

**National Park Service
American Battlefield Protection Program
1849 C Street NW – Room 7228
Washington, DC 20240**

Technical Report

**1676 Battle of Great Falls / Wissantinnewag-Peskeompskut
Site Identification and Evaluation Project Phase II
National Park Service
American Battlefield Protection Program
GA-2287-18-007**



This material is based upon work assisted by a grant from the Department of the Interior, National Park Service. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Department of the Interior.

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Shadow cast by MPMRC field crew member on site in Greenfield, Massachusetts, October 2017.

Contributors

There were many organizations and people that contributed to the ultimate success of this project. First and foremost, this project would not have been possible without the efforts of the Battlefield Advisory Board, comprised of representatives from the Historical Commissions of the towns of Gill, Montague (Turners Falls), Northfield, Deerfield, and Greenfield, Massachusetts and representatives of the Tribal Historic Preservation Offices from the Aquinnah (Gay Head) Wampanoag, Narragansett, Nipmuc, and the Abenaki Tribes.¹ Secondly, the cooperation and patience of the dozens of landowners during was critical to the overall success of the project. The participation and experience of members of the Yankee Territory Coinshooters (YTC) metal detecting club, particularly George Pecia and Mike Horan, Laura Kucharczyk from Awesome Relics New England Metal Detecting Club, University of Connecticut students Matthew Picarelli-Kombert, Cassandra Apuzzo, Zhengrong (Christy) Li, and Anna Morse, and regular crew member Allison Mallow. YTC and Awesome Relics members were tireless in their efforts to continually revise their methods, techniques and technologies to adapt them to the challenges of the cultural and physical landscape. They served as mentors to crew members who greatly valued their experience and knowledge. YTC and Awesome Relics members were very knowledgeable in many aspects of the historic period material culture from their many years of detecting and provided important real time perspectives on recovered objects that informed field decisions regarding where best to focus efforts. Many local historians and archaeologists with extensive knowledge of the culture history of the area and battle events made important contributions to the project and during public meetings. Peter Thomas and John Wilson provided valued archeological and historical perspectives on battle events and the Colonial and Native history of the middle Connecticut Valley and were important sounding boards for the ongoing interpretation of the battlefield throughout the field season. The knowledge and experience of the members and staff of the Nolumbeka Project contributed valuable insights on the project, historical context, and battle events.

¹ David Brule, Project Coordinator; Ed Gregory, Montague; Joe Graveline, Northfield; Peter Miller Greenfield; John Nove, Deerfield; Ivan Ussach, Gill; Doug Harris representing the Narragansett Tribal Historic Preservation Office; and Elizabeth Perry and Steven Craddock representing the Aquinnah (Gay Head) Wampanoag; and David Tall Pine White representing the Chaubunagungamaug Band of Nipmuc Indians.

I. Introduction and Project Summary

The Battle of Great Falls/Peskeompskut took place on May 19, 1676 and was perhaps the most significant battle of King Philip's War (1675-1676; Figure 1). By the spring of 1676 Native people from a Coalition of dozens of tribes fighting the English from throughout southern gathered at the Great Falls to seek refuge and respite from constant English attacks and to gather fish and plant corn for the coming year. The valley was a hotly contested landscape that spring - whoever held the middle valley would control the richest agricultural lands in New England. The battle took place in two phases; the initial English attack on the Peskeompskut village and the subsequent 6.5-mile English fighting retreat to the Deerfield River Ford.

