complete buck and ball set, shows gunpowder corrosion - see 22 031 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 032 001</td>
<td>Lead shot, unfired, .687,&quot; 30.1g. (.75 cal. musket ball, unfired but with sand scarring - road damage).</td>
<td>S</td>
</tr>
<tr>
<td>22 033 001</td>
<td>Wrought iron spike, shaft modified for use as a musket screwdriver, length 81mm.</td>
<td>A</td>
</tr>
<tr>
<td>22 034 001</td>
<td>Lead shot, unfired, .291,&quot; 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 035 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 036 001</td>
<td>Lead shot, fired, 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 037 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 038 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 039 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 040 001</td>
<td>Lead shot, unfired, .357,&quot; 4.2g, weight includes portion of sprue. (Large buckshot, found with 22 040 002).</td>
<td>S</td>
</tr>
<tr>
<td>22 040 002</td>
<td>Lead shot, unfired, 2.0g, a partial casting of another ball like 22 040 001. (Large buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 041 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 042 001</td>
<td>Iron, two-tine fork, missing tips of tines and rear portion of grip tang, poorly preserved, remaining length 128mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 043 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 044 001</td>
<td>Lead shot, fired, 2.0g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 045 001</td>
<td>UID wrought iron object, possibly a horse shoe fragment? Length -- mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 046 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 047 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 048 001</td>
<td>French musket barrel band spring, iron, portion of stock pin missing, length 65.6mm.</td>
<td>A</td>
</tr>
<tr>
<td>22 048 002</td>
<td>French musket barrel band spring, iron, portion of stock pin broken off but present, length 66.0mm.</td>
<td>A</td>
</tr>
<tr>
<td>22 049 001</td>
<td>Cartridge box finial, cast iron, length (excepting attachment nail) 16.2mm, diameter at tip 13.2mm, diameter at base 16.6mm.</td>
<td>A</td>
</tr>
<tr>
<td>Number</td>
<td>Description</td>
<td>Location</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>22 050 001</td>
<td>Lead shot, unfired, min. diameter .581,&quot; max. diameter .616,&quot; 19.4g. (.69 cal. musket ball? A distinctive type at Camden, made in a very crude and asymmetrical mold, and badly undersized for a .69 musket. Shows gunpowder stain.)</td>
<td>S</td>
</tr>
<tr>
<td>22 051 001</td>
<td>Bit chain fragment, iron, 5 links, remaining length 104mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 052 001</td>
<td>Lead shot, unfired, .303,&quot; 2.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 053 001</td>
<td>Melted lead, 14.0g.</td>
<td>S</td>
</tr>
<tr>
<td>22 054 001</td>
<td>Lead shot, unfired, .692,&quot; 30.7g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 055 001</td>
<td>Lead shot, fired, 1.8g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 056 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 057 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 058 001</td>
<td>US 1829 Dime, suspension hole near top of obverse. (See 23 003 001).</td>
<td>N</td>
</tr>
<tr>
<td>22 059 001</td>
<td>Melted lead, 4.2g.</td>
<td>S</td>
</tr>
<tr>
<td>22 060 001</td>
<td>Tack head, copper alloy, convex, diameter 9.3mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 061 001</td>
<td>Lead shot remnant, 12.0g. (Battered remnant of ball from the road bed).</td>
<td>S</td>
</tr>
<tr>
<td>22 062 001</td>
