

Keith T. Heinrich. FORT BRANCH, HAMILTON COUNTY, NORTH CAROLINA: RESEARCH DESIGN AND SITE MANAGEMENT PLAN (Under the Direction of Dr. Charles R. Ewen), Department of Anthropology, June 2004.

The purpose of this thesis is to produce a research design and a site management plan for Fort Branch, a National Register-listed Confederate earthwork on Rainbow Bend in Martin County, North Carolina. The thesis discusses the history of Fort Branch, starting with a history of the Civil War in eastern North Carolina, to provide a context for the fort's construction. A specific history of the fort discusses the defenses of Rainbow Bend and their eventual evolution into what is now Fort Branch. The research design uses the historical and archaeological background to formulate site-specific archaeological questions and uses case studies of Civil War archaeology to ensure that research at Fort Branch is placed within the context of Civil War archaeology. Previous archaeology, the archaeology of fort construction, an archaeological survey of the site, the archaeology of skirmishes, the archaeology of encampment, landscape studies, and the historic cemetery are discussed in this thesis. This research is important because it will provide the Fort Branch Battlefield Commission with ways to better interpret the battlefield, enhance its mission of preservation and restoration, and provide ways that the site can be protected for future generations.

FORT BRANCH, MARTIN COUNTY, NORTH CAROLINA:
RESEARCH DESIGN AND SITE MANAGEMENT PLAN

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CHAPTER ONE-INTRODUCTION

“This is a classic case of local history down here.... It didn’t win the war but it protected these folks up the river here and...it’s a great piece of local history that I’d like to see preserved” (Henry Winslow, 2004, Personal Communication). For this reason among others that will be discussed later, Fort Branch should be preserved and studied to gain information on its role in North Carolina, as well as in the Civil War as a whole. In the end, as Elkton, Maryland, town planner Jeanne Minner puts it:

“Without the role your locale played in forming history, nothing will separate one town from another. They all have the Wal-Mart’s and the 7-Elevens and the strip malls and the shopping centers. Your history is what gives you your identity” (Baltimore Sun December 27, 2000).

Why Study Civil War Sites

In this author’s opinion, Fort Branch’s (Figure 1) importance to local history and its role in protecting Confederate supply lines is reason enough for study. Aside from its importance on the local level, however, the fort is also important for the information it can provide about a defining moment in American history. History alone has treated the Civil War in depth, but archaeology also presents a chance to understand the conflicts and problems of modern American society and to add new perspectives to researchers’ understanding of the time period.

The Civil War is perhaps one of the most studied events in all of American history (Smith 1994:3, 6). In fact, the number of publications about the American Civil War is estimated at 80,000 to 100,000 volumes, with approximately one hundred more each year. Furthermore, in 1986, the National Park Service counted 3.5 million visitors to Gettysburg, Antietam, and Vicksburg. Besides the visitors to National Parks, 150,000



Figure 1: Guion's 1864 Map of Fort Branch Showing Positions of Guns, the Commissary, the Camp, and the Magazine (Guion 1864).

to 200,000 people are Civil War reenactors, and about 14 million people watched Ken Burns' *The Civil War* on Public television (Smith 1994:6).

In light of the above information, the question becomes why is the Civil War so thoroughly examined. First, it profoundly impacted American culture (Geier and Winter 1994:xiv-xv; Smith 1994:7): issues such as race relations, states' rights versus centralized governmental authority, industrial versus agrarian ways of life still resound today when one examines issues such as affirmative action, the gay marriage debate, and factory farming (Orr 1994:22; Geier and Potter 2000:xxvii-xxviii). The aftermath of Civil War and Reconstruction also continue to affect current relations between northerners and southerners. The author has even heard Cary, North Carolina, referred to as the Containment Area for Relocated Yankees.

With so much attention and so many issues regarding the American Civil War, archaeology may seem irrelevant to any understanding of this time-period; however, this assumption is not true. Archaeological research can be used to supplement and correct the historical record, supporting or refuting both popular and academic histories. Where the historical record is either incomplete or nonexistent, archaeology is often the only way to document events (Geier and Winter 1994:xiv).

Besides adding information to the historic record, archaeology can provide new perspectives on history. For example, archaeology can provide insight into logistics, including the role of Confederate blockade running. The archaeological study of logistics can also provide insights into differences between Union and Confederate supplies. Based on this information, researchers can address the differences in morale between

Union and Confederate troops (Smith 1994:11, 16). In addition, by providing another perspective, archaeology can lead to a more complete understanding of this time period (Smith 1994:8; Orr 1994:23). It can also be used to further educate the public (Smith 1994:6-7).

Most importantly, archaeological research at Civil War sites can produce truly anthropological knowledge. Past archaeological studies have examined the impact of the war on the larger culture in the realms of agriculture (Orser 1994), the lives of African Americans (Koons 2000; Galke 2000; Seibert and Parsons 2000), and remembrance of the war (Schackel 2000). Along the same lines, Civil War archaeology can provide a foundation for anthropological studies of modern total war (Geier and Winter 1994:xiv; Geier and Potter 2000:xxvii, xxix, xxx). In many ways, the Civil War was the first modern total war: Sherman brought the war to the civilian population, the number of dead was astronomical, and it marked the first use of rifled artillery, landmines, and ironclads. All of these factors obviously had a great impact on the culture in which they occurred. In addition, archaeological studies can ask research questions that have not been asked in the past (Smith 1994:8), such as questions of status, illicit activities (e.g. alcohol consumption) (McBride 1994, 2000), and of personal identity (Balicki 2000).

Besides the role of war on the larger culture, archaeological knowledge can also be used to provide insight into the effects of war on the soldier. For example, archaeological studies can examine the impact of military technology on the soldiers, both physically and emotionally (Smith 1994:13-14; Orr 1994:33). In addition, the military as a semi-autonomous cultural unit has its own rules, structure, and order (Geier

and Potter 2000:xxix; Smith 1994:15). Because of this fact, military sites are generally less random than other sites. Since military regulations are so well documented, divergence from the regulations is visible in the archaeological record (Smith 1994:15). Finally, the archaeological study of soldier's lives can help to refine the archaeological study of ethnicity, status, and behavior patterns (Smith 1994:15-16; McBride 1994, 2000). Before these aspects of the Civil War can be studied, however, archaeology must establish the facts. The establishment of facts allows for site interpretation and comparison, provides a foundation for Civil War archaeology, provides information for other disciplines that study the Civil War, and produces a culture history of the Civil War (Smith 1994:16-19).

Research Design

Obviously, a lot of information can be gained from archaeological investigations of Civil War sites. The question is how to develop a research program to investigate Fort Branch. One goal of archaeological research, and the goal that will guide this discussion, is "the accurate description and reconstruction of the...remains, and the investigation and testing of hypotheses..." (Redman 1973:61). Therefore, the goal of research design is to "devise techniques for gathering the facts which are pertinent to questions currently being asked of our data" (Binford 1964:427). Without research design, the recovery of pertinent data is almost impossible (Binford 1964:426).

The ultimate goal of research design is to provide a framework for studies that are regional in scope (Binford 1964:426; Redman 1973:63). In order to collect regional data, however, the researcher must necessarily begin at the level of the individual site (Binford

1964:433; Redman 1973:65). As it concerns artifacts, the purpose of site specific research is to collect “reliable and representative data” that demonstrates “the range of formal variability” in artifacts, site content, and the structure of artifacts within a site (Binford 1964:430-431). In the examination of archaeological features, the purpose of site-specific research is to examine variation between similar features, the form of features, and the structure of groups of features. These examinations can then lead to the production of a typology of different sites; therefore, archaeologists can examine the similarity and difference between similar site types in a region (Binford 1964: 432, 434-435). The methodology for site-level research design begins with an intensive collection of the site in order to understand artifact patterns (Redman 1973:65). Next, the researcher should investigate the different cultural features based on the artifact distribution. Finally, the archaeologist should completely excavate the site (Binford 1964:438-439).

Based on the research design goals above, the research program at Fort Branch will focus on three topics: how research at the fort can be used to answer current questions in Civil War archaeology, how Fort Branch can contribute to a regional understanding of the Civil War and the culture of the Civil War military, and the steps necessary to understand the entire site and to answer questions that have not been addressed in the past. On the site level, research uses past archaeology and the historic background to develop site-specific questions. In addition, research also addresses how to investigate the site, starting with a survey of the entire site. Beyond these site specific questions, the plan discusses what questions are being asked at other Civil War sites and

how Fort Branch can yield pertinent data about these questions and be incorporated into a regional understanding of the war.

Statement of Purpose

Keeping in mind the importance of the fort to local history, Civil War history, and Civil War archaeology, the purpose of this thesis is to produce an archaeological research design and site management plan for Fort Branch, a Confederate Civil War earthwork located in Martin County, North Carolina. Fort Branch, listed on the National Register of Historic Places (National Register of Historic Places Inventory-Nomination form 1972), is located on the banks of the Roanoke River north of Greenville and about two miles downriver from Hamilton, North Carolina (Figure 2) (Shiman 1989:1). In the historic record, this site is variously referred to as Rainbow Point (Rowan 1862:560), Rainbow Bluff (Lee 1862:180; Davenport 1862b:181; Wells 1862:189; Flusser 1862a:217; Gilmer 1862a:756; Lee 1863:146), Rainbow Bend (Randolph 1862:185; Davenport 1862a:211; Gilmer, 1862b:765; Gilmer 1862c:768; Crabtree and Patton 1979:288, 295), Rainbow Banks (Foster 1862:21; Garnett 1863:975; Wells 1862:189), and Rainbow (Foster 1863a:250; Peck 1863a:452). Today, the site is owned by the Fort Branch Battlefield Commission and operated as a historic site and museum.

Although the site is largely forgotten to history, the fort played an important role in protecting the railroad bridge at Weldon (Gatlin 1862a:573; Gatlin 1862b:469; Gatlin 1862c:473; Gatlin 1862d:476; Gatlin 1862e:434), as well as a shipbuilding facility at Edwards Ferry (Lee, 1863a:71; Foster 1863b:222; Lee 1863b:156; Lee 1863c:162). To understand the importance of this fort to the Civil War in eastern North Carolina, the

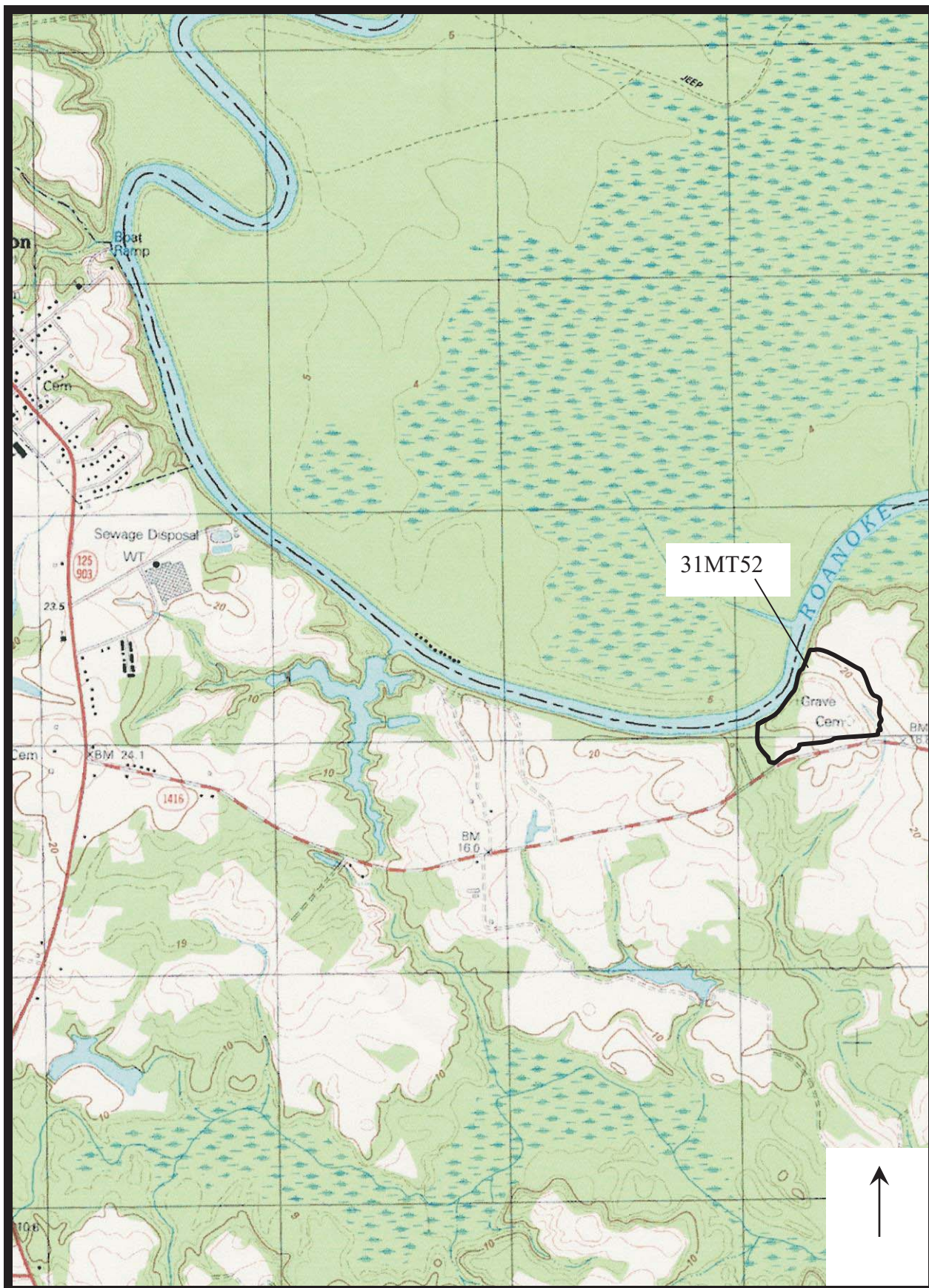


Figure 2: Location of 31MT 52, Fort Branch, on 1:24,000 1981 USGS Hamilton, NC, 7.5' Topographic Quadrangle

second chapter of this thesis provides the historic background. This background is divided into two sections: a brief discussion of the Civil War in eastern North Carolina and a more detailed history of Rainbow Bend and Fort Branch. Since this thesis is meant to be an archaeological research design, the background chapter examines all previous archaeology at the site, both reported and unreported.

The third chapter, the research design itself, uses the background history and archaeology, as well as case studies in Civil War archaeology, to suggest directions for future research at Fort Branch. In this manner, both site specific questions as well as general questions can be addressed. The research design addresses questions raised by previous archaeology at the site, followed by the archaeology of Civil War fort construction in the light of contemporary fortification manuals, such as D.H. Mahan's *A Treatise on Field Fortification, Containing Instructions on the Methods of Laying Out, Constructing, Defending, and Attacking Intrenchments* [sic], *with the General Outlines Also of the Arrangement, the Attack and Defence* [sic] *of Permanent Fortifications* (1856). The archaeology of fort construction will also include a brief analysis of profiling work done at the fort in 2003 and 2004.

Following these discussions, the research design looks at the potential for research outside the fort walls, beginning with an examination of the methodology behind military site survey, then calling for a survey of the entire fort property to locate skirmish areas and the encampment areas at the fort. Using case studies in archaeology, there is a discussion of the archaeology of skirmish sites and encampments that can tell researchers about logistics, lifeways, status differences, identity, and the degree of adherence to

military regulations. The next section looks at landscape studies of Civil War sites, first examining the study of forts as part of a defensive system on the landscape, then exploring how soldiers modified the camp landscape to make life more comfortable during encampments. Finally, there is a brief examination of the historic cemetery located inside the fort. Based on the historic record, it is known that this cemetery was located on the property before Fort Branch was constructed. This section discusses non-invasive methods for cemetery delineation, so anomalies can be surveyed before any destructive stripping takes place. The non-invasive methods should be verified with stripping activities.

The fourth chapter consists of a site management plan based on *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (Weeks and Grimmer 1995). It also incorporates information from management plans in use in other states and at other privately-owned historical and archaeological sites. The overall site management plan discusses two aspects of the property: the archaeological resources and the property itself. The former addresses the most pressing issues concerning the archaeological record of Fort Branch, including poor reporting of excavations and housing and collections management for artifacts recovered during previous investigations. The other section of the management plan addresses the most pressing issues to the property on which the fort stands. These issues are the erosion of the Roanoke River's bank, the effect of public visitation to the site, and the impact of maintenance on the landscape.

By synthesizing previous work on Fort Branch, this thesis provides researchers with a starting point for future research. The research design also ensures that future excavations are conducted in the context of other Civil War sites, and that they add to the understanding of Civil War culture. Thus, if the Commission decides to conduct further excavations, it will be able to start quickly with research questions in hand.

A management plan will also enhance the Fort Branch Battlefield Commission's mission of preserving and restoring the fort. First of all, a management plan will let interested parties, including potential funding agencies, know that the Fort Branch Battlefield Commission "knows what it is doing and that it is serious about making the process work" (Brent 2000:8). It also tells potential funding agencies how their money will be spent. Finally, because a written preservation plan is a concrete entity, it will enable the Commission to achieve its goals despite any change in leadership/ownership and will inform funding agencies and local governments of the plans for Fort Branch (Brent 2000:8).

Over the past forty years, the partnership between the Fort Branch Battlefield Commission and the landowner, Mr. Henry Winslow, has resulted in a site with high integrity that gives the visitor a glimpse into the Civil War in eastern North Carolina. It is the author's hope that this document will help to maintain the site for generations to come, will provide future researchers with a starting point for studies of the fort's history and archaeology, and will help to guide future archaeologists who work at the site. Above all, it is hoped that this document helps the landowner restore the fort and make it

attractive to visitors, enabling the public to learn about the fort and strive to protect it as much as the landowner and the Commission have.

CHAPTER TWO-BACKGROUND

Historical Background

The War in Eastern North Carolina

In order to understand Fort Branch in the broader historical context of the Civil War, it is necessary to recount a brief history of the Civil War in eastern North Carolina. This history begins by discussing Union Major General Ambrose Burnside's capture of Roanoke Island in early 1862. The fall of Roanoke Island was followed by the capture of several other coastal towns, and served as the catalyst for the construction of Fort Branch (Shiman 1989:3-4). With the coastal waters in Union hands, the citizens of eastern North Carolina were under a constant threat of raids and needed forts to protect themselves. After Burnside's expedition, the war in eastern North Carolina consisted mainly of Union raids into the interior and Confederate raids on Plymouth, Washington, and New Bern until Confederate General Joseph E. Johnston's surrender in April 1865.

On January 9, 1862, Union General Burnside departed from the north to begin his attack on the North Carolina coast. On February 4, after facing several violent storms, Burnside's fleet anchored in Pamlico Sound with orders to take Roanoke Island. The next day, with 13,000 men and 19 naval vessels, Burnside was poised to begin an attack on the island. Due to bad weather, the attack was postponed until the seventh when Confederate troops opened fire on the Union fleet. But when troops landed on the island, they were unopposed. Faced with a land attack, the Confederates withdrew to a redoubt in the center of the island, which the Union troops soon outflanked. By that night Roanoke Island was in Union hands (Barrett 1963:69-79, 80,83,84).

Following the capture of Roanoke Island, the Union fleet anchored in the Pasquotank River on the ninth. After a short battle, Elizabeth City was taken the following day. Two days later, Union ships were positioned off Edenton harbor which had already been abandoned by Confederate troops. Thus, after one week, the Union had captured Roanoke Island and two coastal towns, blocked the Chesapeake and Albemarle Canal, and destroyed the Confederate navy in coastal North Carolina. One week after the fall of Edenton, Union troops captured Winton after a two-day battle (Barrett 1863:85, 87-89, 93-94).