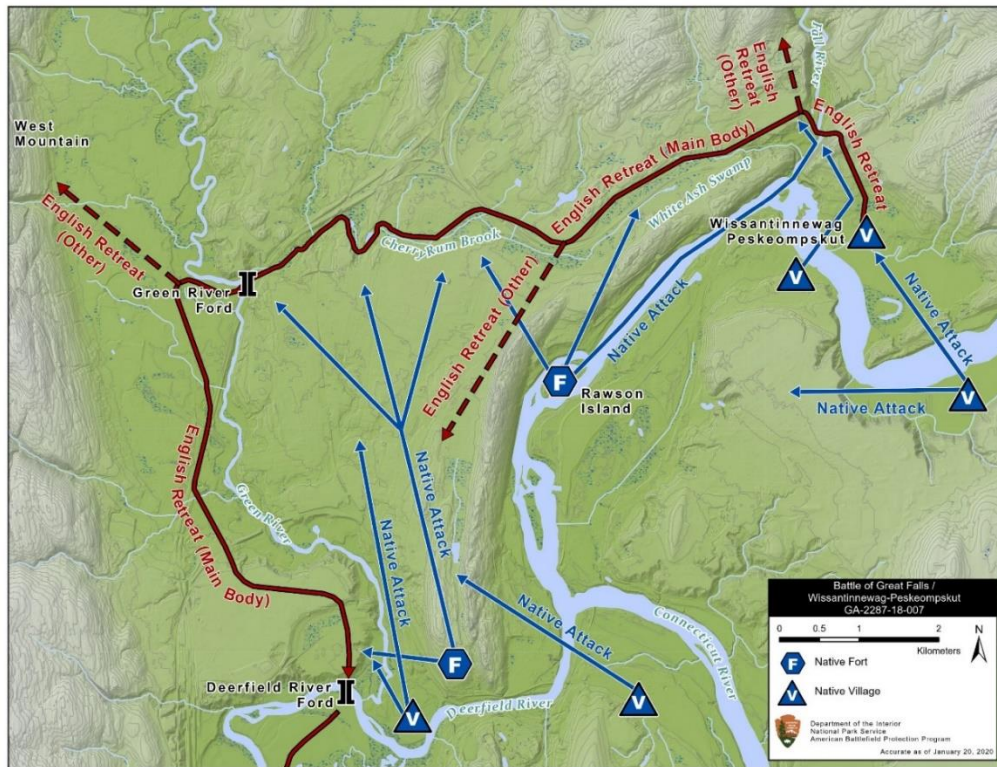


Figure 1. Battle of Great Falls and the English Retreat

The second phase of the battle (English retreat) is best characterized as a near continuous fighting retreat punctuated by episodes of intense fighting at locations where Coalition forces were able to get ahead of the English column and set ambushes. There were also areas where there is little or no evidence of fighting when the mounted English reached level terrain and were able to outdistance Coalition forces for a short time. The Phase II survey also resulted in several new perspectives on the battle including the tactics and weapons used by English and Coalition

forces, and the realization that some of the English were eventually able to mount a cohesive defense.

The English were the victors at the attack on the Peskeompskut Village, killing hundreds of Native people and destroying critical food and military supplies. In the second phase of the battle Coalition forces from five nearby villages mounted a series of well-planned and well-coordinated counterattacks and ambushes against the retreating English which speaks to the experience and leadership within the Native Coalition. The success of Coalition counterattacks is reflected in the English casualty rate of between 45-55 percent (39 killed 29 wounded) of an estimated 120-150 soldiers. At the end of the day, Coalition forces controlled the battlefield and exacted a steep price from the English for their attack on Peskeompskut. Nonetheless the battle was the beginning of a process that resulted in the dissolution of the Native Coalition and ultimately the piecemeal defeat of all the tribes in the Coalition. In the weeks and months following the battle, dozens of Native communities abandoned the middle Connecticut River Valley to seek refuge in Mahican territory west of the Hudson River and among the Abenaki to the north, or they returned to their homelands in central and eastern Massachusetts and Narragansett country.

This technical report summarizes the research, methods, and results of the *Battle of Great Falls / Wissantinnewag-Peskeompskut Site Identification and Evaluation Project Phase II* National Park Service American Battlefield Protection Program (ABPP) grant (GA-2287-18-007) awarded to the Town of Montague in August 2018.² This grant is the second site identification and documentation grant awarded to the Town of Montague to support research, education, site identification and documentation surveys, and preservation of sites, actions, and landscapes associated with the Battle of Great Falls/Wissantinnewag-Peskeompskut.³

The first (Phase I) Site Identification and Documentation project (GA-2287-16-006)

² The ABPP promotes the preservation of significant historic battlefields associated with wars on American soil. The purpose of the program is to assist citizens, public and private institutions, and governments at all levels in planning, interpreting, and protecting sites where historic battles were fought on American soil during the armed conflicts that shaped the growth and development of the United States, in order that present and future generations may learn and gain inspiration from the ground where Americans made their ultimate sacrifice. The goals of the program are: 1) to protect battlefields and sites associated with armed conflicts that influenced the course of American history, 2) to encourage and assist all Americans in planning for the preservation, management, and interpretation of these sites, and 3) to raise awareness of the importance of preserving battlefields and related sites for future generations.

³Kevin McBride, David Naumec, Ashley Bissonnette & Noah Fellman, *Final Technical Report Battle of Great Falls (Wissantinnewag-Peskeompskut) Pre-Inventory and Documentation Plan* (GA-2287-14-012), report submitted to the Town of Montague, 2016.

surveyed a discontinuous stretch of approximately 1.25 miles and 170 acres of the 6.5-mile battlefield that took place between the Riverside area of Gill, Massachusetts (site of the Wissantinnewag-Peskeompskut village) and the Deerfield River Ford (Figure 2). The Phase I survey identified seven battlefield loci (G-H; renamed I & L respectively; Figures 2 & 3), and recovered 284 musket balls, 66 seventeenth or potentially seventeenth battle related or domestic objects such as amulets, brass and lead scrap buttons, gun parts, horse tack, and miscellaneous equipment.⁴ The battlefield proved larger, and more complex than originally anticipated and the survey could not be completed in a single grant cycle. Subsequently a second grant application was submitted by the Town of Montague to the ABPP in January 2018 and awarded in August 2018.