<td>Shoe buckle interior part, copper alloy, bent, width at center bar</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>attachments approx. 30mm. (Matches &quot;Continental&quot; pattern).</td>
<td></td>
</tr>
<tr>
<td>22 063 001</td>
<td>Lead shot fragment, 5.3g. (Torn off portion of a severely mushroomed ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 064 001</td>
<td>Cast copper alloy boss/ornament, round with convex face, with two</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>integral pins (one missing) for attachment to leather, diameter 15.1mm.</td>
<td></td>
</tr>
<tr>
<td>22 065 001</td>
<td>Lead shot, unfired, .662,&quot; 26.6g. (.69 or .75 cal. musket ball, unfired</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>but battered, showing gunpowder stain).</td>
<td></td>
</tr>
<tr>
<td>22 066 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 067 001</td>
<td>Lead shot, unfired, .297,&quot; 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 068 001</td>
<td>Melted lead, 24.1g. (Weight = .69 cal. Musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 069 001</td>
<td>UID wrought iron implement fragment, remaining length 50mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 070 001</td>
<td>Wrought iron staple, max. length 95.6mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 071 001</td>
<td>Melted lead, 11.2g.</td>
<td>S</td>
</tr>
<tr>
<td>22 072 001</td>
<td>Lead shot, fired, 30.1g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 073 001</td>
<td>Tack, copper alloy, convex head, diameter 11.2mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 074 001</td>
<td>Lead shot, unfired, .298,&quot; 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 075 001</td>
<td>Lead shot, unfired, .652,&quot; 26.4g. (.69 cal. musket ball, retains portion</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>of sprue).</td>
<td></td>
</tr>
<tr>
<td>22 076 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 077 001</td>
<td>Lead shot, unfired, .300,&quot; 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 078 001</td>
<td>Copper alloy filler cap from powder horn or flask, diameter 35.9mm,</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>with threaded interior cavity, diameter 16.5mm, holed finial at top</td>
<td></td>
</tr>
<tr>
<td></td>
<td>retaining copper alloy wire suspension ring.</td>
<td></td>
</tr>
<tr>
<td>22 079 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 080 001</td>
<td>Cast iron fragment, possibly langrange, max. length 23.6mm, 14.3g.</td>
<td>M</td>
</tr>
<tr>
<td>22 081 001</td>
<td>Lead shot, unfired, .301,&quot; 2.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 082 001</td>
<td>Lead shot, fired, 22.5g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 083 001</td>
<td>Lead shot, unfired, .294,&quot; 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 084 001</td>
<td>Lead shot, fired, 1.9g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 085 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>Item Number</td>
<td>Description</td>
<td></td>
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<tr>
<td>-------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>22 086 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 087 001</td>
<td>Lead shot, unfired, .637&quot;, 23.0g. (.69 cal. musket ball found in situ with two buckshot, the third missing, from a buck and ball cartridge. Shows gunpowder staining. See 22 087 002 and 003).</td>
<td></td>
</tr>
<tr>
<td>22 087 002</td>
<td>Lead shot, unfired, .265&quot;, 1.9g. (Buckshot from buck and ball set - see 22 087 001. Shows gunpowder staining).</td>
<td></td>
</tr>
<tr>
<td>22 087 003</td>
<td>Lead shot, unfired, .289&quot;, 2.2g. (Buckshot from buck and ball set - see 22 087 001. Shows gunpowder staining).</td>
<td></td>
</tr>
<tr>
<td>22 088 001</td>
