

**THE CIVIL WAR IN KENTUCKY:
ARCHAEOLOGICAL INVESTIGATIONS AT FT. DUFFIELD
WEST POINT, HARDIN COUNTY, KENTUCKY**

Nancy O'Malley
Project Director

Report Submitted to:

Fort Duffield Heritage Committee
16706 Abbotts Beach Road
West Point, Kentucky 40177-9609
Telephone: (502) 933-4222
Contact: Gary Masterson

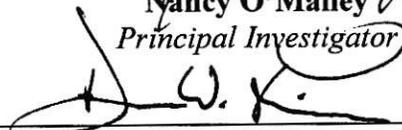
Report Submitted by:

Program for Archaeological Research
Department of Anthropology
University of Kentucky
1020A Export Street
Lexington, Kentucky 40506-9854
Telephone: (606) 257-1944
Fax: (606) 323-1968

Technical Report No. 418



Nancy O'Malley
Principal Investigator



Dr. Donald W. Linebaugh
Principal Investigator

November 15, 1999

ABSTRACT

Documentary and archaeological investigations were conducted by the University of Kentucky's Program for Archaeological Research at the site of Fort Duffield in the fall of 1997. Fort Duffield was a Union fortification, built in 1861 on top of a prominent hill overlooking the town of West Point, located on the south bank of the Ohio River downstream from Louisville, Kentucky. The fort was manned for the longest period by the 9th Michigan Infantry under the command of Col. William W. Duffield; however, other units associated with the site for short periods include the 37th Indiana Volunteers, the 1st Wisconsin, the 1st and 18th Ohio, and the 16th and 28th Kentucky Infantry Regiments. Although the purpose in its construction in West Point was to defend Louisville, Fort Duffield was never attacked by the Confederate army.

The site exists today as a well-preserved earthwork with associated spring and remains of log huts that sheltered the soldiers. It is located on a large tract of 172 acres that is owned by the City of West Point, Kentucky. Documentary research conducted by Richard Briggs, local West Point historian, and others was compiled and analyzed for information regarding the construction, plan and organization of the fort, and daily lives, duties, and activities of the soldiers. Field investigations included the creation of a detailed topographic map by a team of professional land surveyors, a soil conductivity survey, metal detecting, and excavation of shovel probes, trenches, and test units in various parts of the site. The purpose of the field investigations was to examine particular features associated with the earthworks (the main embankment and a possible exterior rifle trench), gather data in areas where structures had once stood, assess the preservation and integrity of archaeological deposits, and identify areas for future excavation. An extant drawing of the fort made by one of the soldiers who had been stationed there indicated that structures were concentrated in the eastern half of the area enclosed by the earthworks. Archaeological investigations identified concentrations of cut nails that are thought to be associated with reinforced tents that stood in the southeast corner of the enclosed area. Test units placed in a flat bench area at the edge of the bluff line forming the fort's northern boundary indicated that soil had eroded downslope from higher elevations and that artifacts dating from the Civil War years were mixed with later artifacts from post-War activities. No intact features such as stone chimney bases were identified within the area enclosed by the earthworks; however, the southern slope outside the fort contained at least 15 soldiers' log huts consisting of stacked stones (possible chimney remnants) on the uphill side of artificially leveled areas. No excavation was conducted on the south slope hut locations during the present phase of investigations.

ACKNOWLEDGMENTS

The historic and archaeological investigations conducted at Fort Duffield owe much to the dedication of many local volunteers in West Point and elsewhere who have shouldered the challenge of preserving and studying the site and bringing its story to the public. The Fort Duffield Heritage Committee secured the funding for the archaeological investigations and organized the volunteers for the fieldwork. The Kentucky Heritage Council provided a grant that funded much of the project costs with matching cash and in-kind services making up the remainder. Gary Masterson, chairman of the Committee, and Richard Briggs, fort historian, served as the main contact people for the project but many others have helped in various ways. The fieldwork was conducted with the help of both paid professional archaeologists and volunteers. Volunteers for the fieldwork included: Annette Baker, Sandy Baker, Sandy Berding, Richard Briggs, Hans Eck, Shawn Farkas, Galen Goldsmith, Jason Jenkins*, David Ludwig*, Trina Maples*, Gary Masterson, Sissy Masterson, Monty Matthews, Julie McClellan, Bill Morris, Marlene McClellan, Denise Mudd, Matt Prybylski*, M.J. Quiggins, Bernell Rash, Lois Rash, Lynette Rogers, Vestal Rogers, Craig Seabolt, Pat Schutt, Carl Shields*, and Jason Slider. Jay Stottman, staff archaeologist with the Kentucky Archaeological Survey, brought his crew (noted as *) from an archaeological field project he was conducting in Louisville to volunteer their time at the fort.