The next town to fall was New Bern. On March 13th, Burnside began a land advance toward New Bern, taking it the next day after a fierce battle. After taking New Bern, Burnside turned his attention to Fort Macon at Beaufort Harbor. By the 22nd, Morehead City was taken, followed by Beaufort two days later. By April 24th, Fort Macon surrendered to the Union troops. The following month, Union forces occupied Plymouth (Barrett 1963:99-106, 109, 118-119; Shiman 1989:9).

In July 1862, Burnside, with two divisions, left eastern North Carolina to join McClellan for the Peninsula Campaign in Virginia. This move left General John G. Foster in charge of Union forces at New Bern. Since Foster did not have enough men to initiate any offensive action (i.e. a move on Goldsboro), he began fortifying New Bern and other Union-held towns (Barrett 1963:128, 131).

On July 9th, Commander Rowan of the United States Navy ordered Lieutenant C.W. Flusser to perform a reconnaissance of the Roanoke River and take the town of Hamilton. After this raid, Foster sent detachments to perform reconnaissance in the

Trenton-Pollocksville area south of New Bern, and the counties between Greenville and Washington. These moves led Governor Clark to fear an attack on the railroad at Goldsboro. Later, on September 6, Confederate soldiers attacked Washington but were forced to retreat when Union reinforcements arrived (Barrett 1963:131-134).

In early November, Foster's men undertook a short raid towards Williamston, fighting battles at Little Creek and Rawl's Mill before taking Williamston on November 3. The following day, Foster's men raided Hamilton, destroying a great deal of property in the process. On November 5, the soldiers advanced toward Tarboro, but left after hearing reports of a large concentration of Confederate troops nearby. By November 10, these troops were in Plymouth preparing to return to New Bern. During another raid on November 23, United States Navy Lieutenant William B. Cushing, USS *Ellis*, steamed up the New River, capturing Jacksonville, the Onslow Courthouse, mail at Wilmington, and destroying saltworks along the river (Barrett 1963:134-135, 137-138).

The following month, Foster's troops again raided the interior. This time, Foster and his troops moved to destroy a railroad bridge over the Neuse River at Goldsboro. During this raid, Foster dispatched three cavalry companies to make a demonstration against the Kinston Road while the rest continued to Goldsboro. The next day, December 12, Foster's troops reached a crossroads and turned toward Kinston. Following this road, the men reached Southwest Creek, where they found the bridge destroyed and Confederates on the other side. Foster sent two regiments across the stream to engage the Confederates. The Confederates fell back towards the Kinston Bridge, digging in two miles before the bridge (Barrett 1963:139-140).

Two days later, Union troops attacked the Confederate's position, turning the Confederate flank and forcing their troops back towards Kinston. A new battle line was drawn two miles beyond Kinston, but the Confederates withdrew before engaging Foster's troops. Upon learning that Confederate reinforcements were approaching, Foster continued on to Goldsboro, delayed by a skirmish at Whitehall. On December 17, Foster sent cavalry to destroy railroad property at Dudley Station and Everittsville. The Union then burned the bridge and returned to New Bern. The damage was repaired in a few days (Barrett 1963:142-148).

During February 1863, Confederate General James Longstreet was put in command of the Department of Virginia and North Carolina and ordered to protect supply lines. The following month, Confederate troops under General D. H. Hill advanced on New Bern. On March 14, Hill attacked Fort Anderson, but was repulsed. Hill then turned his attention toward Washington, laying siege to it. By April 13, however, The Union reinforced Washington and the siege was broken. The only positive result of these attacks was that the Confederates were able to remove corn and bacon from eastern North Carolina (Barrett 1963:149, 152, 154-156, 161-162).

The following month, Foster led a demonstration against the Atlantic and North Carolina railroad, attacking Gum Swamp on May 22. The Confederates withdrew; however, the next day, Confederate reinforcements arrived and pushed the Union back. June brought a degree of calm to eastern North Carolina (Barrett 1963:162-164).

July brought new raids to the interior of eastern North Carolina. In mid-July, Union cavalry raided Greenville, Tarboro, and Rocky Mount, destroying an ironclad, two

steamboats, railroad cars, cotton, and subsistence and ordnance stores in Tarboro. After Confederate reinforcements arrived, however, the Union retreated to New Bern, fighting a running cavalry battle until they arrived. Three days after returning to New Bern on July 23, the Union again raided the interior, this time aiming for the Weldon Railroad Bridge. The Union troops landed at Winton, but were turned back at Boone's Mill. This expedition marked the end of serious fighting for 1863 (Barrett 1963:164-170).

On November 11, Union Major General B. F. Butler replaced General Foster as the Commander of the Departments of Virginia and North Carolina. In early December, Butler sent Brigadier General Edward A. Wild to fight guerrilla forces in eastern North Carolina. From December 9 until December 16, Wild's troops occupied Elizabeth City, then crossed Camden and Currituck Counties to Currituck Courthouse in search of guerrilla fighters. When the Confederates received reinforcements, Wild and his men went to Norfolk (Barrett 1963:177-179).

In early January 1864, General Robert E. Lee wrote President Jefferson Davis suggesting a Confederate assault on New Bern. Major General George E. Pickett was chosen as the commander of the land forces, with Commander John Taylor Wood in charge of the naval forces. Before the attack began, 13,000 soldiers and fourteen navy cutters concentrated at Kinston. On January 30, the Confederates began their march on New Bern, sending three columns to attack the city from different directions. The attack on the city began on February 1. Two days later, the Confederates withdrew in the face of strong Union defensive works. During the attack, however, the Confederates

successfully attacked Newport Barracks, a federal depot near New Bern (Barrett 1963:202-204, 207, 211).

In the spring 1864, the Confederate ironclad *CSS Albemarle* was nearly completed at Edwards Ferry, two miles up the Roanoke River from Hamilton. At the end of March, the *Albemarle* moved on Hamilton. By the middle of the following month, the Confederates advanced on Plymouth. The *Albemarle* arrived near Plymouth on the 19th, sinking one Union ship and forcing the *USS Miami* and smaller Union ships to retreat. One day later, the Confederates took Plymouth except one fort, which soon surrendered. Following Plymouth's fall, Union forces evacuated Washington and returned to New Bern (Barrett 1963:215, 217-221).

After retaking Washington, the Confederates headed to New Bern, along with the *Albemarle*. On May 5, the US Navy crippled the *Albemarle*, forcing its return to Plymouth. One day later, the Confederates called off the attack on New Bern. Because of the *Albemarle*'s role in the Confederate capture of Plymouth, Union Lieutenant William B. Cushing conceived a plan to sink the *Albemarle* by using two small steam landers with torpedoes and howitzers. After losing one boat, Cushing arrived at Roanoke Island and then set off to destroy the *Albemarle*, accomplishing the mission on October 27. Four days later, Union troops recaptured Plymouth (Barrett 1963:223-224, 227-228, 230-231).

The next important event in eastern North Carolina did not occur until near the end of the war. In March 1865, Union troops began their march on Goldsboro, stopping to fight at Kinston. Also during this month, Sherman reached North Carolina. By March

6, Sherman was heading to Fayetteville from South Carolina. Two days later, all of Sherman's army was in North Carolina. By March 16, Sherman's men had taken Fayetteville and fought a battle at Averasboro. Two days later, Confederate General Joseph E. Johnston ordered his troops to Bentonville, where the Confederates were defeated on March 21. By early April, Sherman had taken Goldsboro and Lee had abandoned Richmond. The war in North Carolina ended on April 26, 1865, with Johnston's surrender to Sherman (Barrett 1963:285-290, 294-297, 300, 311, 324, 325, 340, 389; Shiman 1989:80).

The History of Fort Branch

With the Union occupation of Roanoke Island, Elizabeth City, and Edenton in 1862, the people of eastern North Carolina were understandably apprehensive. Union troops now occupied an inland staging area for attacks on Norfolk, Raleigh, and Richmond. In addition, the Union presence in coastal North Carolina posed a serious threat to the citizenry, as evidenced by constant Union raids. Aside from Union occupation, eastern North Carolina's citizens faced property loss and damage, as well as the loss of slaves (Shiman 1989:3-4; Gatlin 1861:671; Davis 1862:758). Unfortunately for the Confederacy, early in the war, "...inadequate means [had] limited preparations in the state" (Lee 1862:437).

This apprehension was manifested in September 1862 when, after a public meeting, the citizens of Onslow County asked Governor Vance to provide for the defense of eastern North Carolina. These citizens made the point that "...abandoning all that portion of North Carolina...would...be to abandon one third of the slaves...if not one

third of the population, and the richest...portion of North Carolina” (Huggins 1862:630). The resolution further called for Governor Vance to recruit 8,000 to 10,000 soldiers to defend the state. Unfortunately, due to a large number of Union troops at Suffolk, Virginia, only a small force could be sent to protect eastern North Carolina (Smith 1862:630).

Although the threat was taken seriously, a more pressing problem faced the Confederacy in eastern North Carolina—protecting the railroads. When Union troops burned the railroad bridges in Tennessee, the government of North Carolina recognized the need for protecting its own railroad bridges. In consequence, in November 1861, Confederate General R. C. Gatlin called for Brigadier General J. R. Anderson to dispatch one officer, four non-commissioned officers, and forty soldiers to guard the Wilmington and Weldon railroad bridges over the Northeast, Neuse, and Roanoke Rivers. This concern manifested itself throughout the war (Benjamin 1861:376; Huger 1862a:111; Huger 1862b:449). These dual problems—threats to the citizens and threats to railroad bridges—provided the impetus for fortifying eastern North Carolina’s rivers, including the Roanoke.

In August 1861, Confederate General Gatlin was put in command of the Department of North Carolina and its coastal defenses. By January 1862, Gatlin was concerned about high water in the Roanoke River, especially if Roanoke Island were to fall. After General Burnside’s capture of Roanoke the following month, Gatlin dispatched the 34th North Carolina to protect the Roanoke River, and sent the 38th

regiment to guard the railroad bridge at Weldon (Gatlin 1862a:577; 1862f:469; 1862c:473; 1862d:476; 1862e:434).

The high water in the Roanoke River did not escape the attention of the citizens of Martin County, either (Gatlin 1862g:458). In fact, a civilian engineer from Martin County, Patrick Edmonston, volunteered his services to the 34th North Carolina and was put in charge of building defenses on the Roanoke River. The site he chose was Rainbow Bluff which lies south of Hamilton and later became the site of Fort Branch.

Edmonston's design called for a fire raft that would consist of several boats bolted together and filled with accelerants; if Union gunboats came up the river, this device would be lit and cut loose to damage the Union ships. This project was finally finished on February 24 (Shiman 1989:5-6), confirming that, as early as 1862, the future site of Fort Branch was considered strategic.

Besides General Gatlin and the citizens of Martin County, the Roanoke's high water did not escape the Union army's attention. In fact, on February 13, General Gatlin wrote to the governor informing him that Burnside's men might have designs to take Weldon on the Roanoke River (Gatlin 1862f:469). Based on these concerns, soon after the fire raft was built, General Gatlin sent Confederate Engineer Captain Richard Kidder Meade to build "scientific defenses" on the Roanoke (Crabtree and Patton 1979:288; Gatlin 1862h:486; 1862a:577; Shiman 1989:7). Meade also designed Fort Fisher at Wilmington, NC (Crabtree and Patton 1979:128n). This last fact could frame some interesting comparative archaeological studies as will be discussed in the following

chapter. In late February, command of Martin County fell to General Huger (Gatlin 1862a:577; Withers 1862:479).

Like Edmonston before him, Meade chose Rainbow Bluff as the most suitable place for defending the Roanoke River. Meade's fort was divided into two sections, an upper battery and a lower battery, with a magazine dividing the two. The upper battery was built to mount three guns and the lower, two guns. The guns, protected by fourteen foot walls, fired through embrasures. This fort was probably designed to hold light field guns. The defense of the land side of the fort consisted of one long rifle pit that ran from the bluff's edge to Coniho Creek (Shiman 1989:7-8). This pit was described as a "...straight intrenchment [sic], or as Zeke has called it 'a canal a mile long in the wild woods...'" (Crabtree and Patton 1979:288). As will be discussed in the next chapter, information on this first fort could be used to answer archaeological questions about the construction of Fort Branch itself, and in comparison with other earthen Confederate forts. Fortunately for the Confederates, pressure on the Roanoke River was relieved by mid-March when Union forces turned their attention to the Neuse River (Gatlin 1862a:578).

In April, due to the Union threat on the Neuse, Colonel Collett Leventhorpe's 34th North Carolina regiment, as well as one heavy battery, were removed from the Roanoke and sent to Goldsboro (Lee 1862:541; Huger 1862b:449). This transfer left nothing to prevent the Union sending boats or men up the Roanoke River, and exposed the important railroad bridge at Weldon. The vulnerability of this situation did not escape Confederate Major General W. W. Loring's attention (Loring 1862:469). In fact, on July

9, US Navy Lieutenant Flusser traveled up the Roanoke River towards Hamilton.

Accounts of this encounter differ slightly from one another. According to Flusser's report, the Union boats came under fire from the banks of the river and passed Meade's empty fort at Rainbow Bluff (Flusser 1862b:556; Rowan 1862:560).

Confederate Lieutenant A. B. Andrews, on the other hand, wrote that he placed 2nd Lieutenant J. W. Peel and ten men at Poplar Point with instructions to fire one volley at the first boat, then report to Andrews at Rainbow Bluff. At that point, Andrews placed his men on the bluff and ordered them to "fire and reload as quickly as possible" (McCallum 1996:97). When the first boat passed, it began shelling the banks, compelling Andrews to retreat. When the boats came back downriver, Andrews again stationed men at Rainbow Banks, but the position was shelled until all the boats had passed (McCallum 1996:97).

A final description of the raid comes from the diary of D.W. Bagley, a civilian from Williamston. According to this account, Andrews stationed 22 soldiers at Poplar Point and the rest of his men at Rainbow Bluff. After Union ships passed Poplar Point, the men there moved to Rainbow Bluff. The Confederate entry says nothing of Union forces shelling the banks and suggests that Andrew's men used both small arms and artillery (McCallum 1996:98-99). Despite discrepancies between the three accounts, they each demonstrate the strategic importance of Rainbow Bluff.

Following this raid by Flusser, in September/October 1862, a second round of construction started at Fort Branch. High water in the Roanoke again led the Confederacy to fear a raid up the Roanoke River (Shiman 1989:10). The Confederate

Engineer Bureau sent Colonel Walter Gwynn to examine the Neuse, Tar, Roanoke, and Chowan Rivers for suitable places to position artillery batteries (Gilmer 1862a:756; Melton 1862:757; Gilmer 1862d:761). Due to the lack of troops in eastern North Carolina, these forts were to consist of:

...One work with batteries bearing on the rivers and the obstructions therein, with water and land fronts of sufficient strength of profile to resist and assault, thus enabling the small garrisons...to hold out until a succoring force can relieve them (Gilmer 1862c:768).

To assist Gwynn in his efforts, the Engineer Bureau dispatched Lieutenants W.G. Bender and James I. Randolph (Gilmer 1862e:759). Upon surveying the River, Randolph found that there was no point “as suitable as Rainbow Bend” (Bender 1862:185). In Randolph’s opinion, however, Meade’s fort at Rainbow Bluff was not well constructed. According to Randolph, the parapets were too thin to withstand heavy artillery fired within a half mile; the embrasures were not sloped enough to allow a pit for the guns; the magazine, which was very prominent, was also very weak; the flooring of one gun platform was missing; and the hillside obstructed the guns. Despite these drawbacks, Randolph believed the fort could easily be fixed. For land defense, Randolph suggested a small work be added (Bender 1862:185-186).

A few weeks after Randolph’s survey, Confederate Generals Foster and Gwynn examined Meade’s fort, decided to do away with the upper battery, and put three guns below the lower battery (Bender 1862:185). This fact could serve to guide archaeological investigations into the stages and techniques of construction at Fort Branch, discussed in the following chapter. Early in October, Gilmer expressed his approval for a fort at Rainbow Bluff; however, he repeated the need for the fort to be made for only a small

garrison (Gilmer, 1862b:765; Gilmer 1862c:768). On October 30, 100 slaves were ordered to assemble at Hamilton to help build the forts and were soon set to work under the direction of civilian J. G. Carraway (Gilmer 1862f:763; Bender 1862:188). Catherine Edmonston, on the other hand, states in her diary that 500 slaves along with fourteen days of provisions were assembled at Hamilton (Crabtree and Patton 1979:288).

By November first, General Gwynn had left, leaving Lieutenant Bender in charge of construction at Rainbow Bluff (Shiman 1989:20). Bender's design consisted of a crownwork with a central bastion and a half-bastion on each side. Each salient angle contained an artillery emplacement, with guns firing over a parapet (*en barbette*). The guns sat on raised earth platforms with ramps. In front of the parapets was a ditch with a berm between it and the parapet. Along with these features, the fort contained a few idiosyncratic elements. For example, there was a short parapet that jutted from the lower half bastion, and the entrance was poorly designed and subject to erosion (Shiman 1989:22-25).

At the end of October, the Union began to contemplate a joint Army-Navy expedition up the Roanoke River, to verify reports of ironclads being constructed (Shiman 1989:27; Foster 1862a:22; 1862b:447; Lee 1862:180; Davenport 1862a:182; Foster 1862c:184). Union General Foster hoped to be at Hamilton by November 8 (Davenport 1862a:183). On November 2, Union ships left Plymouth, arriving at Rainbow Bluff to find that the Union army had taken the fort. The fort had been abandoned by the Confederates earlier that day (Shiman 1989:27; Foster 1862a:21; Lee

1862:180; Davenport 1862a:181). Besides taking the fort, the Union troops were able to recover plans for the fort as well as papers relating to it (Davenport 1862a:181).

The following day, the Union Navy damaged a good deal of the fort, but were unable to destroy it entirely due to a premature explosion that killed one man and seriously injured another. To destroy the fort, Union troops first placed fifty pounds of powder in the magazine and ignited it, then dug under the wooden gun platforms to plant additional powder. During this latter operation the accident happened and the mission ended (Davenport 1862:180; Davenport 1862a:182; Wells 1862:189-190; Davenport 1862b:211). Five days later, the expedition returned to Plymouth (Shiman 1989:31). This kind of damage should leave traces in the archaeological record.

Soon after, Union troops returned to Plymouth, the Confederates went back to work on the fort. In her diary for November 11, Catherine Edmonston reported

...they have gone back to Plymouth & he [General Martin] has issued an order for one fifth of the road hands to be in readiness when called for to work on the fortifications at Rainbow Bend, promising a sufficient force to guard them whilst at work (Crabtree and Patton 1979:295).

Obviously, the work was important to the Confederacy if they would detail guards for its construction. Later in the month, reports reached the Union informing them that the Confederates were again working on the fort (Flusser 1862a:217). By December 2, five Confederate regiments were reported at Rainbow Bluff, but later, two were sent to Virginia. By this time, it appears that the fort was nearly completed and the river obstructed (Flusser 1862c:247). By early 1863, fears of a Union attack on the Weldon railroad bridge again surfaced for the Confederates (Beauregard 1863a:813; 1863b:813).