<td>Lead shot, unfired, .277&quot;, 2.0g. (Buckshot, found with 22 088 002).</td>
<td></td>
</tr>
<tr>
<td>22 088 002</td>
<td>Lead shot, unfired, .299&quot;, 2.3g. (Buckshot, found with 22 088 001).</td>
<td></td>
</tr>
<tr>
<td>22 089 001</td>
<td>Iron musket worm, length 29.5mm, diameter at base 16mm.</td>
<td></td>
</tr>
<tr>
<td>22 090 001</td>
<td>Lead shot, unfired, .689&quot;, 31.0g. (.75 cal. musket ball, rolled).</td>
<td></td>
</tr>
<tr>
<td>22 091 001</td>
<td>Melted lead, 3.5g.</td>
<td></td>
</tr>
<tr>
<td>22 092 001</td>
<td>Lead shot, unfired, .635&quot;, 23.3g. (.69 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>22 093 001</td>
<td>Lead shot, fired(?), partially melted, 1.9g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 094 001</td>
<td>Melted lead, 5.0g.</td>
<td></td>
</tr>
<tr>
<td>22 095 001</td>
<td>Lead shot, fired, 2.0g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 096 001</td>
<td>Bayonet scabbard tip (?), sheet iron, length 32.1mm.</td>
<td></td>
</tr>
<tr>
<td>22 097 001</td>
<td>Horse shoe.</td>
<td></td>
</tr>
<tr>
<td>22 098 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 099 001</td>
<td>Horse shoe fragment.</td>
<td></td>
</tr>
<tr>
<td>22 099 002</td>
<td>Horse shoe fragment.</td>
<td></td>
</tr>
<tr>
<td>22 100 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 101 001</td>
<td>Lead shot, fired, 2.5g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 102 001</td>
<td>Lead shot, fired, 1.8g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 103 001</td>
<td>Lead shot, fired, 3.6g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 104 001</td>
<td>Lead shot, unfired, .280&quot;, 1.9g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 105 001</td>
<td>Gun barrel fragment(?), iron, a badly deteriorated section from the thin-walled front end of a smoothbore barrel, max. outside diameter about .85&quot; (21.7mm), bore (well preserved) is .60,&quot; length of fragment 282mm. (Carbine or trade gun barrel?).</td>
<td></td>
</tr>
<tr>
<td>22 106 001</td>
<td>Lead shot, fired, 2.0g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 107 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 108 001</td>
<td>Lead shot, fired, 30.5g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>22 109 001</td>
<td>Lead shot, battered remnant, 6.7g. (Ball with severe road damage).</td>
<td></td>
</tr>
<tr>
<td>22 110 001</td>
<td>Melted lead alloy (pewter?), 2.7g.</td>
<td></td>
</tr>
<tr>
<td>22 111 001</td>
<td>Lead shot, fired, 26.1g. (.69 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>22 112 001</td>
<td>Lead shot, unfired, .632&quot;, 22.8g. (.69 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>22 113 001</td>
<td>Lead shot, unfired, .303&quot;, 2.6g. (Buckshot, found with 22 113 002).</td>
<td></td>
</tr>
<tr>
<td>22 113 002</td>
<td>Lead shot, unfired, 2.1g. (Buckshot, an incomplete cast, found with 22 113 001).</td>
<td></td>
</tr>
<tr>
<td>22 114 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 115 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 116 001</td>
<td>Lead shot, fired, 3.7g. (A fired rifle or pistol ball with little patina, showing patch impressions - probably post-1780).</td>
<td></td>
</tr>
<tr>
<td>22 117 001</td>
<td>Lead shot, fired, 2.6g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>22 118 001</td>
<td>Melted lead, 1.7g.</td>
<td></td>
</tr>
<tr>
<td>22 119 001</td>
<td>Lead shot, unfired, .620&quot;, 23.6g. (.69 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>22 120 001</td>
<td>Lead shot, fired, 23.9g (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 121 001</td>
<td>Lead shot, unfired, .305&quot;, 2.7g. (Buckshot, found with 22 121 002).</td>
<td>S</td>
</tr>
<tr>
<td>22 121 002</td>