This report will focus primarily on the methods, analysis, and results for the current grant (GA-2287-18-007) with some re-analysis of the data and conclusions from the Phase I survey. The Phase II project surveyed an additional 1.75 miles and 180 acres of the estimated 6.5 miles of the battlefield (a total of 3.0-miles and 350 acres) and identified five additional battlefield Loci and recovered 264 musket balls and 25 seventeenth or potentially seventeenth century battle related or domestic objects such as beads, brass scrap, and buttons.

The survey of the remaining 3.5 miles of the battlefield will present a number of challenges as much of the terrain is very suburban (and disturbed) and there are several potential routes of retreat taken by the various groups of English after they splintered following the ambush by Coalition forces at the White Ash Swamp (Figure 1). The success of future surveys will also be predicated on landowner permissions (or lack thereof) which so far has been largely positive. The Phase I and Phase II surveys have sampled extensive portions of the battlefield between Locus A (Peskeompskut Village) and Locus J (Green River Ford), but the battlefield Between Locus J (Green River Ford) and Locus L (Deerfield River Ford) has not been surveyed and may yield unanticipated results in the last phase of the battle (Figures 3 & 4).

⁴ Kevin McBride, David Naumec, Ashley Bissonnette, and Noah Fellman; Site Identification and Documentation Project, *The Battle of Great Falls / Wissantinnewag-Peskeompskut* May 19, 1676 Technical Report (GA-2287-16-006) submitted to the National Park Service American Battlefield Protection Program, Mashantucket Pequot Museum and Research Center, May 2017.

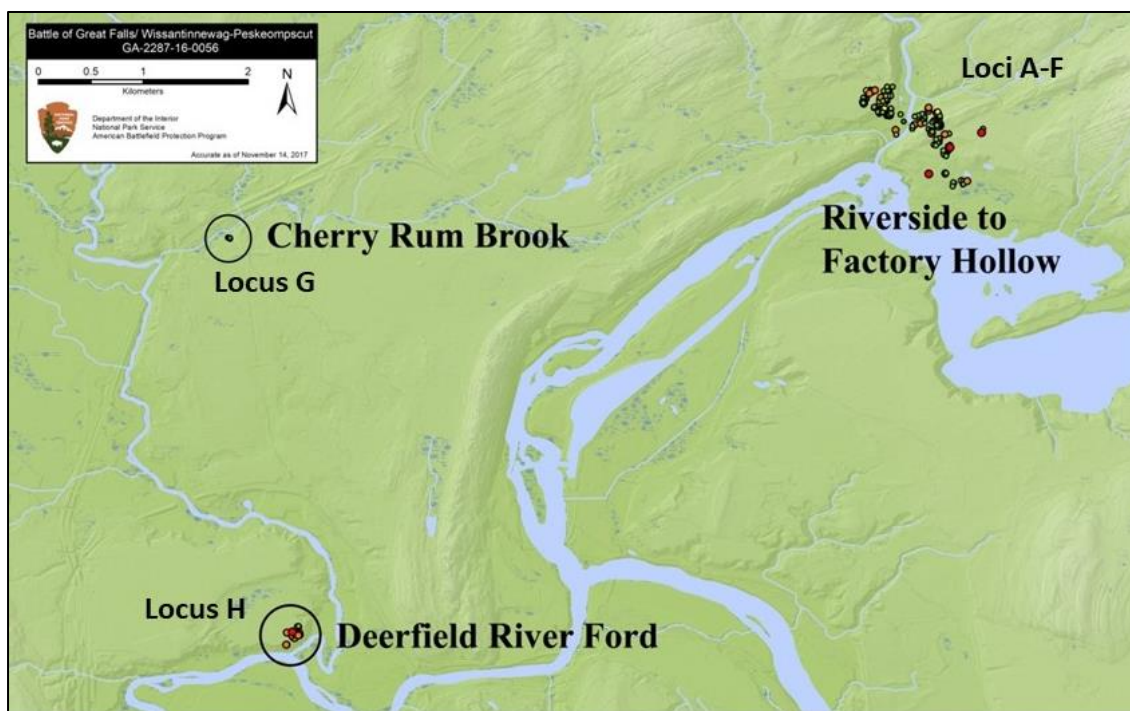


Figure 2. Battle of Great Falls Phase I Battlefield Loci and Musket Ball Distributions.