By January 20, four guns, including a rifled and banded 32-pounder, which matches one gun found at Fort Branch, were ordered sent for the defense of the Roanoke River (Seddon 1863:853). As previously mentioned, the river side of the fort was probably nearly completed by early December 1862. On February 9, the fort was completely finished and named Fort Branch in honor of Lawrence O'B. Branch, former Adjutant General of North Carolina, who had been killed at the Battle of Antietam in September 1862 (Shiman 1989:35).

The only surviving account of life at Fort Branch comes from a Williamston native, William H. Wyatt, who was stationed there with the 17th North Carolina. Since the history was written in 1907, it may not be entirely accurate (McCallum 1996:56). This information provides a starting point for archaeologically investigating soldiers' lives at the fort. According to the account:

Soon after the fort...was completed, we...moved over to the fort, and camped just outside the walls in an apple orchard. The officers' quarters were in the mansion on the other side of the road, the parade ground being in front of the camp. [Soldiers who were absent during one roll call] had to spend a week in an old barn which served for a guardhouse. Most of those absent lived nearby, and frequently...went home for clean clothing or supplies of food, tobacco, etc....There is work in plenty for all ...enough to keep the whole staff busy half the day. Then drills and miscellaneous detail work amply fill the remainder of the time. So many of our men lived within reach of the camp and got clean clothes and good things to eat from home every week, that we were unusually clean and sleek in appearance, and came to be called the 'band box regiment...' (McCallum 1996:57-61).

The account's many specific examples of camp life, give a good impression of daily life at the fort.

By early February 1863, Union Naval Lieutenant-Commander C. W. Flusser asked Colonel Francis Lee and the 44th Massachusetts to accompany him in attacking

Fort Branch. Lee, however, decided not to go (Flusser 1863a:490; 1863b:508). By mid-February, two companies of the 17th NC Regiment were at Fort Branch with two field pieces. The rest of the regiment was near the bluff between Hamilton and Williamston. Besides the 17th North Carolina, three companies of cavalry were scouting between the Tar and Roanoke Rivers (Lee 1863:146).

Also in February, a Confederate deserter told Union troops that a seven gun floating battery was being built to be used in conjunction with Fort Branch. Three of the guns were reported to be larger than the X-inch guns of the *USS Commodore Perry* (Furniss 1863:523). Furthermore, on the 18th, Confederate Colonel W.H. Stevens was put in charge of engineers at Goldsboro, Kinston, the Tar River, and Rainbow Bluff. Early the next month, Union troops received a report that Fort Branch was being repaired and heavy guns being brought from Weldon. The following month, the Confederates reported that forage was getting scarce for the Fort Branch garrison (Gilmer 1863:885; Foster 1863c:550; Garnett 1863:975). This latter information could possibly be tested archaeologically by comparing provision records with foods that were not provided to the garrison.

By May 13, 1863, Confederate Brigadier-General Martin believed that, if properly garrisoned, Fort Branch could repel any land or water attack short of a protracted siege. Furthermore, he stated that the fort held a good supply of ammunition, and provisions to last 1,000 men for thirty days were being brought in (Martin 1863a:1060). Again, this information could be used to guide an archaeological investigation into soldiers' lives at the fort: perhaps resolving the contradiction between

reports of scarce forage and the records of provisions. By June 8, 1863, Brigadier-General Martin was stationed at Fort Branch (Martin 1863b:872).

Based on a letter of Colonel William F. Martin, by mid-June four field pieces had arrived at Fort Branch and were put into position at the fort. In addition, the fort at this time was supplied with a month's supply of bacon, and nearly a month's supply of flour, and one well had been dug, but there were no wooden houses in the fort and the men were low on guns. Later in the month, Brigadier-General J. G. Martin suggested that a permanent garrison of two artillery companies be placed at Fort Branch. This garrison would then be able to provide for all pickets between the Tar and Roanoke Rivers (Martin 1863c:937).

Late the following month, Union Colonel Theodore F. Lehmann reported that he staged a diversion towards Jamesville to cover a cavalry raid from Winton to Weldon. His intention was to keep the Confederates, including the garrison at Fort Branch, in place on the Roanoke River. The need to take this fort into account demonstrates its importance in the wider war in eastern North Carolina. At the end of July, Confederate returns listed six companies split between Fort Anderson, Craven County, and Fort Branch (Lehmann1863:986-987; Whiting 1863a:1068). Early the following month, General Martin was ordered to concentrate his forces at Kinston, leaving Fort Branch deserted (Whiting 1863b:630).

In August, Confederate deserters informed Union officers that the fort's armament consisted of three guns over the river: one rifled thirty-two pounder and two twenty-four pounders. The land side of the fort was protected by one twenty-four

pounder on a field carriage, two brass twelve pounders, and three six pounders. In addition, there were 200 yards of rifle pits below the fort. Near the fort were camped 100 men of the 17th NC Regiment and one mile from the fort was the 56th North Carolina. According to official Confederate reports, 21 cannon were housed at Forts Anderson and Branch, and 458 men were split between the two forts (Peck 1863b:64).

Throughout August and September, the Union received reports that a gunboat being constructed at Edwards Ferry (the *CSS Albemarle*) was nearing completion. Due to low water, and Fort Branch, any expedition to destroy it would necessarily consist of land forces. Union land forces did not have enough troops to accomplish this mission (Lee 1863a:71; Foster 1863b:222; Lee 1863b:156; Lee 1863c:162; Welles 1863:202). The Union also received reports that a floating battery was to be stationed near Fort Branch. The Union greatly feared an attack by the ironclad on the towns along the Roanoke (Cohen 1863:164; Lee 1863c:162).

In late September, the Union received reports that Fort Branch was occupied by 1500 men, a field battery, and a number of heavy pieces. Two months later, reports suggested that Fort Branch contained twelve rifled guns, including three twenty-four pounders and one sixty-four pounder. Confederate returns at the end of 1863, however, counted only 148 men at the fort (Foster 1863d:250; Peck 1863a:452; Pickett 1863:906).

In early 1864, Union forces under Acting Master Welles destroyed a mill near Fort Branch that was grinding corn for the garrison (Flusser 1864a:506). If food remains can be recovered archaeologically from the camp, this report could possibly be verified or rejected. After all, corn is not mentioned as being provided by the Confederate

government. By March 1864, the Confederacy was removing torpedoes in the Roanoke River, making it possible for the *Albemarle* to go downriver (Peck 1864:748). By April, the *Albemarle*, along with 11,000 troops, was on its way to take Plymouth (Flusser 1864b:609; Wessells 1864:653; Lee 1864a:1198). As mentioned earlier, after the *Albemarle* was destroyed, the Union retook Plymouth, pushing the Confederates back to Fort Branch (Arnold 1864a:71).

By November 1864, the Union received reports that Fort Branch contained ten guns, six facing the land and four facing the water. The reports also stated that more guns were being mounted, and that 1500 troops were garrisoning the fort (Macomb 1864a:82-83). Another report (less than one week later) received by the Union stated that Fort Branch housed eighteen guns, the largest a sixty-four pounder (Macomb 1864b:93). As can be seen, reports on Fort Branch were variable, often inflating the garrison size and frightening the Union.

The Union again contemplated an attack on Fort Branch. For example, Union Colonel James Frankle pointed out the importance of controlling the river, because of the railroad bridge at Weldon, the chance of the Confederacy building more rams, and the importance of the valley in supplying provisions for the Confederates. Finally, Frankle pointed out that the Confederates recognized the river's importance, as evidenced by Fort Branch (Frankle 1864a:93-94; Porter 1864a:104).

By the end of November, Rear-Admiral Porter suggested taking the fort, which was then being fortified to prevent Union gunboats coming up during high water. Its capture would also open the entire Roanoke to the Union, if taken by fifteen hundred

troops from New Bern. In addition, the fort was reported to have only 500 men and did not expect an attack, making it an easy target. Also, the attack could destroy a ram said to be under construction at Halifax (Porter 1864a:104; Butler 1864:114). In light of this information, Union Major-General Benjamin F. Butler suggested a joint army-navy expedition to take the fort. By December 1, the order was given (Butler 1864a:114-115). Furthermore, it was suggested that after Fort Branch was taken, Union troops could strike Tarboro and Rocky Mount, as well as Goldsboro and Kinston (Butler 1864b:803).

By December 5, the expedition to take Fort Branch had begun (Grant 1864a:804-805; 1864b:842). From the beginning, the expedition ran into problems. On December 9, 1864, the expedition's naval component began its journey up the Roanoke River. That night, two ships were sunk by torpedoes. After the sinkings, the Union dragged the river and found six more torpedoes. From that time on, the Union was forced to drag the river as it went, slowing the expedition. Another ship was disabled when its boiler accidentally blew up. Meanwhile, land forces arrived at the fort, but fell back to Jamesville after a short skirmish due to low provisions. By December 15, the Union army fell back to Plymouth because of sickness among the men. Two days later, Hamilton and the fort were reinforced. By the 20th, there were no more torpedoes, but the ships were now subjected to Confederate sharpshooters on the banks. The land forces decided to leave Plymouth the following day (Macomb 1864c:160-162; 1864d:163; Porter 1864b:163-164; Macomb 1864e:167; 1864f:167; Frankle 1864b:167; English 1864[5]:174-175; Arnold 1864b:176-177; Macomb 1864g: 177; Palmer 1864:1038).

On December 23, the Union plan was changed to one involving a two-pronged attack from Jamesville and Edwards Ferry. A report that General A. P. Hill had arrived at the fort caused even more delays. The attack was called off four days later due to all of these problems, marking the last Union effort against the fort (Frankle 1864c:170; Macomb 1864g:181; Lee 1864b:938).

By early 1865, the Confederacy called for 1,000 slaves to complete defenses at Fort Branch, Weldon, and Gaston; however, none could be spared (Baker 1865:1109; Anderson 1865:1109). The Union also received reports that another ironclad was being built on the Roanoke River (Grant 1865a:223; 1865b:721-722; Porter 1865a:8; 1865b:15). Returns for the end of January indicate that Cogdell's, Dickson's, and Lee's Alabama Batteries were stationed at Fort Branch. Returns also indicate that the fort was manned by the First Junior Reserves, companies A and F of the 6th North Carolina cavalry, and companies B, G, and H of the 10th NC cavalry (Returns 1865:1068-1069; Bragg 1865:1187). By February 10, these forces were joined by the 68th North Carolina (Hoke 1865:1155).

At the end of March, with Union troops approaching the fort and no troops available to meet them, the fort was abandoned and the guns thrown into the river (Johnston 1865:730; Macomb 1865:116). In mid-May, the Union traveled up the Roanoke River to recover the guns that had been thrown into the river. The Union was only able to find three guns, which they promptly recovered: one 6-inch rifled gun, one smoothbore thirty-two pounder, and one smoothbore twelve pounder. Two other thirty-

two pounders had burst, one was taken to Weldon, and one was taken by Confederate Captain Lee (Thornton 1865:150-151).

Archaeological Background

The first investigations at the site took place in 1932 when Martin County game warden John W. Hines reportedly recovered several projectiles and a small cannon from the site. It was not until the start of the Civil War Centennial in 1961, however, that plans were made to protect this historic landmark. To assess the possibility of developing the site, citizens of Martin County, along with the North Carolina Department of Archives and History, investigated the site, making recommendations for its protection and development. To protect the site, the Fort Branch Battleground Commission was formed (Watts et. al. 1979:43).

Unfortunately, the Civil War Centennial also brought widespread looting of the site (Phelps and Pennington 1990:5). In August of that year, a group of Marines were featured in a Jacksonville newspaper after diving on the site and metal detecting (Watts et al. 1979:44). The following year, collectors from Alabama began searching the river at Fort Branch (Watts et al. 1979:44; Phelps and Pennington 1990:6). These collectors recovered several hundred shot and shell (6 to 100 pounds) and three cannon (Watts et al. 1979:45; Phelps and Pennington 1990:6). Fortunately, the state confiscated the cannon under the submerged cultural resource laws; however, the projectiles were not recovered (Watts et al. 1979:47; Phelps and Pennington 1990:6). When the cannon were seized by the state, the collectors brought a lawsuit that was eventually defeated in the courts. In

the meantime, there was an injunction barring any work in the river (Watts et al. 1979:47).

In 1973, students from East Carolina University's field school, under Dr. David S. Phelps excavated a 2x5 meter test (Trench A) unit across the "commissary" (Watts et al. 1979:49; Phelps and Pennington 1990:6). At the same time, Phelps measured and drew the cannon that had been recovered from the river (Phelps and Pennington 1990:6). The following year, another field school, directed by Dr. Phelps, opened two more 2x5 meter test units in the "commissary" (Trenches C and D) (Figure 3) as well as a 3x4 meter test excavation in one of the riverside 32 pounder cannon emplacements (Figure 4) (Trench B). Both field schools provided information on the size and construction of the "commissary" and its destruction at the end of the war, found wooden support beams for the 32 pounder, measured the width of the commissary, and found iron fragments and charred timber on the "commissary" floor (Phelps and Pennington 1990:6) (Figures 5 and 6). Unfortunately, to date, no report has been written and the field notes have not been found.

With the defeat of the collectors' lawsuit, work was allowed in the river; therefore, in 1974, the state examined the site but found the water too high and the current too swift. Two years later, the site was investigated again and several artifacts were recovered for analysis (Watts et al. 1979:47). Finally, in 1977, the Underwater Archaeology Branch of the North Carolina Division of Archives and History, in conjunction with an East Carolina University underwater archaeology field school,



Figure 3: The Commissary Today.



Figure 4: One of the Gun Platforms Today.

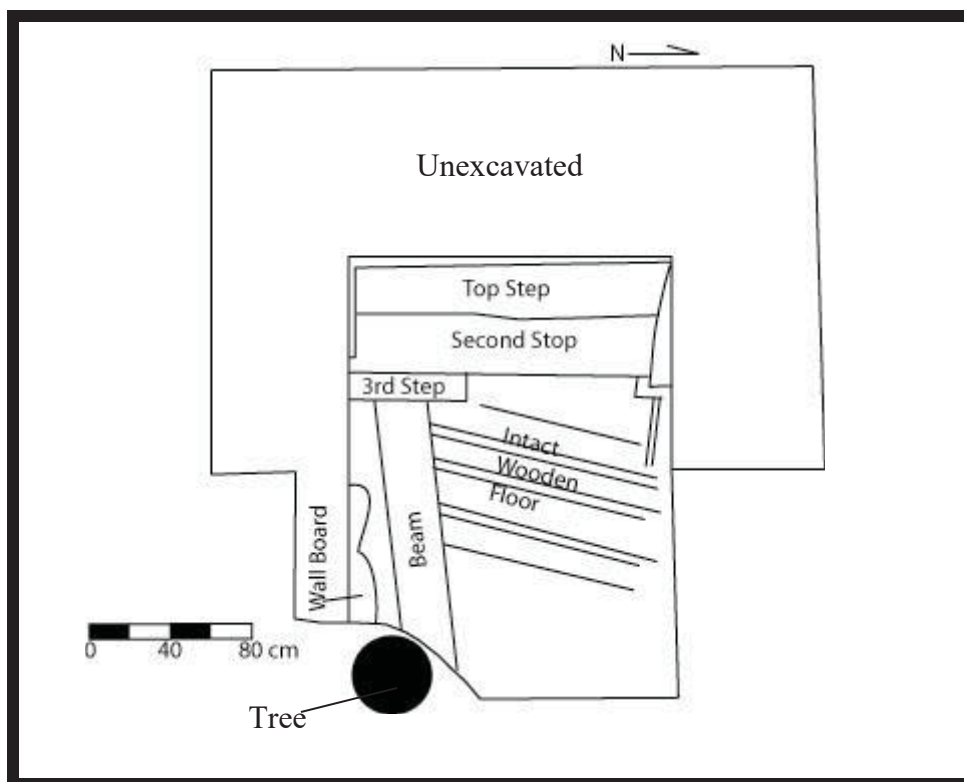


Figure 5: Plan View of Commissary's West Entrance from 1974 Field School.

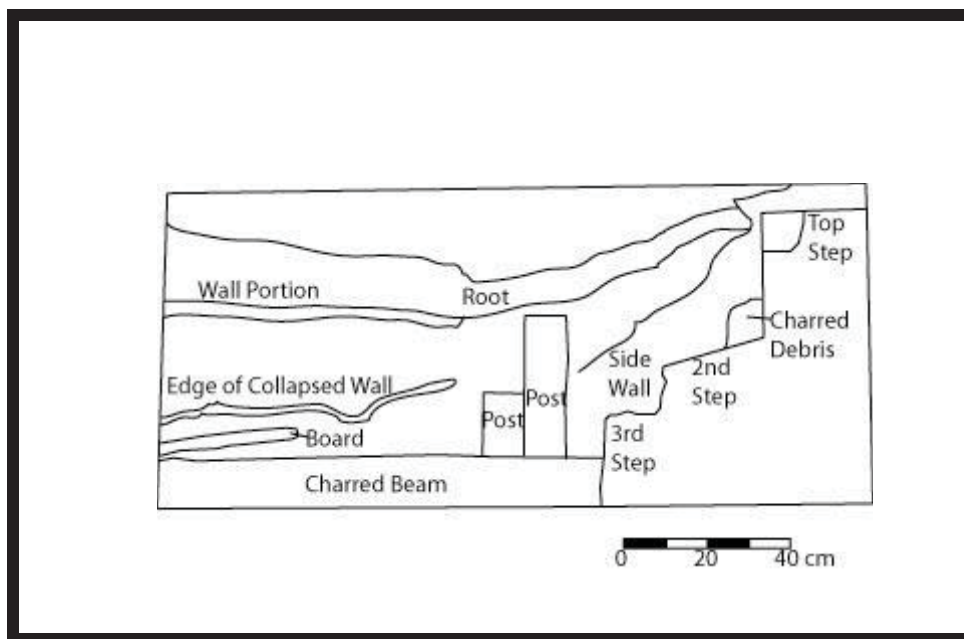


Figure 6: West Profile from "Commissary" Excavation, 1974.

conducted excavations in the river below the site, concentrating mainly on submerged resources (Watts et al. 1979:52).

The first job facing the archaeologists was the removal of snags from the river. Next the group set up a baseline through the center of the fort and established a grid, placing stakes at twenty foot intervals. Researchers used this grid to produce a detailed topographic map and a bathymetric and magnetic profile of the river, taking measurements every twenty feet. When this work was done, the archaeologists established a rope grid around anomalies and recovered smaller artifacts, including a cluster along the clay slope/sand bottom interface. Next came excavation around the cannon. The recovery brought up two large cannon (a 24 pounder and a 4.62 inch rifle) as well as two six pounders and empty siege carriages (Watts et al. 1979: 52-54, 58, 60, 63, 68, 70, 73, 75, 78, 82, 85).

In addition to the underwater work, archaeologists undertook excavations at the site of a magnetic anomaly in the "commissary." This excavation consisted of a 5x6 foot test excavation. This unit was characterized by well-defined strata: a humic layer; followed by a layer containing wood, charcoal, cut nails, and wire nails; followed by a layer with charcoal and charred timbers; then a layer of charcoal, brick, rubble, iron, charred timbers, and shell fragments; and finally a layer with charred wood, timbers, masses of ammunition, projectile fragments, and floor planks and sills (Watts et al. 1979:88).