Professional archaeologists and field technicians employed on the project included Emily Bernier, Dwight Cropper, Jennifer Harr, and Dr. Mary Powell. The project was conducted under the supervision of Principal Investigators Nancy O'Malley and Dr. Donald Linebaugh. Dr. Linebaugh's involvement came about as a result of his assumption of the directorship of the University of Kentucky Program for Archaeological Research shortly before the fieldwork was conducted. Dr. Berle Clay served as one of the original principal investigators with O'Malley but resigned this role upon his departure from the University of Kentucky for employment with Cultural Resource Analysts, Inc. in the summer of 1997. However, Dr. Clay conducted the geophysical survey of a portion of the fort interior before he left the University. A detailed topographic map of the site was prepared by members of the Falls of the Ohio chapter of the Kentucky Association of Professional Surveyors under the supervision of Al Matherly of Matherly Land Surveying, Inc. in Louisville. Surveyors included Al Matherly, Brian Matherly, Scott Shufflebarger, Aaron Dawson, Richard Matheny and Eric Spurrier. Archaeological fieldwork was conducted under the direct supervision of Nancy O'Malley. Dr. Linebaugh assisted in the reconnaissance of the south slope, organized the laboratory processing of recovered artifacts, and provided review comments and suggestions concerning the final report. Lab technicians Mary Brouse and Bridget Byrne performed the washing, sorting, and cataloguing of the recovered artifacts. Preparation of the illustrations and figures in the final report was done by Christina Kiddle and David McBride. Review of the draft report was conducted by Richard Biggs, and Kentucky Heritage Council staff members Tom Fugate and Tom Sanders; their comments were much appreciated.

TABLE OF CONTENTS

	Page
Abstract	ii
Acknowledgments	iii
List of Figures	v
List of Tables	vi
CHAPTER 1: Introduction	1
CHAPTER 2: A Brief History of Fort Duffield	7
CHAPTER 3: Structural Features of the Fortification and Encampment	11
CHAPTER 4: Archaeological Investigations of Fort Duffield	21
CHAPTER 5: Artifacts Recovered from Ft. Duffield	67
CHAPTER 6: Summary, Conclusions, and Recommendations	75
References Cited	79
Appendix A - Artifact Inventory	

LIST OF FIGURES

Figure	Page
1. Location of project area (Hardin County, KY)	1
2. Pearman's Hill looking south from Indiana (West Point is to right of photo)	2
3. Location of Fort Duffield near West Point, Kentucky (U.S.G.S. 7.5-min. quadrangle, Fort Knox, Ky., 1991)	3
4. Main earthwork berm, looking west.	4
5. Spring, looking south	4
6. Charles Kelley's drawing of Fort Duffield.	12
7. Strategic location of Fort Duffield relative to major transportation routes (U.S.G.S. 7.5-min. quadrangle, Fort Knox, Ky., 1991).	13
8. Drawing of winter hut	18
9. Detail of Charles Kelley's drawing of Fort Duffield showing structures in the fort interior	18
10. Topographic map of Fort Duffield (see pocket in back of report for full size folded map)	22
11. Typical elements of fortification compared to two cross-sections of the main embankment	24
12. Geophysical survey results.	27
13. Location of metal detector targets	28
14. Distribution of Civil War artifacts in metal detector survey area, showing areas of concentrations.	29
15. Detail of topographic map showing shovel probe locations	37
16. Profile of Shovel Probe 2	40
17. Profile of Shovel Probe 3	40
18. Profile of Shovel Probe 4	41
19. Profile of Shovel Probe 5	41
20. Profile of Shovel Probe 7	41
21. Profile of Shovel Probe 9	42
22. Detail of topographic map showing test unit locations	43
23. Generalized cross-section of the fort site topography.	44
24. Profile of Test Unit 1 (south wall)	49
25. Profile of Test Unit 2 (south wall)	52
26. Profile of Test Unit 5 (west wall)	52
27. Profile of Test Unit 3 showing Feature 1 (south wall).	55
28. South profile of Test Unit 7, main entrenchment berm	58
29. West profile of Test Unit 7, main entrenchment berm	59
30. Interior of Fort Sumter, Charleston, South Carolina, with Gabion reinforcement, 1865	61
31. Revetments at Centreville, Virginia, March 1865	62
32. East profile of Test Unit 8, possible rifle trench.	63
33. Detail of topographic map showing possible soldiers' hut locations	64
34. Stacked foundation stones associated with the hunting camp building	65
35. Artifacts dating to the Civil War occupation	71
36. Artifacts dating to the Civil War occupation	71