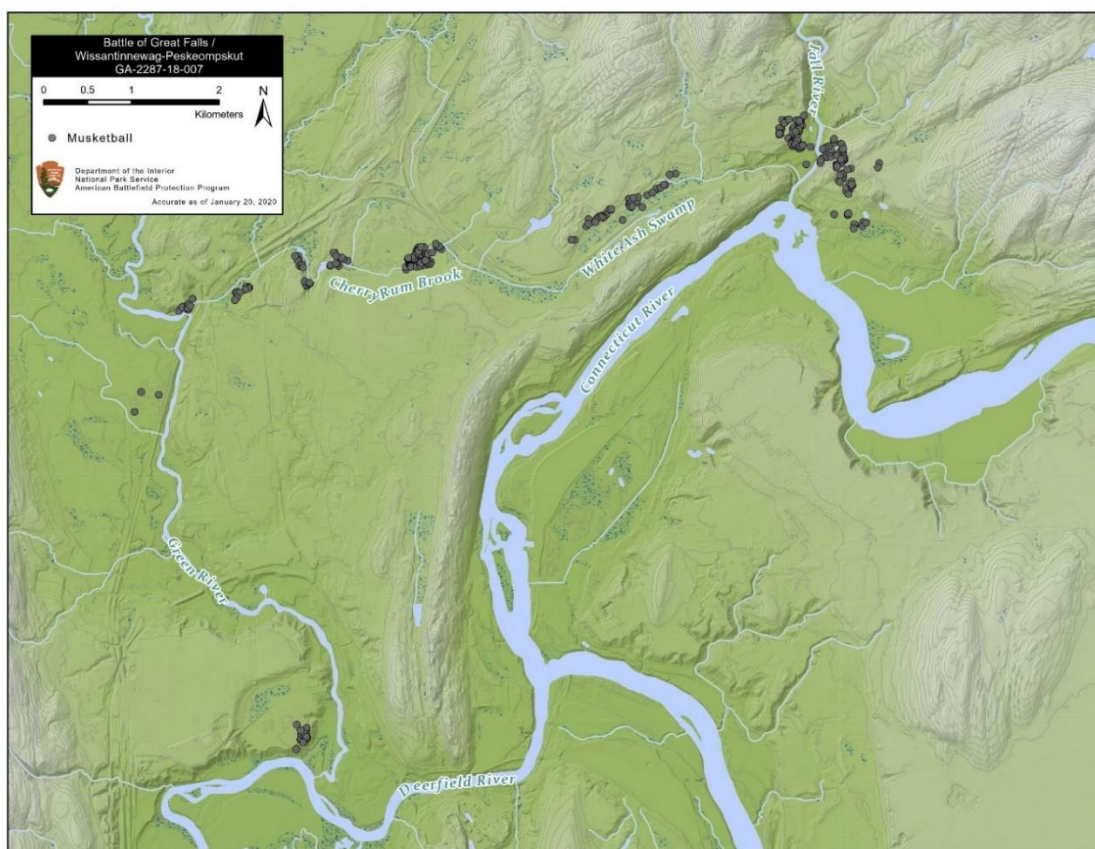


Figure 3. Phase I and Phase II Musket Ball Distributions.