<td>Lead shot, unfired, .302&quot;, 2.4g. (Buckshot, found with 22 121 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 122 001</td>
<td>Copper alloy fragment, probably from a shoe buckle or belt buckle frame, length 40mm.</td>
<td>M</td>
</tr>
<tr>
<td>22 123 001</td>
<td>Lead shot, unfired, .296&quot;, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 124 001</td>
<td>Lead shot, fired, 23.9g (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 125 001</td>
<td>Lead shot, fired, 4.0g. (Large buckshot?).</td>
<td>S</td>
</tr>
<tr>
<td>22 126 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 127 001</td>
<td>Lead shot, fired, 30.5g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 128 001</td>
<td>Lead shot, fired, 30.6g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>22 129 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 130 001</td>
<td>Lead shot, fired, 1.9g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 131 001</td>
<td>Wrought nail.</td>
<td>M</td>
</tr>
<tr>
<td>22 132 001</td>
<td>Lead shot, fired, 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 133 001</td>
<td>Lead shot, fired, 1.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 134 001</td>
<td>Lead shot, fired, 22.1g. (.69 cal. musket ball, chewed by rodent, found with 22 134 002).</td>
<td>S</td>
</tr>
<tr>
<td>22 134 002</td>
<td>Lead shot, unfired, .298&quot;, 2.5g. (Buckshot, found with 22 134 001).</td>
<td>S</td>
</tr>
<tr>
<td>22 135 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 136 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 137 001</td>
<td>Lead shot, fired, 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>22 138 001</td>
<td>Lead shot, fired(?), 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>23 001 001</td>
<td>Lead shot, unfired, .285&quot;, 2.4 g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>23 002 001</td>
<td>US 1820 Dime, suspension hole near top of reverse. (See 22 058 001).</td>
<td>N</td>
</tr>
<tr>
<td>24 001 001</td>
<td>Melted lead, 7.2g.</td>
<td>S</td>
</tr>
<tr>
<td>24 002 001</td>
<td>Lead shot, fired, 29.0g. (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>24 003 001</td>
<td>Lead shot, fired, 1.2g. (Buckshot - partial?).</td>
<td>S</td>
</tr>
<tr>
<td>24 004 001</td>
<td>Lead shot, fired, 23.4g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>24 005 001</td>
<td>Lead shot, fired, 23.9g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>24 006 001</td>
<td>Lead shot, fired, 22.9g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>25 001 001</td>
<td>Canister ball, iron, diameter about .93&quot;, (23.6 mm), weight 50.5g.</td>
<td>G</td>
</tr>
<tr>
<td>25 002 001</td>
<td>Lead shot, unfired, .296&quot;, 2.5g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>25 003 001</td>
<td>French musket side plate fragment, iron, with portion of screw hole, poorly preserved but diagnostic, remaining length 47.6mm.</td>
<td>A</td>
</tr>
<tr>
<td>25 004 001</td>
<td>Melted lead, 6.2g.</td>
<td>S</td>
</tr>
<tr>
<td>25 005 001</td>
<td>Lead scrap, 3.1g, tile nail head?</td>
<td>N</td>
</tr>
<tr>
<td>25 006 001</td>
<td>Lead shot, fired, 23.5g. (.69 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>25 007 001</td>
<td>Lead shot, unfired, .303&quot;, 2.6g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>25 008 001</td>
<td>Lead shot, unfired, .542&quot;, 15.2g. (Pistol, rifle, or carbine ball, about .58 or .60 cal.).</td>
<td>S</td>
</tr>
<tr>
<td>25 009 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>25 010 001</td>
<td>Canister ball, iron, diameter about .92&quot;, (23.3mm), weight 43.8g.</td>
<td>G</td>
</tr>
<tr>
<td>26 001 001</td>
<td>Lead shot, fired, 31.9g (.75 cal. musket ball).</td>
<td>S</td>
</tr>
<tr>
<td>26 002 001</td>