LIST OF TABLES

Table	Page
1. Artifacts recovered by the metal detector survey.	30
2. Artifact concentrations 1-3 in the metal detector survey area.	34
3. Artifacts recovered from the shovel probes.	38
4. Artifacts recovered from Test Unit 1.	46
5. Artifacts recovered from Test Unit 4.	48
6. Artifacts recovered from Test Unit 2.	49
7. Artifacts recovered from Test Unit 5.	53
8. Artifacts recovered from Test Unit 3.	55
9. Artifacts excluded from detailed discussion	68
10. Cut nails and spikes.	70

CHAPTER 1: Introduction

In 1976, the Fort Knox Armor Center gave a 172-acre tract to the City of West Point, a small town on the Ohio River in Hardin County, Kentucky (Figure 1). Located on a high ridge overlooking the town, this tract contains the remains of a fortification built and used by the Union Army during the Civil War. The site has been known by several names including Fort Blair, Muldraugh Hill (using various spellings), and Camp Buell, but was most often referred to as Fort Duffield after the father of Col. William W. Duffield who commanded the 9th Michigan Infantry during their stay at the fort (Briggs 1999:26). Although never directly attacked, this well fortified post was an important deterrent to the Confederate army and was a pivotal element in the defense of Louisville against occupation by enemy troops.

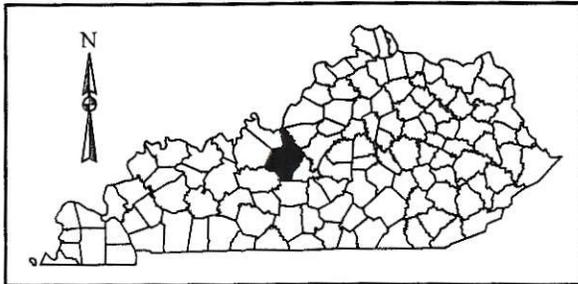


Figure 1. Location of project area (Hardin County, KY).

Fort Duffield is located on top of a high ridge known historically as Pearman's Hill at an elevation of 720 ft. above mean sea level. Pearman's Hill rises over 300 ft. above the Ohio River terrace on which the town of West Point is situated (Figures 2 and 3). The Salt River joins the Ohio River on the northeasterly side of the hill, while the L&N Railroad, the L&N turnpike, the town of West Point, and the old Elizabethtown road were all visible to the north from the ridge

crest. The site is reached by a steep, winding road that terminates at the west side of the fort. Visible evidence of the fort takes the form of a massive earthen embankment enclosing approximately five acres and following the southern edge of the ridge crest (Figure 4). The southern slope of the hill was used to construct log huts for the enlisted men. Remnants of the stone chimneys associated with these camps are still visible. A spring on the north cliff of the ridge was improved by the troops stationed at the fort for use as drinking water (Figure 5). Contemporary accounts suggest that Pearman's Hill was heavily wooded with a mature oak forest when the U.S. Army arrived in 1861 (*Detroit Tribune*, December 21, 1861). Between 50 and 100 acres of timber was cut by the soldiers for construction and fuel, leaving the ridge top essentially denuded of trees and ensuring good visibility of the roads, the town, the rivers, and the railroad (J.C. Love to Parents, letter, December 1, 1861, Bentley Collection, University of Michigan, Ann Arbor). After the war, forest reclaimed Pearman's Hill, and the site was later included within the boundaries of the Fort Knox Military Reservation, where for many years it lay virtually forgotten. The Federal government gave the 172-acre tract including the site to the town in 1978, and, using federal funding, nature trails, rest areas, and a log cabin were built to develop the site into a city park (Yelvington 1993:51). However, lack of maintenance and vandalism closed the park within a few years. Threats by the Federal government to repossess the property spurred renewed developmental efforts by West Point residents in 1981. Lee Prince served as the unpaid park superintendent from 1981 to about 1990. During his tenure, Prince succeeded in persuading the Federal government to delay their reclamation proceedings to allow time for the park to be resurrected. Prince authorized selective timber cutting to raise money for developing the park but the West Point city council used the funds for