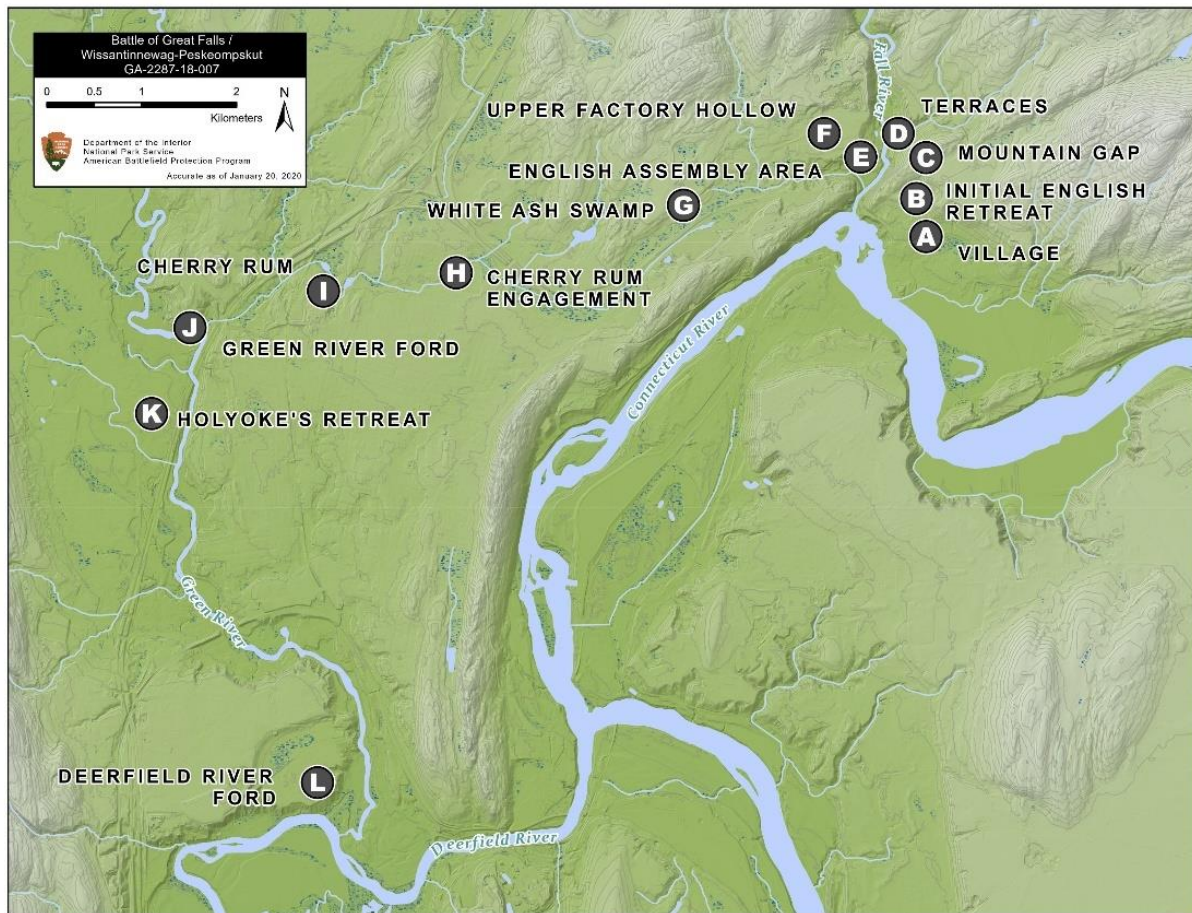


Figure 4. Battle of Great Falls Phase I and Phase II Battlefield Loci

Project Scope and Objectives

The primary objective of the Battle of Great Falls/Wissantinnewag-Peskeompskut Site Identification and Documentation Project was to conduct a battlefield archeology survey to locate, sequence, and document battlefield actions (Core Areas) within the Battlefield Boundary and to assess the eligibility of the battlefield for nomination to the National Register of Historic Places.⁵

Several tasks were identified by the Town of Montague's Request for Proposals for the Battle of Great Falls/Wissatinnewag-Peskeompskut Site Identification and Evaluation Project. The results of these tasks will be discussed below:

⁵ McBride, Et Al. *Final Technical Report Battle of Great Falls Pre-Inventory and Documentation Plan* (GA-2287-14-012).

Task 1: Develop an Archeological Research Design to standards acceptable by the ABPP and in accordance with Massachusetts Historic Commission permitting and standards. Research design should address NAGPRA and protocols for discovery of human remains. The research Design should build off the Pre-Inventory Research and Documentation Report (GA-2287-012) and the Phase I Site Inventory and Analysis Report (GA-2287-16-006).

Task 2: Prepare and Submit Permit Application for archeological investigation to the Massachusetts Historic Commission. The Battlefield Grant Advisory Board will be responsible for obtaining landowner permission for excavation and artifact donation.

An archeological permit application will be submitted to the Massachusetts Historical Commission within a few weeks after the contract is awarded.

Task 3: Conduct Field Surveys in accordance with Secretary of Interior's Standards and Guidelines for Archeological Documentation.

Specific Information on these tasks are discussed in the Research Design outlined below

3.1 Walkover Survey: A pedestrian survey will be conducted of the study areas to identify artifacts that may be visible on the surface. Much of the remaining land in the study areas is covered with vegetation or previously developed and probably will have no visible artifact concentrations. The Town will hire a THPO from Narragansett, Wampanoag of Gay Head (Aquinnah), and/or Nipmuc to be present during walkover.

3.2 Remote Sensing: The walkover will be followed with a metal detector survey of selected areas within each of the Core Areas. The survey will be conducted using a grid of points, established in proportion to the size of the area to be examined. "Hits" will be flagged, mapped and evaluated with small (i.e., 25 x 25cm square) excavation units which will be excavated at 5cm or 10 cm arbitrary levels within natural strata. All soils will be screened through ¼ inch mesh. All test units will be recorded on standard field forms as well as metal detector forms (Appendix II). The grid location and depth of each artifact will be recorded on GPS to make a GIS map of artifact distribution. If a sufficient density of battle related objects is identified a datum point will be established to map the artifacts with a total station.