<td>Lead alloy (pewter?) shot, fired, .415&quot;, 7.1g., with clear patch marks. (Rifle ball).</td>
<td>S</td>
</tr>
<tr>
<td>26 003 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td>S</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>26 004 001</td>
<td>Lead shot, fired, 30.5g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>26 005 001</td>
<td>Melted lead, 2.2g.</td>
<td></td>
</tr>
<tr>
<td>26 006 001</td>
<td>Lead shot, unfired, .680, &quot;30.1g. (.75 cal. musket ball, rolled).</td>
<td></td>
</tr>
<tr>
<td>26 007 001</td>
<td>Spanish 2-Real piece, 1753. (Appears too heavily worn for loss in 1780).</td>
<td></td>
</tr>
<tr>
<td>26 008 001</td>
<td>Lead shot, fired, 2.1g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>26 009 001</td>
<td>Table/mess knife blade, round tip and most of blade in two mending fragments, total remaining length 137.6mm.</td>
<td></td>
</tr>
<tr>
<td>26 010 001</td>
<td>Canister ball, iron, diameter about .90,&quot; (22.8mm), weight 42.8g.</td>
<td></td>
</tr>
<tr>
<td>26 011 001</td>
<td>Syracuse hook, iron, length 75.6mm, probably post-1780.</td>
<td></td>
</tr>
<tr>
<td>26 012 001</td>
<td>Lead shot, fired, 30.0g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>26 013 001</td>
<td>Lead shot, fired, 30.2g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>26 014 001</td>
<td>Lead shot, unfired, .322,&quot; 2.8g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>26 015 001</td>
<td>Melted lead, 2.0g.</td>
<td></td>
</tr>
<tr>
<td>26 016 001</td>
<td>Lead shot, fired (?), 22.7g. (.69 cal. musket ball, heavy sand scarring and battering - road damage).</td>
<td></td>
</tr>
<tr>
<td>26 017 001</td>
<td>Lead shot, unfired, .353,&quot; 3.9g. (Large buckshot).</td>
<td></td>
</tr>
<tr>
<td>26 018 001</td>
<td>Lead shot, unfired, .351,&quot; 3.8g. (Large buckshot).</td>
<td></td>
</tr>
<tr>
<td>26 019 001</td>
<td>Lead shot, unfired, .354,&quot; 3.9g. (Large buckshot).</td>
<td></td>
</tr>
<tr>
<td>26 020 001</td>
<td>Lead shot, fired, 30.8g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>26 021 001</td>
<td>Lead shot, fired, 31.1g. (.75 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>26 022 001</td>
<td>Lead shot, fired, 1.8g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>27 001 001</td>
<td>Canister ball, iron, diameter about .97,&quot; (24.7mm), weight 52.3g.</td>
<td></td>
</tr>
<tr>
<td>27 002 001</td>
<td>Lead shot, fired, 18.7g. (Pistol or carbine ball, about .60 cal.).</td>
<td></td>
</tr>
<tr>
<td>27 003 001</td>
<td>Frame buckle, iron, 34.2mmX30.2mm, tongue length 32.3mm.</td>
<td></td>
</tr>
<tr>
<td>28 001 001</td>
<td>Lead shot, unfired, .326,&quot; 3.4g. (Large buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 002 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 003 001</td>
<td>Lead shot, fired, 2.4g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 004 001</td>
<td>Lead shot, fired, 11.7g. (Pistol ball ?)</td>
<td></td>
</tr>
<tr>
<td>28 005 001</td>
<td>Lead shot, fired, 23.1g. (.69 cal. musket ball).</td>
<td></td>
</tr>
<tr>
<td>28 006 001</td>
<td>Lead shot, remnant, 14.1g. (Severely mashed and eroded ball - road damage).</td>
<td></td>
</tr>
<tr>
<td>28 007 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 008 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 009 001</td>
<td>Melted lead, 4.1g.</td>
<td></td>
</tr>
<tr>
<td>28 010 001</td>
<td>Lead shot, fired, 2.2g. (Buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 011 001</td>
<td>Lead shot, unfired, .634,&quot; 23.3g. (.69 cal. musket ball, shows gunpowder staining and corrosion).</td>
<td></td>
</tr>
<tr>
<td>28 012 001</td>
<td>Lead shot, unfired, .350,&quot; 4.1g. (Large buckshot).</td>
<td></td>
</tr>
<tr>
<td>28 013 001</td>
<td>Lead shot, fired, 2.3g. (Buckshot).</td>
<td></td>
</tr>
</tbody>
</table>