Based on this information, the archaeologists surmised that the structure was built in a five foot deep, seven foot wide trench. Along the floor were sills separated by five

foot joists and wall studs on three foot centers. Top plates connected the studs, and the roof was flat and made of heavy beams, probably for reinforcement against backfill. Finally, there was flooring along the length of the structure. The “commissary” was destroyed by fire and explosion, as evidenced by the remains of several exploded projectiles and charred timbers. Artifacts consisted of grape shot, projectile fragments, and canister. Overall, the archaeologists interpreted the site as not being built to rigid standards, and questioned the identification of the “commissary.” All the artifacts were conserved and are curated at the site (Watts et al. 1979: 91, 97, 99, 101, 103-120; Henry Winslow, 2004, Personal Communication).

In 1987, a bridge trench project was undertaken at the site. The only information comes from a plan of trenches dug in the moat, as well as seven profiles of these trenches. There is also an artifact catalogue (Anonymous 1987). There are no field notes, but based on the sparse notes on the drawing, it appears that the project was undertaken to replace the land bridge into the fort.

In 1990, Dr. Phelps of East Carolina University again conducted excavations at the site (Figure 7) to allow the Fort Branch Battlefield Commission to reconstruct the platform of a gun emplacement (Phelps and Pennington 1990:5). The first priority of the dig was excavation of the gun platform and ramp in the twenty pounder Parrott gun emplacement to find remains and learn how the platform was constructed, and to see if there was a banquette (firing step) next to the parapet. The second priority was a test excavation in the 32 pounder emplacement on the riverside to provide evidence of the gun mount and its construction. A third priority was excavation of a concrete drain pipe

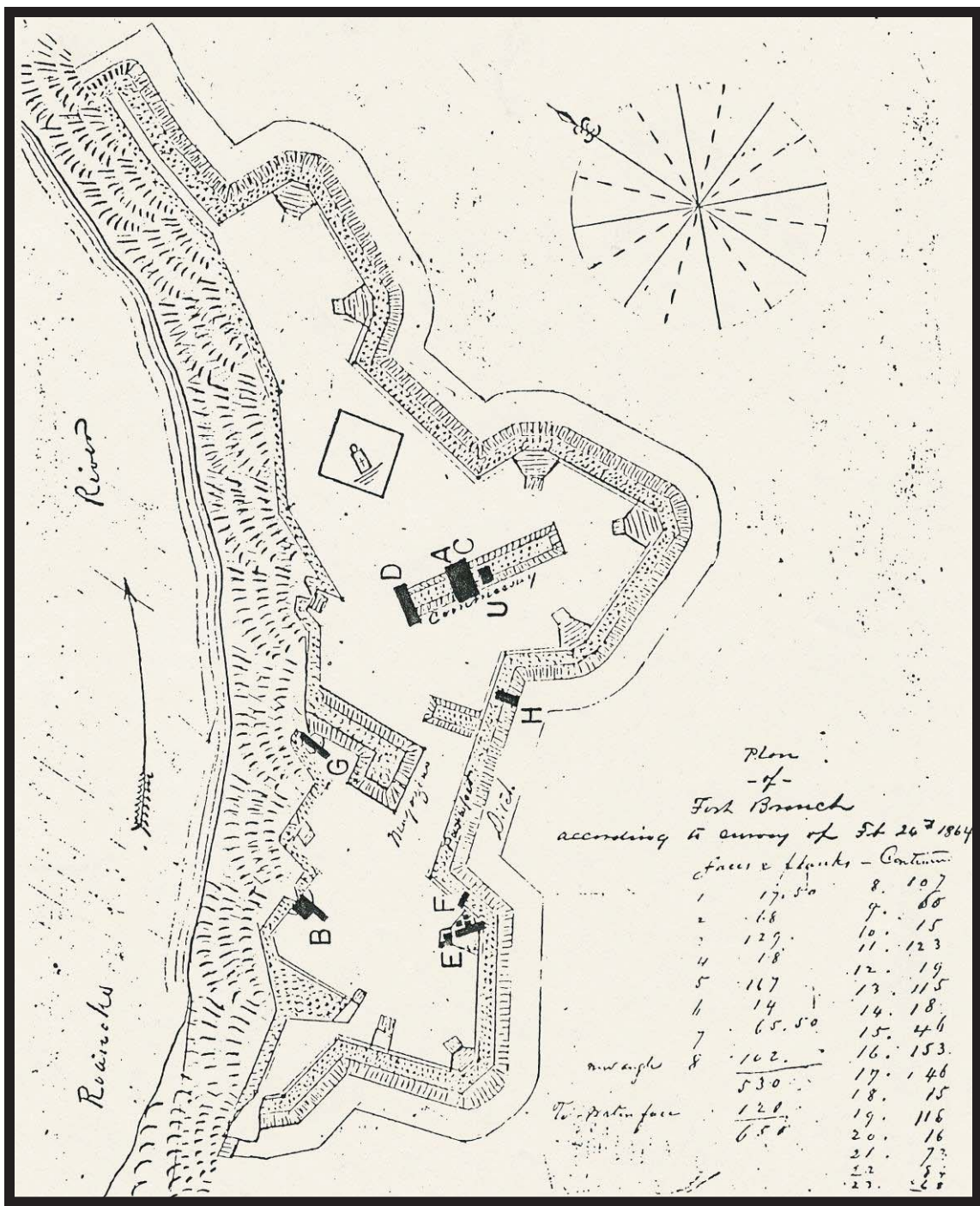


Figure 7: Map of Fort Branch Showing Locations of Previous Work (A—1973 ECU Field School, B-D—1974 ECU Field School, E-H—1990 Excavations, U—1977 Excavation) (Guion, 1864; Phelps and Pennington 1990).

under the parapet beyond the eastern line of the fort. The purpose was to see if the drain was original and, if not, replace it at a lower level to drain the fort (Phelps and Pennington 1990:3).

The first stage consisted of setting in two semi-permanent benchmarks, one inside the main gate and one atop the southern end of the 1864 traverse wall. To accomplish the first priority, Phelps placed a grid over the emplacement and made a 10 cm interval contour map (Phelps and Pennington 1990:9-10). In addition, he excavated a 1x14 meter trench along the centerline of the ramp and platform, as well as a 1x1 meter test to the rear of the platform. The first trench was extended to the east, where an organic stain was encountered; however, this stain could have been either the remains of a platform, soil deposited after the fort's abandonment, or both. Otherwise, there was no evidence for the platform's construction, except a possibility that the platform was trapezoidal (Phelps and Pennington 1990:13-15, 25). Furthermore, a banquette was not found, but one would be located elsewhere in the fort (Phelps and Pennington 1990:19).

To accomplish the second priority, Phelps excavated a 1x9 meter trench across the emplacement. There was no evidence for the wooden platform and the only architectural remains were one rusted nail. The excavation suggests a circular mount with a center pintle, that match a map by Guion, or might be a looter's pit (Phelps and Pennington 1990:20, 22). Finally, for the third task, Phelps excavated a 1x2 meter trench to see if the drain were original. One piece of grapeshot was recovered, but the profile indicated that the drain was more recent (Phelps and Pennington 1990:23).

Other work at the fort centered on gun emplacements for the purposes of reconstruction. These excavations were sponsored by the Fort Branch Battlefield Commission and included amateurs Steve Wolfe and Frank Dew of Jamesville (Frank Dew, 2004, Personal Communication). On April 18, 2003, the author, Dr. Charles Ewen and Dr. Larry Babits of East Carolina University profiled the parapet on the water side in order to gain insight into the fort's construction (Figures 8). The following March, the author and Dr. Ewen returned to the fort to prepare a profile on the landside of the fort (Figure 9). The landowner used a bulldozer to cut a road into the fort to bring in fill dirt to rebuild the riverside wall (Henry Winslow, 2004, Personal Communication). This bulldozer cut exposed the profile of one wall.

This background information serves two important purposes: it provides future researchers with a synthesis of the available history and all previous archaeology at the site, and it provides future archaeologists with context for asking site-specific questions. The former allows future researchers, both historians and archaeologists, to avoid “reinventing the wheel” every time they want to study this site. In other words, researchers can concentrate research rather than spending time on background issues. The latter allows future archaeologists to ask site specific questions, again without having to spend time gathering the necessary background information. In addition, the latter points out the need to report previous archaeology as soon as possible. The following chapter discusses the importance of research design and the need to study the Civil War archaeologically. It then examines different aspects of Civil War fort archaeology. Throughout, case studies are used to frame research questions in the context of general



Figure 8: Dr. Lawrence Babits Preparing the Riverside Parapet for Profiling, April 2003 (Photo Courtesy of Dr. Charles Ewen).

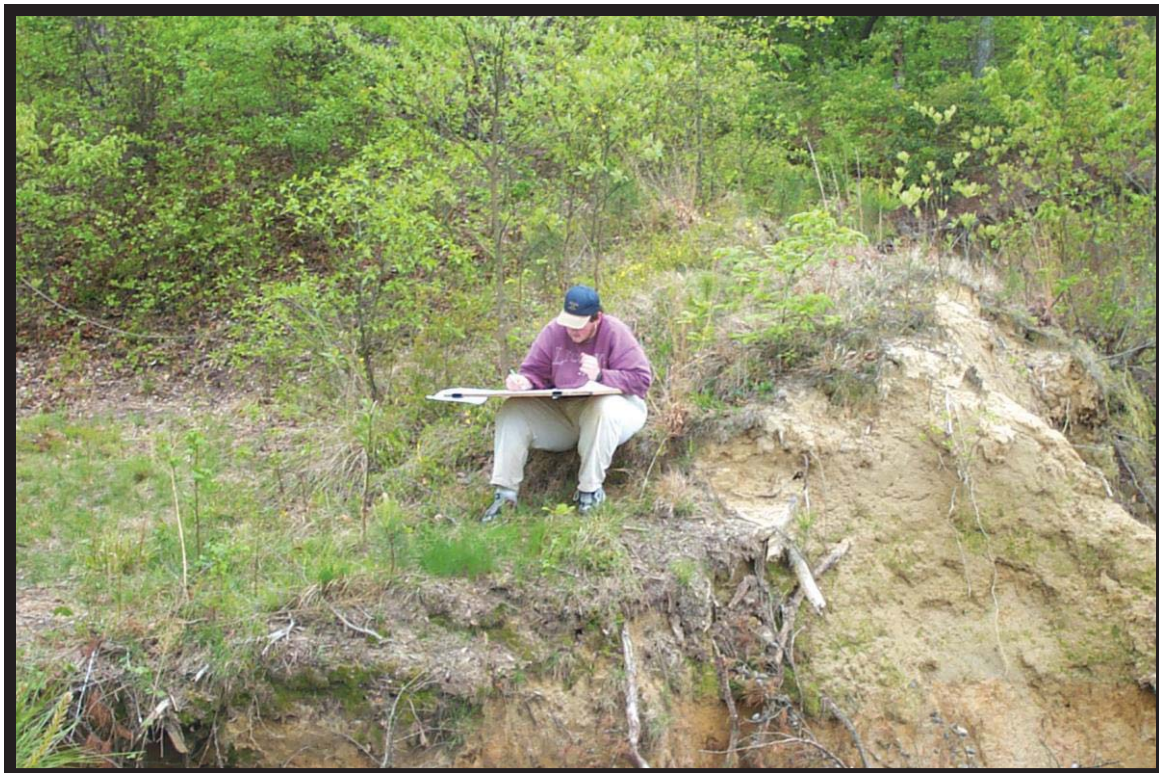


Figure 9: The Author Preparing a Profile (Photo Courtesy of Dr. Charles Ewen).

Civil War archaeology, while the background history and archaeology are used to frame questions to gain information about this particular site.

CHAPTER THREE-RESEARCH DESIGN

Based on the preceding chapter, it may appear that historical documentation is sufficient to answer any questions about Fort Branch and the Civil War in general. The purpose of this chapter, therefore, is to formulate a research plan that can answer both site-specific questions and ensure that future excavations at the site are integrated into current Civil War archaeological research. It is hoped that Fort Branch can then be used to aid in developing a regional understanding of the Civil war. An important goal of this research design is to demonstrate how archaeology can produce an anthropological record of the war that can complement and enhance the traditional historical record. Two sources are used to accomplish this research plan: the available history of Fort Branch and case studies of archaeological research on Civil War sites.

This chapter begins by addressing site-specific questions raised by the two previous, reported archaeological projects at Fort Branch: Watts, et al. (1979) and Phelps and Pennington (1990). Since these reports have almost exclusively dealt with the details of construction at Fort Branch, the following section focuses on fort construction and how it can be used to guide future archaeology. A complete survey of the property is another important step to take at the site; the methods and reasons behind military site survey are examined to provide researchers with a starting point. Survey is important both because the entire property has never been surveyed, and because survey can help pinpoint the location of the camp at Fort Branch, as well as the location of skirmish sites on the property. Following this discussion is a treatment of current landscape studies at Civil War sites and how they can be applied to this site in particular. After a brief

examination of the issues concerning the historic cemetery in the fort, this chapter concludes by prioritizing the different objectives.

Previous Archaeology

As is usually the case, previous archaeology at Fort Branch has raised as many questions as it has answered. It is therefore suggested that future projects at the site address these questions. In conjunction with site reports, the documentary record provides a good starting point. For example, Guion's (1864) map (Figure 10) of the fort shows a magazine on the riverside of the fort, between the 24-pounder and 32-pounder emplacements west of the cemetery. Another underground structure, labeled as a commissary, was located in the central part of the fort. The questions include the role and function of both the commissary and the magazine, the presence or absence of banquettes, and the structure of the gun emplacements.

In terms of the role and function of the commissary and the magazine, Watts et al (1977) excavated a 5x6 foot test unit in the commissary. None of the artifacts recovered, however, suggested that the structure was a commissary; on the contrary, the artifacts suggested the structure was a magazine (Watts et al. 1979:101). The historic record, on the other hand, mentions that the commissary held enough provisions to last 1,000 men for thirty days (Martin 1863a:1060), a fact that should be discernible in the archaeological record. Archaeologists should fully excavate the commissary and the magazine to resolve the function of each. The possibility of answering this question seems high considering the state of preservation of the commissary (Watts et al. 1979:252).



Figure 10: Guion's 1864 Map of Fort Branch Showing Positions of Guns, the Commissary, the Camp, and the Magazine (Guion 1864).

Aside from fully excavating the commissary and magazine, archaeologists should find out whether banquettes were a feature inside Fort Branch. The banquette is a step from which the soldiers could fire over the parapet, or wall, of the fort (Robinson 1977:197, 204), and, based on Mahan (1856:3, 9, 21-22, 51), was a requirement of fort construction. Phelps and Pennington (1990:26), however, were unable to find evidence of a banquette at a point on the parapet interior. This fact, however, does not discount the existence of banquettes on other parts of the parapet wall.

Future archaeology should fully excavate the 32-pounder emplacement. In fact, Phelps and Pennington (1990:26) suggest excavating the 32-pounder emplacement in order to determine if all evidence for a gun platform has been destroyed. Finally, archaeologists should establish a permanent datum on the site. A datum would allow researchers to tie together all past and future excavations and is one of Phelps and Pennington (1990:27) recommendations.

The Archaeology of Fort Construction

Since previous archaeology at Fort Branch has focused on its structure, another fruitful area of research would be a discussion of the archaeology of fort construction (Figure 11). In order to examine fort construction, researchers must familiarize themselves with the construction manuals of the times. Probably the most widely-read manual was Dennis Hart Mahan's *A Treatise on Field Fortification, Containing Instructions on the Methods of Laying Out, Constructing, Defending, and Attacking Intrenchments* [sic], *with the General Outlines Also of the Arrangement, the Attack and Defence* [sic] *of Permanent Fortifications* (1856) (Babits 1989:195). Aside from

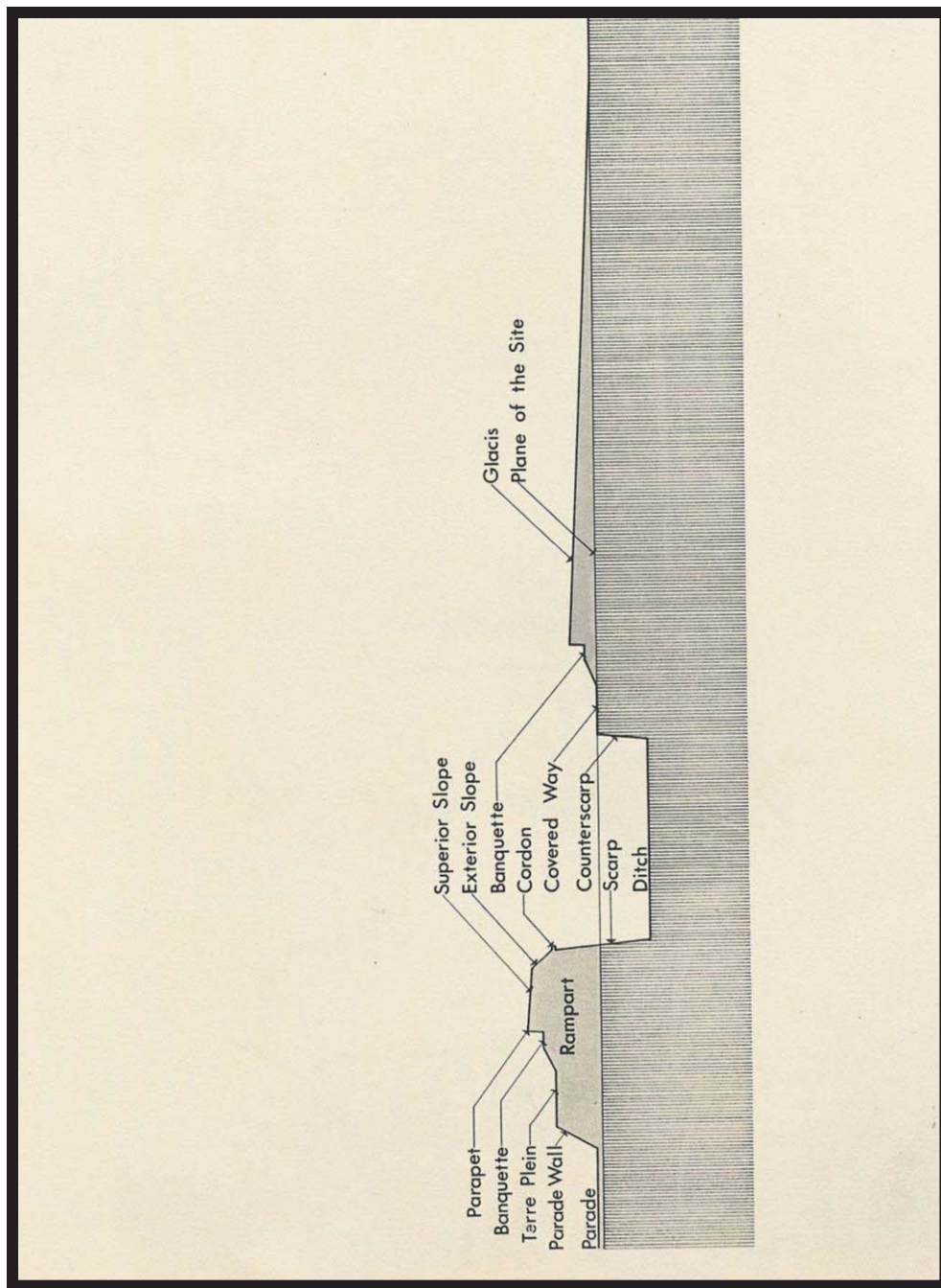


Figure 11: Schematic of a Typical Fort, Showing the Various parts of the Profile (Robinson 1977).