3.3 Subsurface Testing: Limited subsurface testing using 50cm x 50cm shovel test pits and occasionally 1m x 1m excavation units may also be conducted in Core Areas and ancillary sites (e.g., village or domestic areas) that are expected to contain significant numbers of non-metallic artifacts and features. Examples of these sites are the White Ash Swamp and ancillary villages. All shovel test pits and excavation units will be excavated in 5cm or 10cm arbitrary levels within natural strata. All soils will be screened through a maximum of ¼ inch mesh. All test and excavation units will be recorded on standard shovel test pit and excavation forms (See Appendix II). The town will hire representatives from the Tribal Historic Preservation Offices (THPO) of the Narragansett, Wampanoag of Gay Head (Aquinnah), Abenaki, and Nipmuc tribes to be present during all subsurface testing.

3.4 Prepare GIS Map of Battlefield Area using NPS battlefield survey data dictionary

Task 4: Laboratory Analysis and Curation. The field methodology will be designed to document the battlefield boundaries with minimal artifact collection. Expected artifact classes include metallic objects of lead, brass, and iron such as musket balls, gun parts, brass arrow points, buckles, and personal items. All artifacts will be cleaned, assessed for conservation needs, identified and catalogued, and the location of each plotted on GIS battlefield base maps. Arrangements will be made with a museum that meets National Park Service standards (NPS Museum Handbook I and II) for permanent artifact conservation and curation.

Specific Information on this task is discussed in the research design discussed below

Task 5: Coordinate a public planning process which shall include three meetings. The first meeting should be to present the goals of the project. The second meeting will be to solicit public comment on the draft report. The third meeting will be a presentation of the final report.

Task 6: Prepare a technical report as specified in the work plan, with a preference for a final product that seamlessly combines the Phase I and Phase II report.

Specific Information on this task is discussed in the Research design discussed below

Task 7: Provide monthly updates to the Battlefield Grant Advisory Board through a written report or participation in the monthly board meetings.

Task 8: Following approval of the final report document, the consultant shall provide the town with ten (10) acid-free paper copies of the Technical Report and GIS map. One copy will be ARPA redacted. One (1) digital copy on CD shall be included in the deliverables. The Technical Report will include a summary report of the field investigations, containing relevant maps, documents, drawings and photographs. Inventory forms for each Prehistoric and Historic Archeological site identified will be completed and submitted to the Massachusetts Historical Commission.

II. Methods

The discipline of Battlefield Archeology is concerned primarily with the identification and study of sites where conflicts took place, and the archeological signature of the event. This requires gathering information from historical records associated with the battle including combatant dispositions and numbers, the order of battle (command structure, strength, and disposition of personnel, and equipment), as well as any undocumented evidence of an action or battle gathered from archeological investigations. The archeology of a battlefield allows battlefield historians and archeologists to reconstruct the progress of a battle, assess the veracity of historical accounts of the battle, and fill in any gaps in the historical record. Battlefield

archeology also seeks to move beyond simple reconstruction of the battlefield event, and move toward a more dynamic interpretation of the battlefield.⁶

Battlefield Boundary - Battle of Great Falls/Wissantinnewag-Peskeompskut

The first step toward battlefield preservation is to define battle field boundaries. In 2016 the ABPP revised their Battlefield Survey Manual to focus the attention of battlefield researchers on a standard methodology to provide State Historic Preservation Offices, local planners, preservation advocates, and others with a reliable and standardized methodology to enable the ABPP to compare information across all wars and all sites.⁷

One of the more significant changes in the revised manual was the redefinition of the term Battlefield Study Area to Battlefield Boundary:

Perhaps a weakness of the old manual was the use of the term “study area” to indicate the furthest extent of the historic battlefield boundary. Casual researchers frequently equated the “study area” to the Project Area or Vicinity Area of a general study which may include buffers in the boundary of land that really had little value. Just the term devalued the historic resource. It was difficult for our partners to defend that the “study area” has known, studied and identified historic resources. Worst, even less careful investigators use the term to indicate that there was no value outside of the Core Area as defined by our surveys. For this reason, the ABPP has decided to change the term to indicate that the battlefield boundary is indeed the currently understood boundary of the battlefield.⁸

The Battlefield Boundary should accurately reflect the extent of the battle and is defined as the ground over which units maneuvered in preparation for combat, the salient places where battle events occurred, and important cultural landmarks and terrain features. This requires establishing the Battlefield Boundary and delineating it on a USGS 7.5 series topographic map or other GIS referenced maps. The boundary must be defensible based on historical and/or archeological evidence and the final map must demonstrate that the boundaries encompass legitimate historic resources. Battlefield boundaries should be defined as objectively as possible to include the salient places where battle events occurred and where important landmarks are located, and should accurately reflect the extent of the battle and encompass the ground over

⁶ Richard Fox & Douglas Scott. “The Post-Civil War Battlefield Pattern: An Example from the Custer Battlefield” in *Historical Archeology*, Vol. 25, No. 2, 1991. (92-103).

⁷ National Park Service American Battlefield Protection Program, *Battlefield Survey Manual* (Washington, D.C.: National Park Service, 2016).