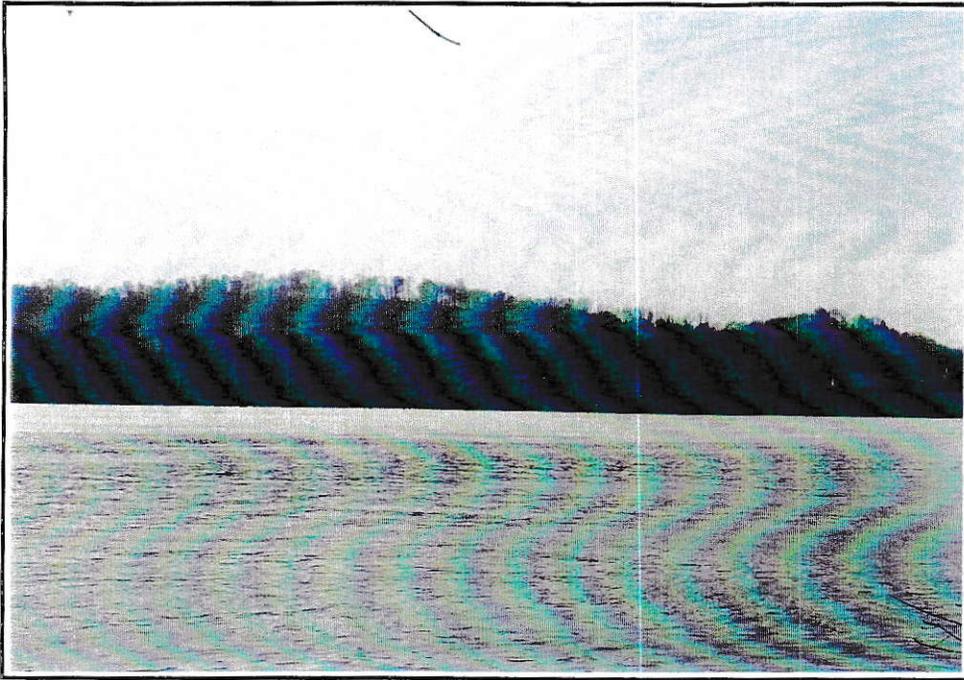


Figure 2. Photograph of Pearman's Hill looking south from Indiana (West Point is to right of photo).

other projects. After a cable boundary fence erected between Fort Knox and the park was stolen, Prince quit his job and the park was again closed to the public. However, Prince managed to save the park from reclamation by the Federal government and prevented commercial development that might have endangered or destroyed the earthworks (Yelvington 1993:50-52).

Finally, in 1992, the West Point Merchants Association took up the reins and voted to restore the Fort Duffield cemetery under the chairmanship of Dave Arnce. He succeeded in procuring television coverage for the Veterans Day Fort Duffield Cemetery Memorial Service while his committee worked on interesting state officials in supporting the site. These endeavors paid off when then Secretary of Tourism Crit Luallen, State Historic Preservation Officer David Morgan, and other state officials visited the site. With their blessing, plans for restoring Fort Duffield and making it accessible to the public took on renewed energy (Yelvington 1993:52-54).

The site was placed on the National Register of Historic Places in 1993 and the Fort Duffield Heritage Committee (FDHC) was organized to lead planning efforts to develop the site for tourism. The FDHC contracted with the Corradino Group to produce a management and interpretation plan for the site (The Corradino Group 1993). The resulting report focused on the preservation of the site's historic and archaeological resources, restoration of the site to its appearance at the time of the Union occupation, improvement of site access, camping facilities, visitor circulation and security, and maintenance and expansion of the facilities. The inclusion of archaeological concerns in this document demonstrated the Committee's sensitivity to and awareness of the importance of archaeological evidence and the need to both study the archaeological resources pertaining to the site's history and identify and mitigate any adverse impacts that may occur during the development of the site as a tourist attraction and public educational facility.