Mahan's manual, researchers can also refer to Gibbon's *The Artillerist's Manual* (second edition, 1863); however, this work reiterates information contained in Mahan (Babits 1989:195).

Mahan (1856:xxv,1-2, 18-19, 90) covers such diverse topics as how guns should be placed in a field fortification, and how to strengthen a position by either natural or artificial means in order to both protect the troops and enable them to deliver the most effective fire. Concerning the actual construction of field fortifications, Mahan (1856:6-7, 11, 19) discusses the best angles and size of a fort, as well as the thickness of parapets. The manual even discusses the number of people and the amount of time required to construct a field fortification, as well as the effect of different soil types on fort construction (Mahan 1856:22, 33-35).

Some points germane to Civil War fort archaeology include the fact that the exterior slope of a fort assumes the shape the dirt naturally takes when it is thrown up, and that the ditch around a fort should provide the material for the parapet (Mahan 1856:21-22). If the parapet were made too steep, the fort walls could be strengthened by revetting with sod or sand bags (Mahan 1856:36,40). At Fort Branch, archaeologists should examine three aspects of Fort Branch: its profile, plan, and placement on the landscape.

An example of the information contained within a fort's profile comes from Babits' (1989) work at Causton's Bluff near Savannah, Georgia. This project was undertaken to mitigate adverse impact from a construction project by obtaining information on fort construction during a time of changing technology (Babits 1989:194).

In order to examine the fort wall profile, a bulldozer made two cuts into the earthwork, producing four profiles (Figures 12 and 13): three at the Central Battery and one at the southwestern wall near the gate (Babits 1989:195-196).

The southwestern wall profile consisted of, from bottom to top, the original subsoil, then the original ground surface with hardpan (caused by water percolation). Atop the original ground surface was the topsoil taken from the ditch. Topsoil was rounded in profile since it had been thrown into place. There were also some darker areas from widening the fort's ditch, followed by hardpan from the ditch, which was used for the wall's interior. In addition, the wall also had evidence of filling and leveling as well as sand bag and mud brick revetting (Babits 1989:196).

The south profile from the southern bulldozer cut showed a somewhat similar construction sequence; however, the position was filled in and the parapet built up and thickened, probably because it faced more powerful naval guns. Furthermore, the position was terraced and showed evidence of later soil addition in two episodes. The north profile of the southern cut was also similar to the southwestern wall profile, but did not have the terracing of the south profile of the eastern cut (Babits 1989:196).

Finally, the north profile of the northern bulldozer cut gave the clearest indication of construction sequences. From bottom to top, there was a low mound of topsoil, with subsoil on top and in front of the topsoil. On top of this dirt was lighter, deeper subsoil, followed by hardpan and revetting. This sequence represented the original construction sequence at the fort. The next episode of construction featured mixed subsoil and topsoil, covered with sod, and then topsoil (Babits 1989:196-197).

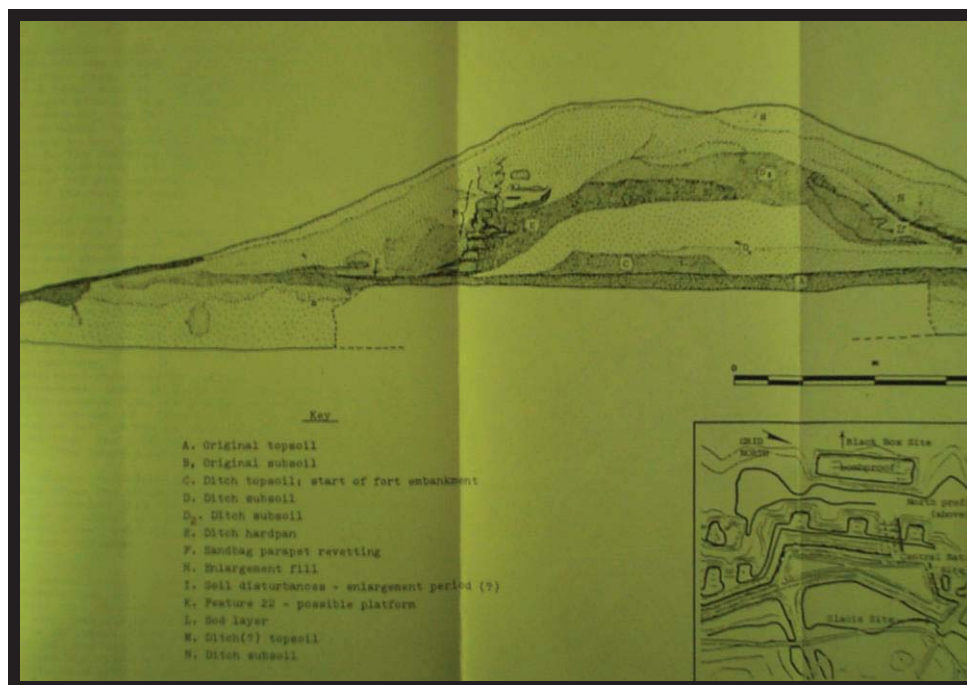


Figure 12: Profile from Causton's Bluff, Georgia (from Babits et al. 1987).

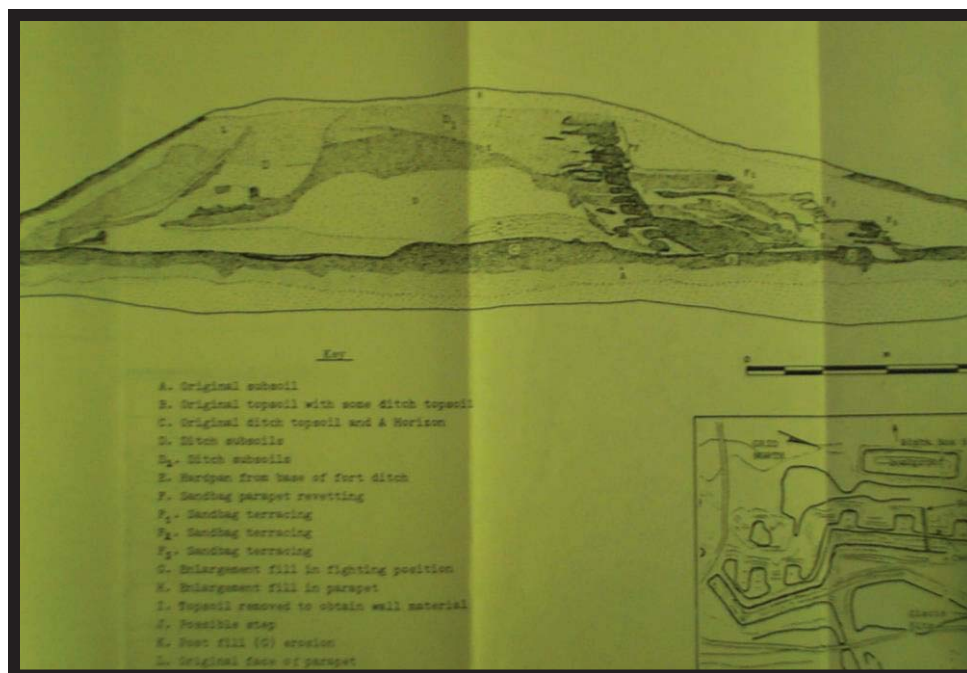


Figure 13: Profile from Causton's Bluff, Georgia (From Babits et al. 1987).

Using the same methodology, archaeologists at Fort Branch should examine the profiles to see the degree to which they agree with Mahan's specifications. Preliminary work at Fort Branch suggests a similar construction sequence. On April 18, 2003, the author, Dr. Charles Ewen, and Dr. Larry Babits made the first of two preliminary profiles of the fort walls (Figures 14 and 15). The first profile was taken from the highly eroded west (riverside) face of the parapet; therefore, the profile does not show the entire internal structure of Fort Branch, but it does give glimpses of the construction sequence. The profile consists of the original, yellowish/brownish yellow subsoil, followed by mottled yellow, shallower subsoil. Then, there is a mound of gray and brown topsoil. The fact that the topsoil is not one consistent color could be explained by the fact that the dirt came from different areas of the ditch, perhaps, a higher humic layer, and then a lower level. In addition, since this profile was taken from the exterior of the parapet, it only shows a small portion of the topsoil mound. On top of the original topsoil is mottled dark and light dirt, probably representing the topsoil/subsoil interface. There are several darker intrusions in the mound of subsoil, but these most probably represent tree roots.

Analysis of this sequence shows a construction sequence similar to Causton's Bluff (Babits 1989). It also shows that the builders followed Mahan since the profile presents an inverted stratigraphy created by dirt being thrown up from the ditch as it was excavated. Unlike the Causton's Bluff (Babits 1989) profiles, however, there is no evidence of revetting at Fort Branch. The lack of revetting could be explained by the fact that the profile did not reach the top of the parapet.

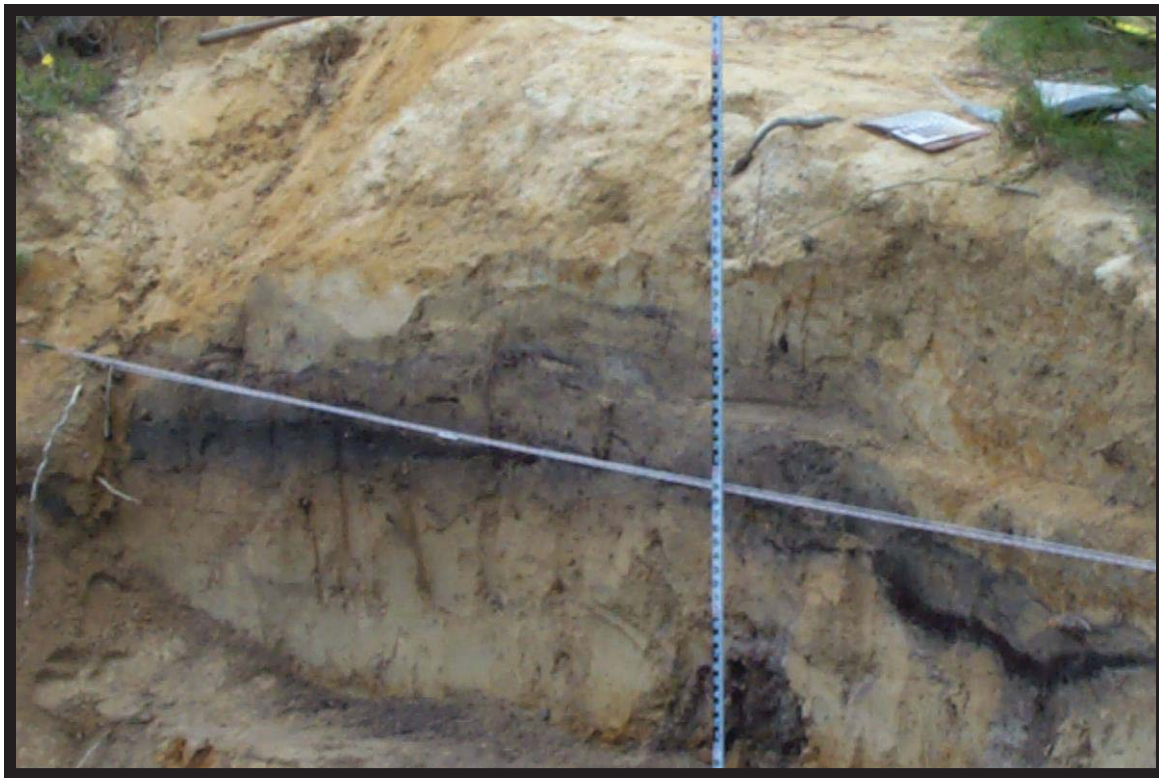


Figure 14: Riverside Parapet Profile (Photograph Courtesy of Dr. Charles Ewen).

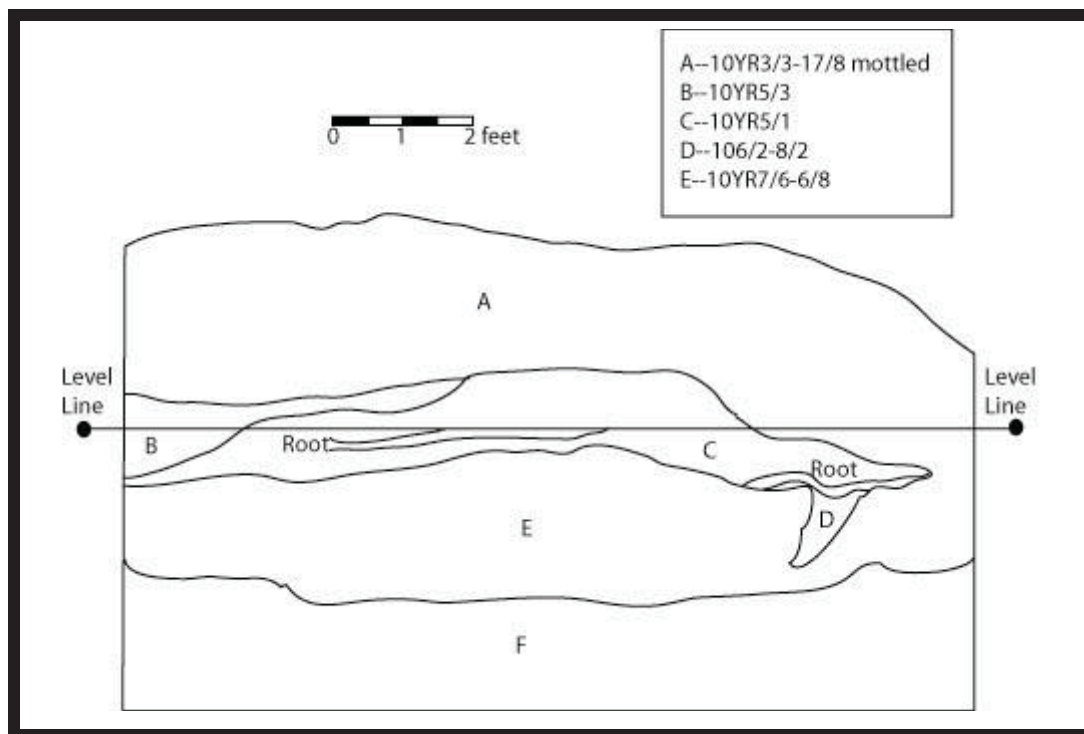


Figure 15: Profile Drawing of Riverside Parapet Profile.

In March 2004, Mr. Winslow bulldozed a new road into the fort, allowing the author and Dr. Ewen to make a cross-section profile, this time on the landside of the fort (Figures 16 and 17). This profile also agrees with the Causton's Bluff profile. From outside to inside, the profile consists of a layer of yellowish brown topsoil from the ditch, followed by a layer of lighter, yellowish brown subsoil, followed by a layer of the deeper, strong brown subsoil mottled with the yellowish brown, followed by the deepest, strong brown subsoil. Therefore, it appears that, as Mahan (1856) prescribed, the dirt from the ditch was piled up to make the parapet. The layers appear to have been mounded at some point, but the tops probably eroded away, replaced with a thin layer of humus. One anomaly in the profile, a dark yellowish brown intrusion in front of the first layer, could possibly date from when Meade's fort was made stronger with thicker walls. Such an assumption matches Babits' work at Causton's Bluff.

The 2003-2004 profiling seems to have yielded enough information to say that the fort was built following Mahan's methodology. Other topics, however, can be addressed at Fort Branch. For example, the original fort at Rainbow Bend was constructed by Captain Meade, but was modified when Fort Branch was built on the same site in October 1862. A Union raid the following month did a great deal of damage to the fort, after which, construction resumed. By late 1864/early 1865, the Union received reports that Fort Branch was being "fortified" (probably meaning reconstructed) (Crabtree and Patton 1979:288; Gatlin 1862i:470; 1862h:486; 1862a:577; Shiman 1989:7; Randolph 1862:185-186; Gilmer 1862f:763; Bender 1862:188; Flusser 1862a:217; Lee 1862:180; Davenport 1862a:182; Wells 1862:189-190; Davenport 1862b:211 ;Porter 1864a:103-104;



Figure 16: Profile of Parapet Wall on Land Side of the Fort.

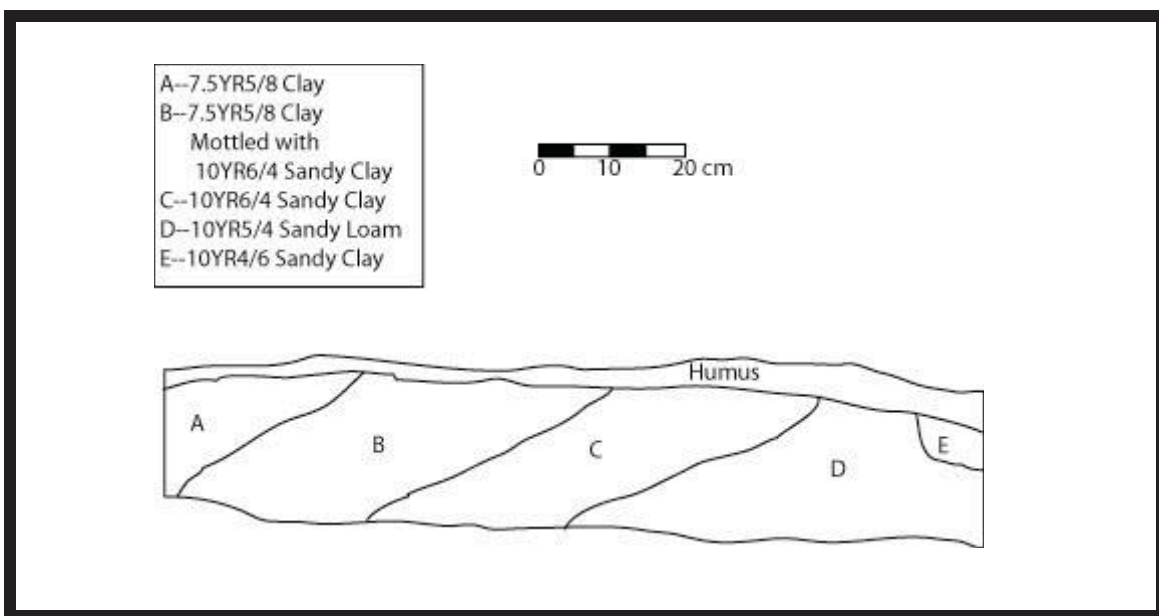


Figure 17: Profile Drawing of Land Side Parapet Profile.

Butler 1864a:114). Therefore, archaeologists should make more profiles to see if these discrete construction sequences are visible and if they can provide further information concerning the historic record. Babits (1989:196-197) points out that discrete construction sequences leave discernible archaeological traces.

In addition to the profile, a fort's form in plan can yield a great deal of information. Several archaeologists compared the plan of extant Civil War earthworks to Mahan's specifications (Smith et al. 2003; Winter 1994; Fryman 2000). At Fort Branch, preliminary examination indicates that the builders followed Mahan (1856) (Shiman 1989:21-22).

One example of this type of study comes from South Carolina where Smith et al (2003) examined several forts. They found that, in general, the redans, works made up of two faces and open at the back (Robinson 1977:204), did not match Mahan's (1856) recommendations; however, their modified plans enabled the forts to hold more guns (Smith et al. 2003:26). He also found that Hardy's Camp, an enclosed encampment, did follow Mahan's manual. Based on this information, it appears that the troops in the field used the fortification manuals of the day, but adapted them to the specific situation they faced (Smith et al. 2003:27-28).