⁸ ABPP. *Battlefield Survey Manual*. P. 3.

which units maneuvered in preparation for combat. The initial survey should include all known historic standing, terrain, or archaeological resources associated with the battle. Once the battlefield survey is completed and the final battlefield map is marked with defining features and boundaries, informed preservation decisions can be made. The battlefield survey should result in the definition of three boundaries:

- Battlefield Boundary defined as the maximum delineation of the historic battle and associated terrain
- Core Area(s), which defines the area where significant combat events occurred.
- Potential National Register Boundary (PotNR), which contains only those portions of the battlefield that have retained integrity.

In the case of the Battle of Great Falls/Wissantinnewag-Peskeompskut, the Battlefield Boundary, Core Area(s), and National Register Boundary is very similar and determined primarily by the distribution of battle-related objects along a linear battlefield landscape.

Defining Battlefield Boundaries and Core Areas

Defining Battlefield Boundaries and Core Areas of the battlefield is a critical part of the battlefield documentation process.⁹ The Battlefield Boundary is defined as the maximum delineation of the historical site and should contain all the terrain, cultural features, and artifacts related to or contributing to the battle event including where combatants maneuvered, deployed, and fought immediately before, during, and after combat. In the Battle of Great Falls, the Deerfield River Ford is considered the southern boundary of the battlefield as it marks the English Avenue of Approach and Retreat and where the fighting ended. When the English forded the river. The Peskeompskut village in Riverside marks the current northern boundary of the battlefield as it marks the northernmost extent of fighting. The remaining boundaries will be determined by the maximum distribution and extent of battle related objects (primarily musket balls) that delineate fighting along the White Ash Swamp, Cherry Rum Brook, and the west bank of the Green River. The five other Coalition villages along the Connecticut River in the immediate vicinity of the battle will also help define the Battlefield Boundary as Native men from these villages mobilized to attack the retreating English.

⁹ ABPP. *Battlefield Survey Manual*. P. 28-29.

The Battlefield Boundary functions as the tactical context and visual setting of the battlefield. Natural features and contours on relevant USGS 7.5-minute quadrangle maps are used to outline a Battlefield Boundary and should include all locations and terrain features that directly contributed to the development and conclusion of the battle. The Battlefield Boundary should include the following:

- Core Areas of combat;
- Avenues of Approach and Withdrawal/Retreat;
- locations of all deployed units of the combatants on the field, including reserves;
- preliminary skirmishing if it led directly to the battle; and
- logistical areas (supply trains, encampments/villages, storage facilities, villages, watercraft, etc.).

The Core Area(s) of a battlefield must fall fully within the Battlefield Boundary and defined as the area(s) of direct combat and include those places where the opposing forces engaged and incurred casualties. Currently twelve Core Areas or discrete battlefield loci are defined but in reality, the battlefield is a continues area of combat punctuated by more intense episodes of fighting (Figures 3 & 4). The natural features and contours on USGS 7.5-minute quadrant maps help to define Core Areas and should include the areas of confrontation, conflict, and casualties. Natural barriers, such as rivers, creeks, swamps, hills, and ridges often restrained or enhanced the movement of the combatants and can provide a natural landscape or topographical boundary for the battlefield. Generally, Core Areas can be reasonably well defined in Revolutionary War and Civil War battlefields based on better documentation and maps compared to seventeenth-century battlefields. No known period maps document the Battle of Great Falls, and the available documentation with respect to battle locations and actions is ambiguous or nonexistent. As such the Battle of Great Falls Battlefield Boundary and Core Areas will be delineated primarily based on the nature and distribution of battle-related and domestic objects and key terrain and cultural features.