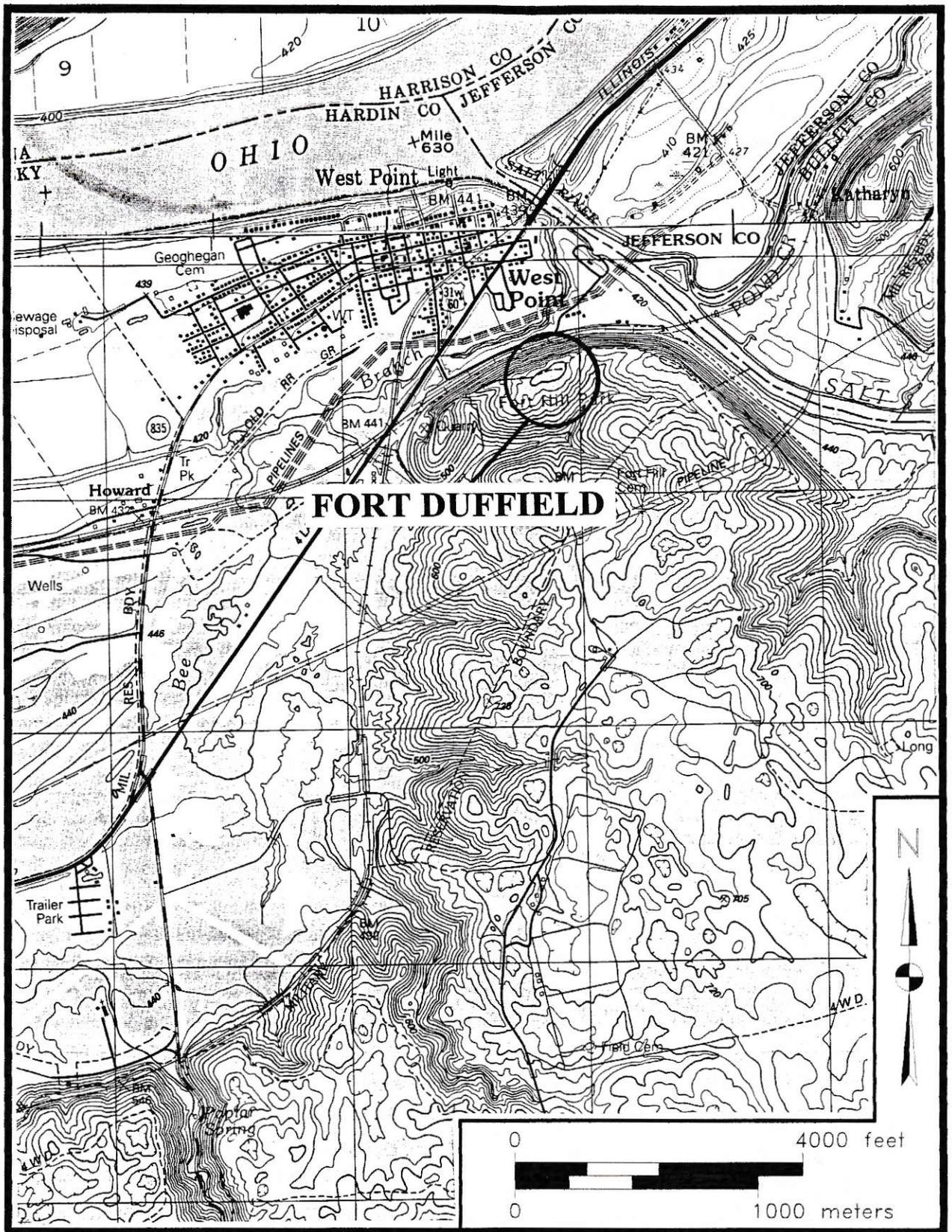


Figure 3. Location of Fort Duffield near West Point, Kentucky (U.S.G.S. 7.5-min. quadrangle, Fort Knox, Ky./Ind., 1991; U.S.G.S. 7.5-min. quadrangle, Kosmosdale, Ind./Ky., 1960 [photorevised 1971]).