At Fort Branch, the plan of the current fort should be compared with Mahan's manual to see how closely the builders followed his prescriptions. In addition, if Meade's fort can be located, its plan should be compared with the plan of the current fort. When Fort Branch was built, the upper battery of Meade's fort was scrapped (Randolph 1862:185). If the previous battery was simply knocked down, the previous trench would

have been filled, leaving traces in the archaeological record. In addition, the “straight intrenchment [sic]” described by Edmonston (Crabtree and Patton 1979:288) could have been filled in, leaving archaeological traces. Future research should focus on comparing the plans of the two forts. Archaeologists should use data from both forts to further illustrate the sequence of construction at the site, and to see if the original was truly inferior (Crabtree and Patton 1979:288; Randolph 1862:185-186). Meade also designed Fort Fisher at Wilmington, NC (Crabtree and Patton 1979:128n). Information on the original fort combined with information on Fort Fisher could be used to demonstrate the role of the individual in developing fortifications (Stephen McBride, 2004, Personal Communication).

Other archaeologists focused on how closely a fortification’s placement on the landscape followed Mahan’s guidelines (Winter 1994). A study by Fryman (2000:43) on forts around Atlanta examined all aspects of fort construction: placement, construction, armament, and occupation. He points out that these studies are important because forts “represent a component of the built environment reflecting the cultural contexts underlying their construction” (Fryman 2000:43). The methods employed by Fryman (2000:54) consisted of measuring the forts and comparing them to the manuals of the day.

By analyzing Fort Branch, archaeologists can gain insight into the cultural factors that affected its construction and placement on the landscape. Archaeologists can also understand the engineer’s pre-war training and experience as applied to their understanding of enemy fire power (Fryman 2000:43). Furthermore, archaeologists

should also examine the role Fort Branch's function played in its construction. Other researchers have found that different functions affect fort placement and construction: a training center and depot (McBride 1994, 2000) differs from the defenses for an important city (Fryman 2000; Balicki 2000), which should differ from a field fortification meant to defend a river (Fort Branch).

Survey of Fort Branch

As mentioned above, the fort is a veritable gold mine of information; however, there is more to the fort than the earthworks. Therefore, the property around the fort should be surveyed. To begin, the survey should cover only the property owned by Mr. Winslow. If military artifacts extend beyond the property, then the survey can be extended, pending the consent of adjacent landowners. It is believed that a survey of the property can locate the camp as well as the skirmish area(s). A veteran's diary places the garrison camp in an apple orchard (McCallum 1996:57); a map of the fort (Guion 1864), on the other hand, shows an orchard to the east, with the camp on the other side of the fort. The historic record also indicates that at least one, and possibly two, skirmishes took place at the fort (McCallum 1996:97-99). Before examining the archaeology of skirmish and encampment sites, however, it is important to understand the methodology behind military site survey.

For military sites, the most efficient method of survey is a metal detector survey. Metal detectors have been used to survey military sites since the 1950's; in recent times, the use of metal detectors has greatly increased. At military sites, metal detectors are useful for delineating the boundaries of a site and locating trash deposits and structural

remains. Metal detector surveys can also recover artifacts that traditional shovel testing would miss (Connor and Scott 1998:76-77).

For example, during a surface survey of Little Big Horn Battlefield, archaeologists found only ten metal artifacts, despite the fact that a recent wildfire had cleared out all the vegetation, and ground surface visibility was 100 percent. A metal detector survey, on the other hand, recovered 5,000 artifacts. In order to achieve the same amount of coverage, archaeologists using a 10 meter shovel test grid would have to excavate 45,500 shovel tests. Placing a 10-meter grid over the Little Big Horn Battlefield, however, would have resulted in a less than 1 percent recovery rate for the metal artifacts (Connor and Scott 1998:78). During a shovel testing survey at Antietam Battlefield, the recovery rate for military artifacts from shovel tests was less than 1% (number of artifacts divided by number of shovel tests). The recovery rate using a metal detector jumped to 37% (Sterling and Slaughter 2000:310).

Before beginning a metal detector survey at Fort Branch, archaeologists must account for the users' experience and the soil conductivity. The steps in this type of survey include detecting, recovering the artifacts, and recording the location of artifacts. One way to conduct this type of survey, is for the users to walk side by side, being sure to overlap their sweeps (Connor and Scott 1998:81). Other archaeologists suggest the use of perpendicular transects to be sure that features are not missed during the survey (Sterling and Slaughter 2000:316). The sweeps should be made as level with the ground as possible (Connor and Scott 1998:81; Lees 1994:7; Sterling and Slaughter 2000:307). If the artifacts are particularly dense, the area may have to be swept several times. In

addition, shovel tests are unnecessary since the artifacts do not have any stratigraphic relationships. When a metal detector gets a hit, a smaller coil detector can be used to pinpoint the artifact, lessening the amount of ground disturbance (Connor and Scott 1998:82).

Some caution is required when conducting this type of survey. The metal detector should not be set to discriminate between different types of metals, since this setting can lead to artifacts being missed (Connor and Scott 1998:80). Reenactments can also cause problems by masking the archaeological data with modern replicas (Smith 1994:16; Sterling and Slaughter 2000:320). This fact must be remembered when surveying Fort Branch, the site of annual reenactments. In addition, before beginning a metal detector survey, the archaeologist should develop a plan for dealing with non-military artifacts (Connor and Scott 1998:82).

The advantages of a metal detector survey include the fact that metal detectors are inexpensive, they do not cause the same amount of disturbance as shovel tests, and they are easy to use (Connor and Scott 1998:83). Additionally, metal detector surveys have great potential for educating the public, since many surveys rely on experienced amateurs (Connor and Scott 1998:80). Using amateurs can not only make the project go faster, but also can inform potential pothunters about proper archaeological ethics as well as the importance of provenience when examining a military site.

The Archaeology of Skirmish Sites

A survey of the Fort Branch property enables researchers to examine the skirmishes at the site. An example of Civil War skirmish archaeology comes from Lees

(1994:46) study of the Mine Creek, Kansas, battlefield. This engagement was described as a “short but sharp clash,” that lasted less than thirty minutes (Lees 1994:43, 45). The Fort Branch land skirmish appears to have been a similar short clash (McCallum 1996:97-99). Unfortunately, the exact battle positions at Mine Creek were lost to history. The goal of the project, then, was to uncover the large scale patterns of battle using metal detectors (Lees 1994:45-47).

Lees’ project revealed that bullets could be related to the different weapons used by each side. The distribution of bullets was used to demonstrate where troops were positioned (Lees 1994:49-50; Sterling 2000:347). In addition, the distribution of dropped and fired bullets can show exactly where troops were positioned. Dropped bullets represent troop positions, while fired bullets show the direction of fire and give a rough approximation of opposing troop positions (Lees 1994:52; Cornelison 2000:302; Sterling 2000:347). Although this type of investigation reveals nothing about general cultural patterns (Binford 1962:218, 220; 1983:23) on the battlefield, it does allow researchers to glimpse a battle from the view of the soldiers, even discerning patterns of retreat (Lees 1994:56-57). This type of investigation can clarify the historic record at Fort Branch and, in combination with information from other sites, may allow archaeologists to discern general patterns of the battlefield.

Another example of the archaeology of battle sites comes from investigations at Chickamauga (Cornelison 2000). The research question addressed by this research was whether short-term activities at a battlefield would leave interpretable evidence in the archaeological record. Based on his survey, Cornelison (2000:301-302) was able to

determine the degree to which different groups of Union soldiers maintained order as they withdrew from the battlefield. Cornelison (2000:301) found that when order breaks down during a retreat, the soldiers tend to drop any material that may weigh them down, such as cartridge boxes (Figure 18). During an orderly retreat, however, the soldiers may take additional steps to ensure that they are not pursued. For example, at Chickamauga, some Union troops spread out caltrops (Figure 19) as they retreated. Caltrops are four-pronged spikes that would hobble a pursuing cavalry's horses (Cornelison 2000:32). This information could be used to see if Union troops withdrew from Fort Branch in an orderly fashion, or simply broke and ran.

The above studies provide several questions for archaeologists at Fort Branch. For example, Fort Branch was the site of one, and possibly two clashes between Union and Confederate soldiers. One clash took place between land forces during the Union attempt to take the fort in Mid-December, 1864 (Macomb 1864c:161; Porter 1864b:163-164; Macomb 1864f:167; English 1864[5]:175; Macomb 1864g:177-179). The other skirmish took place when Flusser's ships came under fire from the banks of the Roanoke (McCallum 1996:97-99; Flusser 1862b:556; Rowan 1862:560). Two accounts of the latter engagement say the Confederates fired from the fort (McCallum 1996:97-99), while another claims the fort was empty (Flusser 1862b:556; Rowan 1862:560). By surveying the property and determining the location of firing lines (i.e towards land or water) archaeologists can clear up this discrepancy. In addition, researchers can examine whether the Union troops retreated in an orderly fashion or broke and ran after the 1864 skirmish.

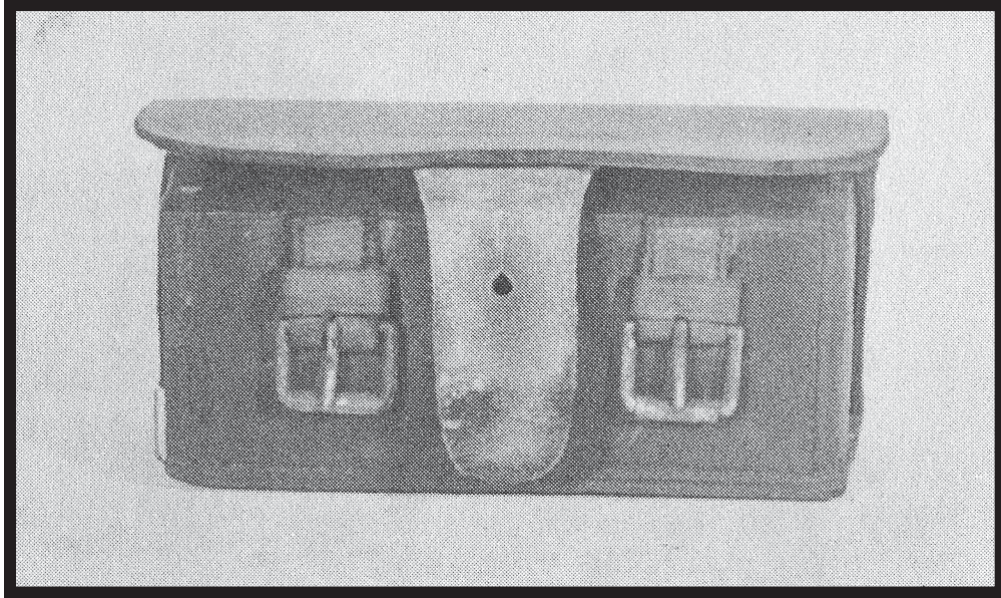


Figure 18: Example of a Civil War Cartridge Box (Lord 1965).

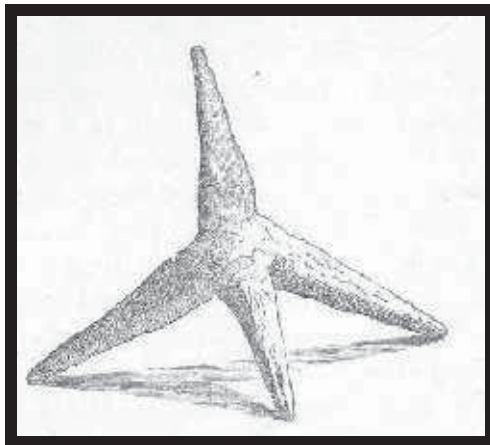


Figure 19: Example of Caltrops (From Hereford Falls by Trickery 2004).

At Fort Branch, there are some important issues to remember when examining the skirmish site(s). Before beginning a survey, archaeologists need to examine the degree of prior collecting at the site, the amount of time the site has been protected from unauthorized digging, as well as the extent of agricultural disturbance (Sterling and Slaughter 2000:314). If the site has been intensively collected or farmed, there may not be many artifacts, but this lack of artifacts does not mean that no action took place. In addition, assemblages from skirmish sites can be compared with encampment assemblages to demonstrate the effects of battle and non-battle situations on individual soldiers as well as the army as a whole (Sterling and Slaughter 2000:321; Balicki 2000:141). Finally, examining bullets left on battlefields can give insight into logistics and military features, both of which can be compared to the historical record (Sterling 2000:347).

The Archaeology of Camp Life

Aside from locating skirmish lines, the archaeological survey can locate encampments. Encampments provide a wealth of information about the lifeways of individual soldiers. Until recently, Civil War encampments have been largely unexcavated by archaeologists. These sites, on the other hand, have been very popular with collectors, who use historic maps to locate and loot camps. With the advent of cultural resource management (CRM), more encampments have been excavated, however, the data remain inaccessible and badly reported (Balicki 2000:125). Fort Branch is at risk in this regard and would benefit from a systematic archaeological investigation.

Based on the numbers of troops at Fort Branch, the soldiers' camp (Guion 1864; McCallum 1996:57) should be visible in the archaeological record and discoverable through a survey of the entire property. Documents state that, by mid-February 1863, two companies of the 17th NC Regiment were stationed at the fort (Lee 1863:146). Returns from July 1863 state that six companies of troops were divided between Forts Anderson and Branch (Whiting 1863a:1068). The following month, there were 100 soldiers from the 17th North Carolina stationed near the fort (Peck 1863b::64). In late September and in November, Union troops received reports that 1500 Confederates were stationed at the fort; however, Confederate returns for the end of the year list only 148 men (Foster 1863a:250; Peck 1863a:452; Pickett 1863:906; Macomb 1864a:82). The January 31 returns indicate that Cogdell's, Dickson's, and Lee's Alabama Batteries were stationed at Fort Branch. The returns also indicate that the fort was manned by the First Junior Reserves, companies A and F of the 6th North Carolina Cavalry, and companies B, G, and H of the 10th NC Cavalry (Returns 1865:1068-1069; Bragg 1865:1187).

Once the camp is located, archaeologists can address several research questions. For example, excavations at Camp Nelson, a Union quartermaster's depot, have shed light on the lives of Union soldiers (McBride 1994). This project allowed the archaeologists to see the material aspects of a Civil War garrison in Kentucky, information that could allow researchers to examine the nature of supplies at a Kentucky garrison and compare it to other Civil War sites. Camp Nelson was a permanent installation (McBride 1994:132, 134) and could allow comparisons between Union and Confederate camps.

The investigations at Camp Nelson focused on areas around the Headquarters Complex and the Owens' House/Post Office Complex. These excavations found that the most informative artifacts for the study of camp life are ceramics, glass, faunal remains, arms, clothing, and personal items (McBride 1994:136, 140). Ceramics have been found at both long and short-term encampments (Balicki 2000:141). Ceramics found at Camp Nelson demonstrate that soldiers preferred minimal decoration (McBride 1994:140-141), a fact that can be compared with any potential assemblage at Fort Branch. When compared to domestic sites, military assemblages can indicate the degree to which military life differed from civilian life, and thus the kinds of adjustments soldiers had to make when they joined the military (McBride 1994:142-143; Balicki 2000:125).

Examination of the faunal assemblage can also be instructive about soldier's lives at a fort. For example, different species represent availability and preference, as well as the importance of forage in soldier's diets (McBride 1994:145). Aside from ceramics and faunal remains, glass bottles can provide information about camp life. Alcohol was prohibited at Civil War camps, so its presence can point out the degree of illicit activity, as well as the degree of enforcement of army regulations (McBride 1994:149; Balicki 2000:126).

Arms can, perhaps, be the most instructive artifact class at encampment sites. For example, the arms assemblage can indicate both the quality of supplies and proximity to the front lines. Since Camp Nelson was far from the front lines, the weapons were of lower quality. Researchers can also compare the number of regiments with the types of bullets, since, oftentimes different regiments were equipped with different arms (e.g.

cavalry vs. infantry) (McBride 1994:150-151; Balicki 2000:138). Overall, McBride (1994:156; Balicki 2000:135) points to the need for more comparative data.

Another area of camp life that can be addressed archaeologically is status difference. Between October 1994 and August 1995 archaeologists at Camp Nelson attempted to discover status differences between officers and enlisted men. This examination looked at two inns, one used by officers and one used by enlisted men, and then compared their assemblages of ceramics, faunal remains, glassware, and military items (McBride et al. 2000:104, 109). The archaeologists used Miller's CC index to determine status differences based on ceramics; higher status individuals would tend to have more expensive ceramics. For both glass and ceramics, Mc Bride et al. (2000:111-112) looked at the number of vessel forms, hypothesizing that higher status individuals would have access to a diversity of forms. In terms of the faunal assemblage, the archaeologists hypothesized that higher status would give officers access to better cuts of meat and more variety of domesticated animal products (McBride 2000:116-117). The fourth indicator of status, military items, was rather simple: officers and enlisted men had different types of buttons. By mapping where each button type was found within the camp, and comparing his hypotheses to the historic record, McBride was able to discover status differences (2000:119, 122). An account of life at Fort Branch states that the officers stayed in a nearby mansion; if this assertion is false, the presence of officers could be identified and status differences tested.

One final example of the archaeology of camp life comes from Fort C.F. Smith, a Union Civil War camp outside Washington, D.C. (Balicki 2000:125). Examination of

this permanent camp was based on a sample of a midden. Comparing these data to other fort sites, there are similarities and differences based on camp location and access to markets, its function, and what troops were stationed there. Artifacts at encampments demonstrated choices made by both soldiers and the army, as well as how the army subsumed the identity of individual soldiers (Balicki 2000:125-126). Artifact densities illustrated how closely the soldiers followed army regulations pertaining to camp cleaning and maintenance (Balicki 2000:136-137).

Based on the above case studies, archaeologists at Fort Branch have several fruitful areas of research. First, excavations at the camp should address the nature of supplies. Since Camp Nelson was far from the front lines, the weapons were of lower quality (McBride 1994:150-151). It is hypothesized that since Fort Branch was constantly expecting a Union attack, the garrison would have been better equipped for defense, an assertion that should be tested archaeologically. In addition, archaeologists should test the assertion that ceramics are found at both long and short-term encampments and that soldiers preferred minimally decorated wares.

Besides examinations of supply issues, archaeologists at Fort Branch should examine soldiers' lifeways, such as preferences for meat as well as availability, medicine, and alcohol. If medicine bottles are recovered, archaeologists at Fort Branch could draw conclusions about the overall health of soldiers in camp, or about medicine as an alternate source of alcohol (Balicki 2000:145-146). Finally, alcohol was prohibited at Civil War camps, so its presence or absence at Fort Branch can point out the degree of illicit activity, as well as the degree of enforcement of army regulations (McBride 1994:149;

Balicki 2000:126). In addition, Balicki (2000:114) asserts that more alcohol and fewer ceramics would be found at frontline sites, where soldiers were isolated, did not have access to ceramics, and drank to pass the time. Fort Branch's assemblage should be used to test this assertion.

The description of camp life says that officers stayed in a mansion across from the fort (McCallum 1996:57); therefore, archaeologists should test this source. If officers did not camp elsewhere, archaeologists have a fruitful avenue of research into status differences. Information from Fort Branch can be compared to Camp Nelson to see if status differences were universal during the Civil War. On a related note, Fort Branch can be used to examine whether soldiers' identities were subsumed by the military (Balicki 125-126; Lesser et al. 1994:170). Information from Fort Branch can also be compared with other encampments, both Confederate and Union (McBride 1994, 2000; Balicki 2000; Geier 2003). These comparisons can lead to a regional understanding of the Civil War.