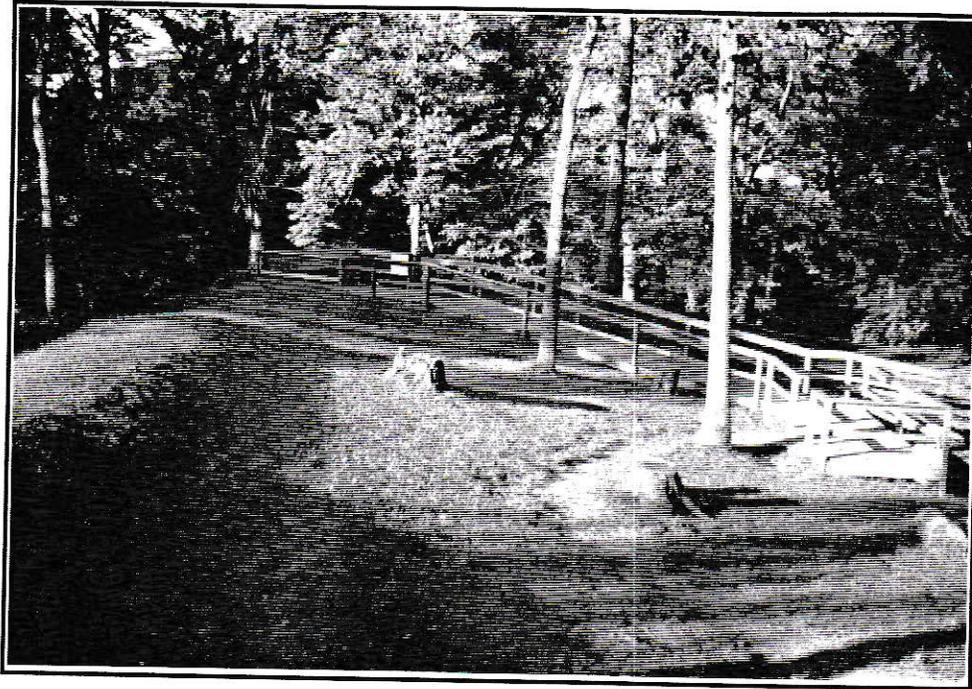


Figure 4. Main earthwork berm, looking west.

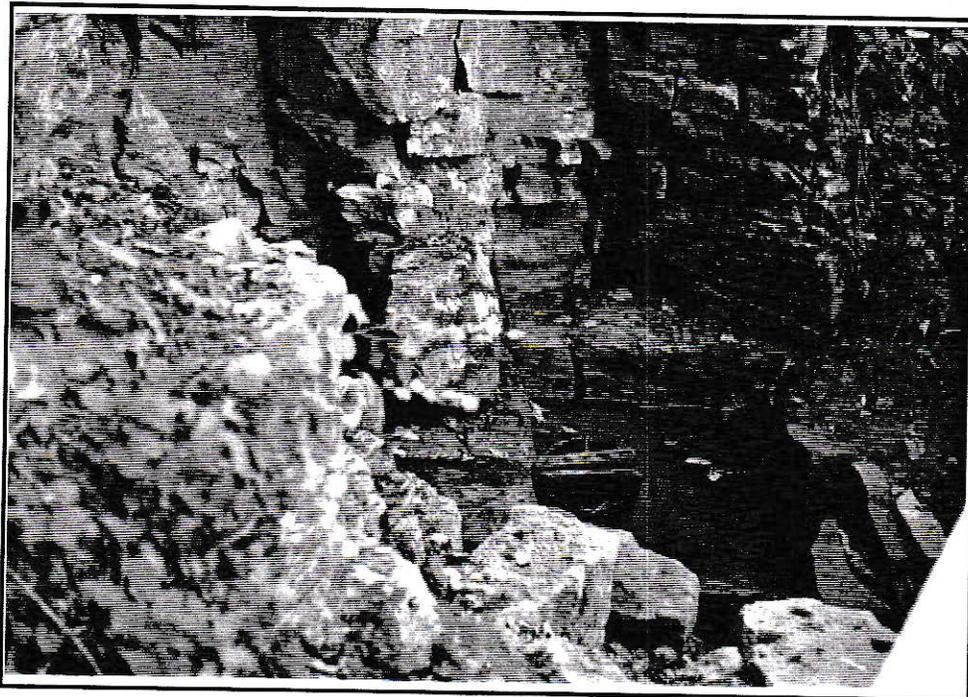


Figure 5. Spring, looking south.

While planning efforts were moving forward, enthusiastic work parties were performing the tasks associated with removal of the dense vegetation that covered the earthwork and surrounding environs. Working carefully to prevent disturbance to site features, brush was removed, saplings and young trees were carefully felled, and regular mowing was instituted. The result was a much more accessible site that made visitation considerably more enjoyable and greatly facilitated visibility.

In 1995, the Fort Duffield Heritage Committee received federal grant monies from the National Park Service through the Federal Survey and Planning Grant program administered by the Kentucky Heritage Council to conduct archaeological investigations of the fort. The University of Kentucky Program for Archaeological Research was subsequently selected to perform these investigations. Fieldwork, conducted in September of 1997, included the preparation of a detailed topographic map of the site, remote sensing, metal detection, and excavation in several areas of the fortification. A later visit conducted a pedestrian reconnaissance of the south slope of the ridge outside the fort to locate and map the remains of soldiers' huts. All materials and documentation were transported to the archaeological laboratory at the University of Kentucky for analysis and curation.

This report details the results of these investigations. Following this introductory chapter, Chapter 2 presents a brief history of Fort Duffield. Chapter 3 discusses the structural features of the fortification and encampment, while Chapter 4 presents the results of the archaeological investigations. An analysis of recovered artifacts is presented in Chapter 5, and Chapter 6 summarizes the project, draws conclusions about the site's occupation, and offers recommendations for additional research and developmental efforts.

CHAPTER 2: A Brief History of Fort Duffield

Previously published research by local historian Richard Briggs of West Point, Kentucky, has discussed the military aspects of Fort Duffield in considerable detail, thus only a summary is presented here (Briggs 1993; 1999). The events that culminated in the establishment of a Union fortification at West Point began in early August 1861 when, defying Kentucky's claim of neutrality and warnings by Governor Beriah Magoffin to abstain from any military movements within the Commonwealth, Union forces established Camp Dick Robinson in Garrard County as a recruiting post. In September, Confederate forces commanded by General Leonidas Polk, fearing that Federal forces were moving on Columbus, also defied Kentucky neutrality by occupying the town and securing control of river traffic on the Mississippi. Seizing this opportunity, Union troops commanded by Ulysses S. Grant moved into Paducah and Smithland, providing the Federals with an important position which helped immensely during the Western River Campaigns. Twelve days later General Simon Bolivar Buckner would occupy Bowling Green and General Albert Sidney Johnson quickly established a defensive line that would span the southern portion of the state. The establishment of both Union and Confederate military outposts in Kentucky set the stage for a contest to control key points in the state, particularly the City of Louisville. West Point, a short distance downstream from Louisville, was located along the most feasible route for the Confederates to take from Bowling Green to Louisville, the Louisville-Nashville Turnpike.

General William Tecumseh Sherman, who had recently replaced General Robert Anderson as the commander of Union forces in the Ohio Valley area, quickly realized the grave

danger the Confederate Army posed to continued Union control of Kentucky. Sherman immediately began to make plans to establish a defensive line that would allow him to defend Louisville and those portions of Kentucky not already controlled by the Confederates. The ultimate goal was removing the enemy from the state altogether.

On September 8, 1861, the first indication that war was coming to West Point arrived with a large group of Confederate cavalry traveling toward the town on the Louisville-Nashville Turnpike. These men were reconnoitering the area for General Simon B. Buckner and were commanded by Capt. Mitchell Lapaille. The night prior, a company of Union Home Guards from Louisville had camped at the confluence of the Salt River and Ohio River, just east of West Point. The Confederates appeared on the scene while the Home Guards were in the process of ferrying its forces across the Salt River to West Point. With the Home Guard split between two sides of the river, and heavily outnumbered by the Confederates, matters looked grim for a time. After a brief skirmish, however, both forces withdrew since neither had any certain knowledge of their opponents' strength or situation.

This encounter no doubt added fuel to Gen. Sherman's sense of urgency in establishing a reliable line of defense across Kentucky. Hampered by an insufficient number of recruits and inadequate equipment, Sherman distributed his limited forces in Bardstown, Lebanon Junction, Colesburg, Elizabethtown, and the Nolin River. He established a supply base at West Point in October 1861, and five regiments were dispatched to the town to protect the stores. These regiments included the 9th Michigan Volunteer Infantry, the 37th Indiana Volunteers, the 1st

Wisconsin, the 1st and 18th Ohio Infantry, and the 16th and 28th Kentucky Infantry Regiments. Sherman established a staging area called Camp Holman on the site of an abandoned town named Williamsville, on the Jefferson County side of the Salt River at its confluence with the Ohio River. Along the riverbank in West Point and in an area near the present day brickyard on the old Elizabethtown Road, he established Camp Hazzard as his supply base.

The units assigned to guard the supplies began to arrive in late October with the 37th Indiana Infantry and a battery of Kentucky Home Guards being the first to reach West Point. The 9th Michigan Infantry, which remained at West Point and Fort Duffield longer than any other regiment, arrived on October 28, 1861. The units first settled at Camp Holman in an old apple orchard. Capt. Charles Deland of the 9th Michigan Infantry described the situation (*Jackson American Citizen*, November 21, 1861):

The soil was a nasty, damp river-bottom clay, and the second day after our arrival it rained most gloriously, and then drizzled for the rest of the week. Of course the ploughed ground of the orchard was quickly puddled into the softest yellow "sticking solace," and for five or six days you never saw so nasty and muddy a set of men, even in a brick yard. Alas for those new "store cloths" and neat regimentals you saw when we passed through Jackson [Michigan]. They were a mixture of blue cloth and reddish yellow-gray Kentucky mud.