Archaeologists should also test the historic record. Some soldiers at Fort Branch had families near the fort (McCallum 1996:58) and this proximity to home should be reflected in the artifact assemblage. The record also indicates that by June 1863, one well had been dug in the fort (Martin 1863:899). This well, however, is not shown on the fort map (Guion 1864). If it were filled in before abandonment, it could represent a time capsule of the fort's occupation. Also, the location of the well could provide insight into how worried the troops were about attack: if the well were inside the fort, it would demonstrate a feeling that the water source was in danger in the event of Union attack, or

that a possible lengthy siege could cut off the water supply. Aside from the well, the camp had to have privies. Regulations suggested that latrines be located far from the water source (Whitehorne et al. 2000:152), a fact that should be tested to give insight into possible causes of disease. Aside from this information, privies, where food remains were deposited, can provide information on soldier diets, and, if filled, can provide a time capsule.

Landscape Studies of Civil War Sites

Before discussing landscape studies at Fort Branch, it is important to define exactly what these studies entail. At military sites, landscape studies examine how forts were integrated into the landscape to provide the greatest amount of protection and to maximize the soldiers' ability to defend their theater (Smith et al. 2003:14-15; Smith et al. 2003:22-23). In terms of individual sites, landscape studies demonstrate how soldiers manipulated their environment to make camp life more comfortable. Most landscape studies focus on functional or historically particular aspects, while non-military landscape archaeology has attempted to gain insights into material culture and social relations. The latter studies focus on topics ranging from reconstruction and documentation of historic landforms to symbolic and ideological studies that look at meanings and uses of the environment (Schackel 2003:6-9).

One example of landscape studies of a defensive system comes from South Carolina (Smith et al. 2003). Starting in May 1861, South Carolinians constructed a string of forts to defend the coast and supply lines, especially the railroads (Smith et al. 2003:14). This concern for the railroads led to numerous works in Jasper and Beaufort

Counties, most of which have disappeared. Besides destroying the physical forts, modern development also destroyed the defensive system's context (Smith et al. 2003:14).

The goals of the South Carolina project were to use GPS data to create GIS maps of the batteries used to protect the Savannah-Charleston Railroad. When overlaid on historical topographic maps, these data allow better interpretation of the defensive system. Data also enable researchers to better understand both strategic and tactical defensive positioning, and to better interpret the Civil War to the public (Smith et al. 2003:14-15). This study showed that the strategy in South Carolina evolved over time and noted that any study of Confederate defensive strategy must be weighed against Union blockading strategy. In other words, the Union strategy in South Carolina was to blockade the coast, not to raid the interior. Therefore, Confederates defended the railroad system by using economy of force and mass to meet attacks and by using the topography, leaving forts unmanned until a threat presented itself (Smith et al. 2003:22-23). Studies of the individual batteries, combined with studies of the entire defensive system, the number of troops, the railroad, and the number of approaches placed the entire defensive system into its larger context: what places were important to defend, how soldiers were moved about, and how the Confederates used terrain to block Union incursions (Smith et al. 2003:24). In sum, this study illustrates that the defensive system of South Carolina was the result of the dynamic, long-term defense combined with short term Union attacks.

Another example of landscape studies dealt with fortifications surrounding Atlanta (Fryman 2000). During the Atlanta campaign, field fortifications were part of the

tactics employed by both Union and Confederate armies. Fort placement is related to manpower and can affect tactics. Because of the strength and placement of the Atlanta fortifications, Sherman decided to bypass them instead of launching a frontal assault (Fryman 2000:43, 47-48).

Although a study of an entire eastern North Carolina defensive system would be an ambitious undertaking, archaeologists should use landscape studies to gain insight into the integration of forts into the eastern North Carolina landscape. Data from a study of that type, should be tested against the above studies. In the case of Atlanta (Fryman 2000), eastern North Carolina is analogous to the city of Atlanta. A similar study could demonstrate the Union threat as it was perceived by the builders of Fort Branch and the other forts.

Landscape studies also illustrate how soldiers manipulated their landscape to make camp life tolerable. Union encampments on Maryland Heights near Harper's Ferry demonstrate how troops made standard issue tents more comfortable. Soldiers improvised, elevating their tents above the ground or building tent platforms (Winter 1994:103, 116, 119, 128-129). Winter (1994:122) found that one camp contained very few surface features, a fact that demonstrates why the entire Fort Branch property must be surveyed to determine how closely camps followed military regulations (Winter 1994:127). Overall, Winter's study demonstrated that the rough mountain terrain led to an irregular camp layout (Winter 1994:128).

Another example of landscape studies at Civil War encampment sites comes from investigations of Fort Edward Johnson and Camp Shenandoah in western Virginia. The

work at Fort Johnson and Camp Shenandoah was part of a historical-archaeological study of the landscape of the George Washington and Thomas Jefferson National Forests and was used to better interpret the fort complex to the public (Geier 2003:31-32). Geier (2003:35) found that the complex adhered to some pre-conceived plan in its construction, while existing features influenced camp layout as well as troop deployment. The data demonstrated that camps were laid out to protect soldiers from the wind, and to provide access to both springs and the fort. The camps were also laid out to keep soldiers out of sight of Union troops. Finally, the type of tent also influenced camp layout (Geier 2003:40-42, 44).

These studies present a model of how soldiers manipulated landscape in mountainous terrain. Archaeologists at Fort Branch should also develop a model of how soldiers manipulated the environment in a relatively flat area, where there are different concerns (e.g. mosquitoes). A flat land model could then be compared to camps in a mountainous setting to illustrate differences and similarities, as well as the overall effect of landscape on decisions made by camping soldiers.

The Historic Cemetery at Fort Branch

Excavations at the historic cemetery should be limited to isolating possible additional graves. North Carolina law is very strict concerning cemeteries. Any such project requires permission from the town where the cemetery lies (North Carolina General Assembly, General Statutes, Article 5, 65-13, d, a(4)). North Carolina law also outlaws certain activities at cemeteries. It is illegal to touch any grave markers. It is a Class I felony to desecrate, cover, or plow over graves without authorization. This statute

also involves opening, disturbing, destroying, removing, vandalizing, or desecrating caskets or human remains without a professional archaeologist (North Carolina General Assembly, General Statutes, Article 10, 14-148, a(1),(3); Article 10, 14-149 a, a(1)).

In the past, delineation of a cemetery consisted of stripping large amounts of topsoil from a site to identify grave shafts (Potts and Smith 2003; Baicy and Ewen 2002). At Fort Branch (Figure 20), stripping (even by hand) is problematic because of the need for exact locational information when attempting to discern firing lines. Topsoil removal should be done only after a survey has cleared the area of Civil War artifacts. In addition, it should be done after non-invasive methods (such as electrical resistivity) (Ellwood 1990) (Figure 21) minimize the amount of stripping required.

Resistivity is based on the fact that materials naturally resist an electrical current. One set of electrodes sends a current into the ground while a second set measures the electrical difference. The electrodes are spaced evenly, and then moved in a straight line in increments equal to the electrode spacing. Anomalies (e.g. digging and refilling associated with a grave) can be found with an appropriate sampling technique as well as appropriate spacing. Based on surveys in Texas, the best spacing of the electrodes is no greater than 50 centimeters for burials in a uniform grid (Ellwood 1990:92-94).

In order to achieve accurate results, resistivity data should be compared with data on other ground disturbances such as rocks. Some important things to remember when using remote sensing on graveyards are that most historic graves are oriented in an east-west directionate. Finally, it is also important to remember that the historic records are



Figure 20: The Cemetery Inside the Fort.



Figure 21: Example of a Resistivity Survey (Bregger et al. 2003).

sometimes wrong, underestimating the size of a particular cemetery (Ellwood 1990:95, 97).

Another form of remote sensing that can be useful in delineating historic cemeteries is ground penetrating radar (GPR) (King, et al. 1993). GPR sends radar waves into the ground and receives them to produce a subsurface profile. When used to delineate graves, transects should run north-south to intersect the east-west oriented graves, and transects should be placed about one to two feet apart. Cheaper, wider spacing is permissible if the goal is simply delineation (King et al. 1993:4-6), the goal at Fort Branch.

GPR is able to locate graves by detecting ground disturbances associated with digging and refilling, chemical disturbances caused by decay, air pockets from caskets, or soil compaction. One note of caution is that rocks, rodent burrows, trash, and trees can mask graves or give false readings. Burial depth can also affect the readings obtained (King et al. 1993:6-7).

The purpose of the King et al (1993) study was to determine the validity of GPR. The findings indicated that shallow echoes from the GPR are not good indicators of graves. In fact, graves deeper than four feet are most easily detected. In King et al. (1993), GPR detected two-thirds of the graves in an unmarked cemetery in Maryland. Although it can miss some graves (King et al. 1993:8, 12, 14-15), GPR could be helpful in delineating the Fort Branch cemetery.

Conclusion

The above information points out several questions that should be addressed by future excavations at Fort Branch. Based on previous archaeology, Fort Branch needs to be investigated to discover the role and function of both the commissary and the magazine, to illustrate the presence or absence of banquettes, and to discern the structure of the gun emplacements. Archaeology of fort construction should examine three aspects of the fort: its profile, plan, and placement. Archaeologists should examine the profile to see if the discrete episodes of construction are visible and if these episodes can clarify the historic record. The plan should be investigated for its adherence to Mahan's manual and for comparison with the first fort, if it can be located archaeologically. In addition, the original fort can be compared to Fort Fisher (also built by Meade) to demonstrate the role of the individual in developing fortifications (Stephen McBride, 2004, Personal Communication). In terms of placement, archaeologists at Fort Branch should address the cultural factors that affected construction and placement on the landscape, the engineer's pre-war training and experience compared with his understanding of enemy fire power (Fryman 2000:43), and the role Fort Branch's function played in its construction.

Besides previous archaeology and construction, archaeologists should conduct a survey of Mr. Winslow's property to discover skirmish areas as well as camp location. Survey should be used to clear up the discrepancy over the number of skirmishes at the site, as well as whether the Union troops retreated in an orderly fashion after the 1864 skirmish. Examination of the camp should address the nature of supplies, the presence or

absence of ceramics, the preferences and availability of meat, the use of medicine and alcohol, the question of where officers stayed, status differences between officers and enlisted men, the degree to which individuals assumed a military identity, the differences and similarities between Fort Branch and other camps, the proximity of soldiers to their homes, the location of the well, and the location of privies.

In addition to addressing questions that apply only to Fort Branch, archaeologists should examine Fort Branch as part of the landscape. Landscape studies should be used to gain insight into the North Carolina defensive landscape, and these insights should be tested against data from other landscape studies. The final requirement for research at the site is to delineate the cemetery so that future excavations do not adversely impact this resource. The priorities for this research plan are, first, establishing a permanent datum to tie past and future work into one standard grid, then to survey the entire property to locate areas for future investigations. Finally, archaeologists should delineate the historic cemetery. After these priorities are accomplished the remaining questions can be addressed in any order.

CHAPTER FOUR-SITE MANAGEMENT PLAN

The preceding archaeological research design provides several potentially informative research questions. Without a site to investigate, however, research design is useless. The purpose of this chapter is twofold: to make recommendations to protect the archaeological record, and to protect and restore the physical site. Some site background provides information on where the preservation process currently stands and what it should address in the future.

In 1961, citizens of Martin County began to take an interest in developing the fort as a historic attraction. With this goal in mind, personnel from the North Carolina Division of Archives and History performed a preliminary assessment of the site and made recommendations for its preservation. In addition, the Fort Branch Battleground Commission was formed to oversee the site (Watts et al. 1979:43). The landowner, Mr. Henry Winslow, leased the site to the Commission for one dollar (Henry Winslow, 2004, Personal Communication), the site was cleared, and parking facilities were added. To prevent site looting, the Martin County Sheriff's Department began patrolling the site (Watts et al. 1979:43). This strategy seems to have worked since looting is no longer a problem at the site (Henry Winslow, 2004, Personal Communication).

It is important to discuss the preservation roles played by the landowner, Mr. Winslow, and the Fort Branch Battlefield Commission, led by Mr. Don Torrance. As mentioned previously, the Fort Branch Battleground Commission was formed in the 1960's, during the Civil War centennial. In the 1970's, the Commission was re-formed as the Fort Branch Battlefield Commission, the group that exists today. Normally, the

Commission is made up of a chairman, a vice-chairman, a secretary, a treasurer, a representative from the Winslow family, and a representative from the reenactment group. At this time, however, the Commission is going through a period of reorganization and does not necessarily have active members for each post (Don Torrance, 2004, Personal Communication).

Mr. Winslow has an overall say in the preservation and restoration arena. The Commission serves more as an advisor, helping in this process. In addition to this limited role in preservation and restoration, the Commission helps with maintenance and upkeep, recruiting and looking after volunteers, fundraising, and most importantly, the annual reenactment. Echoing Mr. Winslow's sentiments, the Commission is also seeking a long-range site plan: a function to be fulfilled by this document (Don Torrance, 2004, Personal Communication).

Even though the site has now been managed by Mr. Winslow and the Commission for over forty years, a written management plan is useful. A written plan will demonstrate that the Commission has done the necessary research to protect the site and that preservation is a guiding principle. In addition, a management plan informs any potential funding agency exactly how their money will be spent. More importantly, a written plan ensures that the Commission's operations continue even after leadership changes (Brent 2000:8). Experience in Piscataway, Maryland, demonstrates the importance of stability through leadership changes; after a key leader of the preservation movement moved away, no preservation initiatives were enacted (Rothrock 2000:24).

The Fort Branch site management plan addresses both archaeological resources and the site itself. For archaeological resources, the plan examines the reporting of previous archaeological investigations, as well as curating field notes, photographs, completed reports, and recovered artifacts. Since Federal guidelines (Weeks and Grimmer 1995:52) (National Park Service 1983) suggest that work on historic properties avoid disturbing the in situ archaeological remains, it is recommended that the property be surveyed to avoid damaging archaeological resources. The plan also addresses how the landowner's plans to bring fill dirt to reconstruct the fort's riverside can be accomplished while minimizing contamination.

The management plan's second portion focuses on protecting the physical site, beginning with a brief discussion of Mr. Winslow's plans. Building on Winslow's plan, the management plan discusses where the fort stands in the preservation process, including its inclusion in the National Register of Historic Places, the Commission's input into planning and zoning issues, and its fundraising apparatus and support from annual reenactments.

Although the Commission and the landowner have done a great deal to protect the fort over the past forty years, the new plan recommends steps to address planning and zoning issues, as well as the need to get the preservation message out to a wider public audience through increased public visitation. Recommendations to increase tourism include drafting an interpretive plan for the site, hiring an interpreter, or finding a volunteer interpreter, and working with local school districts to fulfill North Carolina History curriculum requirements. On a related note, the Commission and Mr. Winslow

should work to restore the land to its Civil War appearance in order to give visitors a sense of the fort as the soldiers knew it. This plan then discusses the most pressing threat to the site, erosion, concluding with a brief summary of these recommendations. Throughout, this plan cites examples from other historic sites in the United States.

The Archaeological Resource Management Plan

The most pressing problem facing Fort Branch's archaeological record is the lack of reporting for previous archaeological investigations. To date, Phelps' 1973 and 1974 excavations have not been properly reported, despite data produced by these excavations, and it is not known where the artifacts are currently housed. Calls to the Office of State Archaeology, the state underwater archaeology branch, as well as a check of collections in the Phelps Archaeology Laboratory at East Carolina University failed to locate these artifacts (Dolores Hall, 2003, Personal Communication; Bill Oliver, 2004, Personal Communication; Nathan Henry, 2004, Personal Communication). Mr. Winslow and the Commission do not have the artifacts, either (Henry Winslow, 2004, Personal Communication; Don Torrance, 2004, Personal Communication). Fortunately, several plans and profiles from Phelps' work were filed at the Phelps Archaeology Laboratory at East Carolina University. The landowner and the Commission should locate the field notes, photographs, and artifacts and curate them, together with plan views and profiles. Finding and housing these data together will enable someone to produce a report in the future. The same recommendation applies for the 1987 Bridge Trench Project and the amateur excavations.

The benefits of reporting these excavations are that a report will prevent future research from wasting time in the same areas and will add to the database of Civil War archaeology, enabling others to test hypotheses. This collection of reports will help to guide future excavations by raising further research questions.

A related priority for managing the archaeological record is locating and housing all artifacts from previous investigations. At this point, the majority of the artifacts from the 1977 underwater excavations are housed at Fort Branch. Other artifacts are housed at the Underwater Archaeology Laboratory in Kure Beach. The artifacts include a ramrod found in the barrel of one submerged cannon (Henry Winslow, 2004, Personal Communication). In addition, the Phelps Archaeology Laboratory houses one donated collection (accession number 1602). It is not known where artifacts from Phelps' excavations are housed. All these artifacts should be loaned or gifted to the Commission so they can be housed for future research and public interpretation.

In the near future, the building housing these artifacts should be upgraded. According to the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (National Park Service 1983), proper curation facilities must have sufficient space manned by professional staff, ensure artifacts are not degraded, associated records meet professional archival standards, collections are accessible to researchers, and collections are available for interpretation, but are safe from theft or vandalism. 36CFR79 *Curation of Federally-Owned and Administered Archeological Collections* (Code of Federal Regulations 2002), adds that collections should be housed at one facility unless special treatment (e.g. conservation) is needed. Obviously, some of

these requirements entail a tremendous outlay of funds (e.g. hiring professional staff).

36CFR79 Curation of Federally-Owned and Administered Archeological Collections adds more specific guidelines. According to this code, a curation facility should be able to label, catalog, accession, store, and conserve the collection. The curation facility should also maintain accurate records, meet all local codes, have a fire detection and suppression system, protect paper records in a safe or other fireproof container, have a security system, have an emergency management plan (in case of hurricanes e.g.), and protect artifacts from temperature fluctuations, excess humidity, light damage, and ultraviolet radiation. It is recommended that the Commission and landowner meet the above requirements. Labeling, cataloging and accessioning can be done by volunteers or student interns to control costs. To cover costs of fire detectors and suppressors, climate control, and security, the landowner and Commission should try to obtain grant money. In addition, due to conservation costs, it is recommended that the Commission contract out any conservation work (to the Office of State Archaeology or East Carolina University).

Before any further ground-disturbing activity is undertaken, an archaeological survey should be undertaken. The specifics of this survey are covered in the preceding archaeological research design. This survey is important for future management decisions because it will ensure that any future construction does not destroy in situ archaeological remains. Since the only way to be sure of the cemetery's boundaries is by stripping possible grave sites (King, et al. 1993:15), a survey will ensure that most artifacts are mapped and provenienced before they are removed from their context.

The final aspect of the management plan for archaeological resources focuses on reconstructing the riverside parapet. The landowner, Mr. Henry Winslow, plans to bring dirt in to reconstruct the river face that has been damaged by erosion (Henry Winslow, 2004, Personal Communication). It is imperative that clean fill be brought in. Clean fill ensures that no artifacts are mistakenly attributed to the site, when they came from elsewhere. If clean fill can not be brought in, a geo-textile fabric should be laid down before the soil is deposited. The fabric provides a line of demarcation between the original fort and reconstructed portions of the parapet and allows roots to grow through it to anchor earth that was brought in. Geo-textile fabric prevents out-of-context artifacts from contaminating the site (Loretta Lautzenheiser, 2004, Personal Communication).