Very quickly, the men learned that their campsite was unhealthy, and many fell ill from their exposure to wet and cold. A measles epidemic soon erupted, and wreaked havoc among the regiments, along with other diseases such as

typhoid, meningitis, pneumonia, and dysentery. Historic records disagree as to the number of men who died of disease while at West Point, but the regimental historian of the 9th Michigan Infantry claimed that 61 soldiers from his regiment died during their service at West Point and were buried on a hill adjacent to the fort. In general, disease killed twice as many soldiers as did combat wounds during the Civil War (Linderman 1987:115). The measles epidemic suffered at Fort Duffield was one of two waves of disease to strike the outpost. Acute infections of childhood diseases struck particularly hard in units consisting mostly of young men from rural backgrounds; urban dwellers tended to have been exposed to such diseases as measles, mumps and smallpox at earlier ages and brought immunity with them (Linderman 1987:115). Although the measles epidemic ran its course among the Fort Duffield soldiers, camp diseases such as dysentery, malaria, and pneumonia became a constant threat to the regiment and increased in virulence through the war, as was the case for all Civil War soldiers on both sides of the battle lines.

In spite of the measles epidemic, the able-bodied began the work of fortifying a high ridge that overlooked the town known as Pearman's or Muldraugh Hill. This prominent landscape feature was well suited as the location for a fort since from its summit there was a sweeping view of the L&N Railroad and Turnpike, the town of West Point, the Ohio and Salt rivers, and, to the south, the old Elizabethtown Road. All five regiments were ordered to work on the fortifications but the 9th Michigan, under the command of Col. William W. Duffield, was in charge. Work began on Sunday, November 3, 1861, with the grading of a path wide enough for two men to walk abreast up the side of the steep hill. Massive trench excavations were initiated and took 70,000 man days to complete. The resulting earthwork fortified the south side of the hill, leaving the steep north bluff escarpment to serve as a natural defense. Even before the earthwork was finished, some soldiers pitched their tents on the hill and

bedded down on straw laid on the ground. Rain continued to plague the men, prompting Private John Rossette (Glesner n.d.: 2) to observe, "we would be sure of drawing our bounty of land if we had any place to put it, but we cannot step out without getting about a half acre on each foot."

After the earthwork was completed, log huts were built to shelter the men assigned to the fort itself, while the majority of the regiments remained in a new camp established in healthier circumstances near West Point. A wagon road was built on the west side of the hill that is still used to access the site today. A gate was built at the northwest edge of the fort where the road entered.

Military service at Fort Duffield was a combination of hard labor building fortifications, illness from exposure, polluted water, and disease; and boredom. Letters written by the soldiers chronicle the long winter of 1861-1862 as they waited to be sent to the front lines. In the meantime, their presence at Fort Duffield served as an effective deterrent to any Confederate plans to advance toward Louisville. Fort Duffield was never attacked or involved in any battle during the war, but it was occupied by Union forces until war's end. Because of its strategic position, it was described as the "Key to Louisville" in an article in the *Louisville Courier-Journal* (Briggs 1993:14). Briggs (1993:14) summed up Fort Duffield's role in the war, noting that "except for its existence, [General] Buckner may have been encouraged to march on our state's largest city. Three times General John H. Morgan approached the fort and three times he altered his route to avoid it."

After the war, the site was owned by Mrs. Ann Guthrie, a widow whose only son, William, had been killed in action as a Confederate soldier in Georgia. She sold the farm to John Jewell in 1869; over the next ten years the land passed through five different owners before it was acquired by Henry Dink who cultivated a portion of the site (Briggs 1998). The Fort Hill Stone Company owned the site briefly and quarried

stone from the slopes below the fort. In 1895, the Grand Army of the Republic held a reunion of Civil War veterans at the fort. Eventually, the site was acquired by Louisville businessman Pendleton Beckley and several wealthy friends who used it as a hunting camp and erected a clubhouse building within the fort. They employed a cook, held parties, and shot skeet there for a number of years. They also allowed the site to be used by the Fort Hill Chautauqua for various entertainments. By 1918, the site became part of the Fort Knox Military Reservation but was never used for training. In 1978, Fort Knox deeded the land to the City of West Point.