The Site Management Plan

In order to guide the site management plan, this section begins with a brief discussion of the landowner's plans for the property. Mr. Winslow's highest priority is to rebuild the fort to its original dimensions and to replace the guns recovered in 1977. Mr. Winslow would like to see the Fort Branch Battlefield Commission take a more active role in day-to-day management and acquire new members to energize it. This past summer, Mr. Winslow wanted the fort open on weekends to increase tourism, but the Commission could not supply anyone (Henry Winslow, 2004, Personal Communication).

One of the fort's biggest assets is that it is currently listed on the National Register of Historic Places (National Register of Historic Places Inventory-Nomination form 1972). Listing on the National Register puts the fort in the public domain and informs local government of its existence; therefore, local government can take

preservation into its planning decisions. In addition to these aspects, many funding organizations require that a Civil War site be listed on the Register to be eligible for funding (Brent 2000:8). Since this time-consuming, research-intensive step has been completed, the Commission is free to concentrate on more important aspects of site management. Another way the Commission gets the preservation message out to the community is by sitting on the Planning and Zoning Board of Hamilton and serving as a voice for the protection of Fort Branch (Henry Winslow, 2004, Personal Communication).

In terms of site management, the most important role of the Fort Branch Battlefield Commission is as fundraiser. The Fort Branch Battlefield Commission makes roughly 80% of its money from the annual reenactment, with the other 20% coming from private donations. During the reenactment, the Commission charges visitors five dollars for a parking pass and women from the community prepare food and sell it. All proceeds from these activities go to the fort and provide a starting point for meeting recommendations contained in this plan. The fort does not charge admission to visitors at other times of the year because of the money made at the reenactment. This fact could be a big draw for tourists and locals who want an inexpensive family day trip. Aside from providing funds, the reenactments also provide a solid core of reenactors determined to preserve the fort (Henry Winslow, 2004, Personal Communication).

The previous discussion demonstrates that the landowner, as well as the Commission, has provided a solid foundation for preserving Fort Branch; however, more can be done. In the planning and zoning arena, it is recommended that the site be placed

under planning and zoning protection as soon as possible. One of the biggest draws is that it is undeveloped (Henry Winslow, 2004, Personal Communication): zoning protection ensures that the site remains that way.

An example of the importance of protection comes from Manassas National Battlefield Park (National Park Service American Battlefield Protection Program 2001). In 1988, a privately-owned 540 acre tract was slated for development into a shopping mall. Since this project would have adversely affected the entire battlefield, the United States Government acquired the land, paying more than 100 million dollars (National Park Service American Battlefield Protection Program 2001). With zoning protection, this expense can be avoided. In addition, when residents of Eastport, a community in Annapolis, Maryland, wanted to protect their maritime trade heritage, they used zoning to ensure that residential waterfront development did not adversely impact historic waterfront structures (Hole 2000:5).

By working with the Planning and Zoning Board, the Commission additionally guarantees that the board has the best information when it comes to zoning decisions that could possibly affect the fort. Experience in Cottage Grove, Minnesota, demonstrates what can happen when planning and zoning boards do not have accurate preservation information (Vogel 2000). Planning decisions were based on poor or inaccurate information and were not integrated with community planning, putting Cottage Grove's historic resources at risk. Early integration with planning and zoning would have prevented many headaches (Vogel 2000:17).

One final way that an active presence on the Planning and Zoning Board can protect the site is by getting the board involved as an active partner in the historic preservation movement. Partnerships developed between Chickamauga National Battlefield and local Georgia county planners now mutually inform the battlefield park of permit applications and zoning requests (Reed 2000:27). With an active partnership, the Commission can head off any adverse effects.

Working with the Planning and Zoning Board can get the preservation message out to local government; however, the Commission must get this message out to the public at large. *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (National Park Service 1983) suggests that the public be involved in the process from the beginning (Vogel 2000:17). Experience at Chickamauga National Battlefield shows that the best planning methods involve multiple partners from different disciplines, all making equal contributions to the process (Reed 2000:18). Aside from helping to restore one particular site, public involvement in the preservation process also tends to raise public awareness of all Civil War sites (Brent 2000:11).

Probably the best way to increase the public's stake in preservation is by increasing the number of visitors to the site. People who know the site and enjoy it will more likely work to see it properly preserved. The easiest way to increase visitation is to keep it open on weekends during the summer, since people usually tend to travel more during the summer. It is therefore recommended that the Commission hire a part-time interpreter or use a volunteer interpreter for summer weekends. This strategy would

provide a person whose sole responsibility is staffing the site and interpreting it to the public.

The benefits of using an interpreter go beyond leading tours for visitors. South Carolina's Rivers Bridge Civil War battlefield hired a full-time interpreter in 1998. Although the interpreter was not able to give tours to all site visitors, he was instrumental in developing interpretive programs (Bell and Enter 2002:42). On a related note, the Fort Branch Battlefield Commission needs to develop a written interpretive plan. This step can be taken either before bringing an interpreter to the site or the interpreter can write the plan himself. By allowing any staff to tell a consistent story, a written interpretive plan is the final step in Brent's (2000:7-8) three step program for Civil War site preservation. The first step is listing on the National Register of Historic Places and the second step is developing a site management plan (Brent 2000:7). A museum professional or museum studies student would be the best person to produce an interpretive plan since a main concern of museums is providing exhibits.

The Commission should increase visitation by forging partnerships with local public schools. In North Carolina, state history is part of the curriculum for fourth and eighth grade students (North Carolina Department of Public Instruction 2004). With no admission charge, Fort Branch provides an inexpensive way to acquaint schoolchildren both with the important ethic of historic preservation and with North Carolina history. The fort is far more interesting than standard history textbooks.

Combining historic sites with school curriculum has been used to great effect at the Rivers Bridge Civil War Battlefield in South Carolina (Bell and Enter 2002).

Interpretive programs for schoolchildren are based on the curriculum and reviewed by teachers to ensure that the programs are appropriate. In addition, programs also include educational materials both before the site visit and afterwards. One program, “A day in the Life of a Soldier,” presents information about the life of average soldiers. This program uses reproduction clothing and equipment as part of a hands-on experience to give children a view into the lives of everyday soldiers (Bell and Enter 2002:42). Fort Branch, with its enthusiastic pool of Civil War reenactors, could institute a program like this that would forge relationships between reenactors and the general public and teach children about the war from the standpoint of individuals who fought, not just the men who led the armies.

In addition to this program, Rivers Bridge is developing other programs that can be used to teach schoolchildren. These programs include “The Words of War,” which, through poems, speeches and letters, discusses how people dealt with the lead-up to the war, the war itself, and the aftermath during Reconstruction. Other possible interpretive programs could address what the battlefield can teach about Civil War strategy and tactics. Taking a wider view, Civil War battlefields can also teach the public about wider contexts of the Civil War, such as its causes and the impact of new technology (e.g. rifled artillery and infantry weapons), as well as the different meanings that have been attached to the Civil War over the years (e.g. “The Lost Cause”) (Bell and Enter 2002:43).

Partnerships with schools also encourage other people to visit the site, if children tell parents about a trip to the fort, their parents may be encouraged to go. At the very least, parents will know that the site exists and may support preservation efforts.

To enhance tourists' enjoyment and educational experience, the Commission should return the site to its appearance during the Civil War. This step is one of the landowner's major goals. As mentioned previously, Mr. Winslow would like to rebuild the parapet on the riverside, as well as replace guns recovered in 1977 (Winslow, 2004, Personal Communication). He will use Guion's (1864) map to site the guns. Winslow's goals allow a brief examination of the goals and methods of battlefield restoration. The goal of restoration is "...to make the landscape appear as it did at a particular significant time in its history, rather than to maintain and preserve the landscape as it has evolved over time" (Birnbaum 1997:22).

In order to accomplish this goal, the Commission should begin by researching the site's documentary history (Birnbaum 1997:22). Much of this research has already been done (Shiman 1990; Donnelly N.D.) and many sources are cited, giving the Commission a good starting point. Aside from enabling appropriate treatment decisions to be made, the documentary history guides decisions for maintaining, preserving, and interpreting the site. A second step in the restoration process is to document contemporary landscapes, a process that serves as a starting point for all restoration projects and informs the Commission of the amount of work that needs to be done to the site.

At Fort Branch, once the dirt is brought in for the riverside, the next priority should be to remove trees from the parapet, and from the area inside the fort. Aside from helping to restore a Civil War appearance, this step will also prevent the fort from being destroyed by the forces of erosion. Trees outside the fort should be removed as well to

meet Mahan's (1856:xxii) prescription that there should be no place for the enemy to hide and fire on the fort.

Battlefield restoration is now being undertaken at Gettysburg National Battlefield (Lawhon 2002). In addition to attempting to restore the battlefield terrain, this program is attempting to restore historic fence lines and viewsheds. The goal is to improve public interpretation, as well as enabling the public to see the battlefield from the soldiers' viewpoint (Lawhon 2002:36). The latter goal goes hand-in-hand with Rivers Bridge's interpretive goal of introducing schoolchildren to "A Day in the Life of a Soldier" (Bell and Enter 2002:42).

The Gettysburg restoration is based on military terrain analysis, or KOCOA, which stands for Key terrain, Observation and fields of fire, Cover and concealment, Obstacles, and Avenues of Approach (Lawhon 2002:36-37). To meet these tenets of terrain analysis, Gettysburg is removing trees that block views available during the battle. The park is also repairing damaged or missing features, such as fences and buildings, and replacing non-native vegetation (Lawhon 2002:36-37). Although Gettysburg saw more action, as well as more participants, the work at Gettysburg provides a blueprint for future landscape work at Fort Branch. An important point to remember when restoring a battlefield is that everything restored to the site must have a counterpart in either the archaeological or historical record. Otherwise, restoration gives a false impression (Birnbaum 1997:22).

A site management plan would not be complete without discussing the biggest threat to the site: erosion. The worst erosion comes on the riverside of the fort. Erosion

on this side of the fort is caused when trees along the riverbank get too big and fall over during heavy rains and winds. When a tree is uprooted, it pulls outwards and causes the bluff face to collapse, bringing the parapet with it (Henry Winslow, 2004, Personal Communication). In order to prevent tree falls from pulling down the parapet, the landowner and the Commission should monitor tree growth. Before trees get too big, they should be cut down. Simply stabilizing the bank will not work. The state attempted to correct the erosion problem by placing black netting on a portion of the bluff face and planting grasses along it in order to anchor the soil. Unfortunately, the first frost came and knocked the entire apparatus into the river.

Mr. Winslow's plan to combat erosion, bringing in dirt and rebuilding the river bluff would be the best way to prevent further erosion. When this project is completed, native grasses should be planted on the face. The roots of these grasses will hold the soil in place, preventing erosion (National park Service and Georgia Trust for Historic Preservation 1998:18; Azola 2001:7). To plant grasses on the bluff face, the Commission and Mr. Winslow should use some sort of "plastering" technique, such as a hydroseeder (Azola 2001:18). Native grasses should be planted on any bare spots inside the fort and along the parapets, since they are adapted to the local climate and can withstand weather fluctuations, insects, and diseases. Using native vegetation makes sense on an aesthetic level too: it is much better looking (Azola 2001:18), and too many different types of grass can obscure the form of an earthwork, hurting public interpretation (National Park Service and Georgia Trust for Historic Preservation 1998:24). Finally, grass cover prevents falling rain from dislodging soil and damaging the earthwork (Azola 2001:6-7).

Trees are the biggest threat not only to the riverside of the fort (Figure 22), but also to the fort's interior (Figure 23) and other parapets. Current maintenance practices at the fort show what the landowner and the Commission are doing correctly and what needs to be improved. Once a year, in April, the fort is mowed with a standard push mower (Henry Winslow, 2004, Personal Communication). It is recommended that this mowing program be continued because it decreases the amount of walking done on the parapet and the chance that the mower blade will dig into the soil (National Park Service and Georgia Trust for Historic Preservation 1998:19, 23, 26; Azola 2001:30, 56). In addition, mowing lays down mulch (National Park Service and Georgia Trust for Historic Preservation 1998:41). As a way to further reduce earthwork degradation mowing should be done with a "boom-arm mower." "Boom-arm mowers" are attached to a tractor and allow the earthwork to be mowed without someone walking on them. These mowers also help to avoid digging into the earthwork with the blades (Azola 2001:57).

A further problem with the current mowing regimen is that the grass appears to be cut too short which can lead to gouging the earthwork (Azola 2001:57; National Park Service and Georgia Trust for Historic Preservation 1998:21). Aside from threatening the earthwork, a short mowing height can also inhibit root growth and kill grasses that hold the soil in place. Short mowing removes leaf surfaces which, by inhibiting photosynthesis, lead to poor root development and possibly death of the grasses (Azola 2001:15; National Park Service and Georgia Trust for Historic Preservation 1998:42). The Commission should leave grass on the parapet at about 6 inches tall.



Figure 22: Erosion on the Interior of the Fort.



Figure 23: Example of Erosion Caused by Tree Falls Within the Fort.

Keeping the grass tall provides an added benefit to the preservation goals at the site: it discourages tourists from climbing on the earthwork and damaging it with foot traffic (National Park Service and Georgia Trust for Historic Preservation 1998:21). Increasing signage at the fort, as well as keeping the parapet grass tall should stop tourists from walking on the fort walls. Grass in the fort's interior, on the other hand, should be kept short so that visitors can easily walk and so that, when viewed next to the tall grass-covered parapets, the short grass will reinforce the message that the parapets are for viewing, not climbing (National Park Service and Georgia Trust for Historic Protection 1998:21).

Finally, because the landowner's goal is to interpret the earthwork to the public and because trees can damage the earthwork, trees inside the fort, on parapets, and outside should be removed gradually over time. When trees are knocked over by wind or ice, the roots pull up earth, damaging the earthwork and exposing the wall to erosion (National Park Service and Georgia Trust for Historic Preservation 1998:33, 50-51; Azola 2001:11). The most efficient and effective way to remove trees is by cutting them down so that they fall away from the earthwork. To remove the stumps, the Commission should spray them with an herbicide to prevent them from resprouting or use a stump grinder. Where trees are removed, the surface should be smoothed and covered with woodchips to prevent decay from further degrading the fort (National Park Service and Georgia Trust for Historic Preservation 1998:35).

To sum up, recommendations for the site can be divided into two groups: protecting the archaeological resources and protecting the physical site. For cultural

resources, this plan recommends that the Commission gather all field notes, associated records, and photographs from previous archaeological investigations and house them, either in a safe place on site, or at a local repository such as East Carolina University. The purpose of this recommendation is to ensure that excavation reports can be prepared as soon as possible. The reports will add data to a growing Civil War database and are the ethical thing to do archaeologically. A second recommendation is to locate and house all recovered artifacts in one place. If that facility is on fort property, present curation facilities must be upgraded (Code of Federal Regulations 2002). The fort property should be surveyed as soon as possible so that ground-disturbing activities do not adversely impact in situ archaeological remains. So any future survey does not yield false information, fill that Mr. Winslow brings in for the river side should be clean, and separated from the original construction by geo-textile fabric.

The site management plan for the physical site recommends, first, that the Commission work with the planning and zoning board of Hamilton to get zoning protection. In addition to protecting the site, a close working partnership with the zoning board ensures that the zoning board has the best information for site preservation and that it incorporates preservation into its planning decisions. Aside from forging a partnership with local government, the Commission needs to work at increasing site visitorship. To accomplish this goal, the Commission should open the site and staff it on weekends, initially with a part-time interpreter. Either before or after the interpreter is brought in, Fort Branch needs to develop an interpretive plan. The Commission should also work with local school districts as well as return the site to its Civil War appearance. To

combat the biggest threat to the site, erosion, the Commission should rebuild the river bluff and plant grasses to stabilize the soil. Trees on the river bank should be monitored and cut down before they get big enough to fall over and destroy the earthen parapet. Grasses should be planted on any bare spots in the fort's interior. When these grasses take root, the Commission should continue to mow the site once a year, leaving the grass on the parapet about 6 inches high. Most importantly, trees in the fort's interior, on the parapets, and outside the fort should be cut down gradually and bare spots covered with wood chips and replanted.

CHAPTER FIVE-CONCLUSION

Even though Fort Branch was not a nationally significant earthwork, its role in local history and in protecting Confederate supply lines make it an important site for further study. Aside from its importance on the local level, however, the fort is also important for the information it can provide about a defining moment in American history. History alone has treated the Civil War in depth, but archaeology presents a chance to understand the conflicts and problems of modern American society and to add new perspectives to researchers' understanding of the time period. The purpose of this thesis, therefore, is to develop an archaeological research design to guide future research at the site. To ensure that there is a site to investigate, the thesis also presents a site management plan so the site can be restored and preserved.

In terms of research design, there are several areas that should be investigated archaeologically. Based on previous archaeology, Fort Branch needs to be investigated to discover the role and function of both the commissary and the magazine, to illustrate the presence or absence of banquettes, and to discern the structure of the gun emplacements. Archaeology of fort construction should examine three aspects of the fort: its profile, plan, and placement. Archaeologists should examine the profile to see if the discrete episodes of construction are visible and if these episodes can clarify the historic record. The plan should be investigated for its adherence to Mahan's manual and for comparison with the first fort, if it can be located archaeologically. In addition, the original fort can be compared to Fort Fisher (also built by Meade) to demonstrate the role of the individual in developing fortifications (Stephen McBride, 2004, Personal

Communication). In terms of placement, archaeologists at Fort Branch should address the cultural factors that affected construction and placement on the landscape, the engineer's pre-war training and experience compared with their understanding of enemy fire power (Fryman 2000:43), and the role Fort Branch's function played in its construction.

Besides previous archaeology and construction, archaeologists should conduct a survey of Mr. Winslow's property to discover skirmish areas as well as camp location. Survey should be used to clear up the discrepancy over the number of skirmishes at the site, as well as whether the Union troops retreated in an orderly fashion after the 1864 skirmish. Examination of the camp should address the nature of supplies, the presence or absence of ceramics, the preferences and availability of meat, the use of medicine and alcohol, the question of where officers stayed, status differences between officers and enlisted men, the degree to which individuals assumed a military identity, the differences and similarities between Fort Branch and other camps, the proximity of soldiers to their homes, the location of the well, and the location of privies.

In addition to addressing questions that apply only to Fort Branch, archaeologists should examine Fort Branch as part of the landscape. Landscape studies should be used to gain insight into the North Carolina defensive landscape, and these insights should be tested against data from other landscape studies. The final requirement for research at the site is to delineate the cemetery so that future excavations do not adversely impact this resource. The priorities for this research plan are, first, establishing a permanent datum to tie past and future work into one standard grids, then to survey the entire property to

locate areas for future investigations. Finally, archaeologists should delineate the historic cemetery. After these priorities are accomplished the remaining questions can be addressed in any order.

The site management recommendations can be divided into two groups: protecting the archaeological resources and protecting the physical site. For cultural resources, this plan recommends that the Commission gather all field notes, associated records, and photographs from previous archaeological investigations and house them, either in a safe place on site, or at a local repository such as East Carolina University. The purpose of this recommendation is to ensure that excavation reports can be prepared as soon as possible. The reports will add data to a growing Civil War database and are the ethical thing to do archaeologically. A second recommendation is to locate and house all recovered artifacts in one place. If that facility is on fort property, present curation facilities must be upgraded (Code of Federal Regulations 2002). The fort property should be surveyed as soon as possible so that ground-disturbing activities do not adversely impact in situ archaeological remains. So any future survey does not yield false information, fill that Mr. Winslow brings in for the river side should be clean, and separated from the original construction by geo-textile fabric.

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