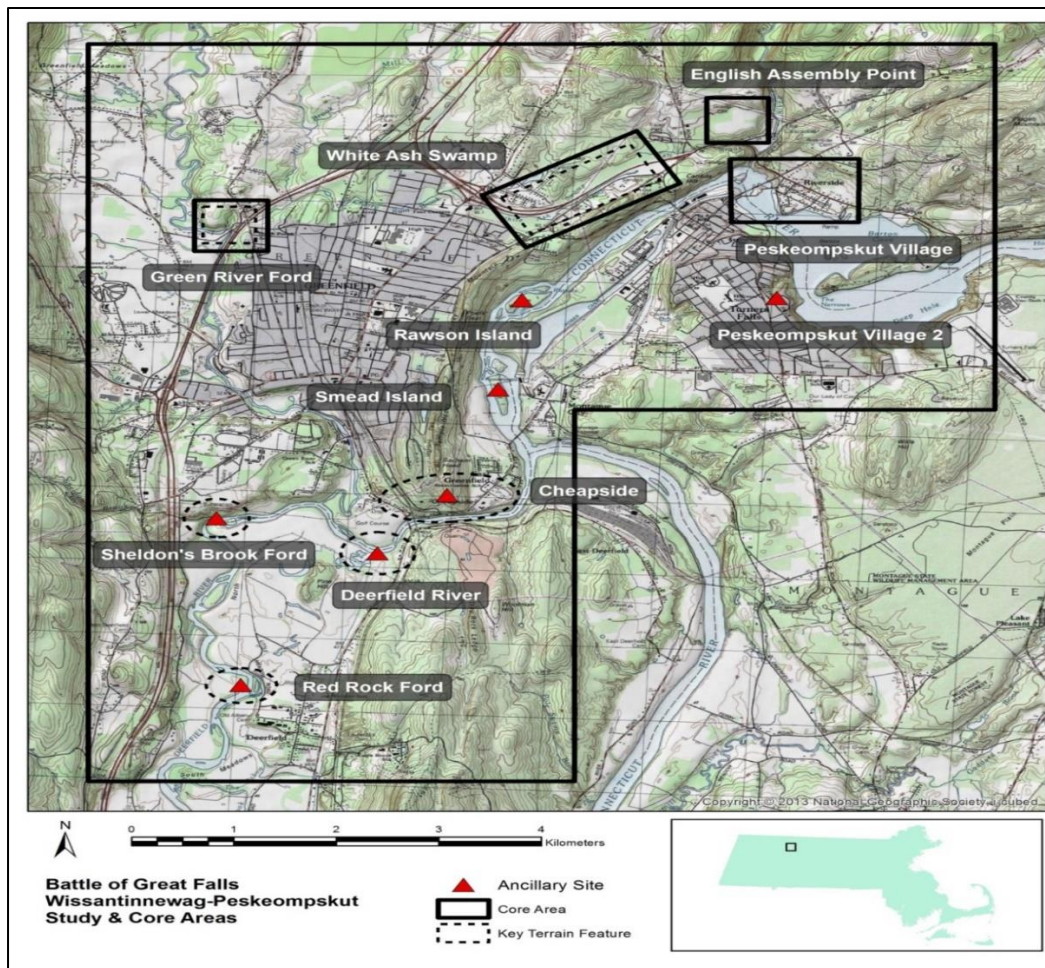


Figure 5. Original Study and Core Areas, Ancillary Sites and Key Terrain Features.

When the original Study (now Battlefield Boundary) and Core Areas were identified it was not precisely known where the English route of retreat was located, how many different routes the English used during the retreat, nor the nature and locations of all the actions associated with the battle (Figure 5). The boundaries of the Study Area and locations of Core Areas were based entirely on primary sources associated with the battle and were imprecise and too broad as proven by the recent battlefield survey. The recently completed battlefield survey has confirmed some of the original Core Areas but has identified several new actions and terrain features. Many more actions should be anticipated when the entire battlefield has been completely surveyed.

Areas of Integrity

Areas of integrity delineate portions of the historic battlefield landscape that still convey a sense of the historic scene (retain visual and physical integrity) and can still be preserved (See: Part V Battlefield Landscape and Key Terrain Features). Any areas of the Battlefield Boundary and Core Areas that have been impacted or otherwise compromised by modern development, erosion, or other destructive forces and can no longer provide a feeling of the historic setting are excluded from areas of integrity. However, some battlefields in suburban areas may still retain integrity and significance if artifacts or other archeological information are intact.

The Riverside neighborhood in Gill, Massachusetts, is the supposed location of the Peskeompskut village attacked by Turner's company. It has been significantly impacted by nineteenth and twentieth century industrial development with numerous cut and fill episodes, high water levels resulting from the Turners Falls Dam that may have submerged significant portions of the battlefield, and a high density of residential home construction. The area certainly has no visual integrity and metal detector surveys during the Phase I project indicates the area does not retain physical integrity either. The Lower Factory Hollow area has also been significantly impacted by industrial activity, industrial construction and demolition episodes, and residential construction. One of the largest impacts is from the thousands of non-battle related objects and debris from industrial activities which make it extremely difficult to identify any battle-related objects amongst the "noise" from thousands of more recent metal objects.

However, as demonstrated from the Phase I and Phase II surveys many portions of the Great Falls battlefield still retain a high degree of visual and physical integrity that convey a sense of the historic scene and battlefield landscape. Since the 1676 battle, houses, factories, and roads have impacted sections of the battlefield and the nature of the vegetation has certainly changed (it was likely a more open forest), but the battlefield terrain and geomorphology are relatively unchanged and still provide a sense of the visual setting at the time of the battle. The most significant impacts to the battlefield are those resulting from 350 years of land use after the battle. Post-battle artifacts recovered from the battlefield include hundreds of lead bullets, horse and ox shoes, quarry tools such as feathers and plugs, chain links, and personal items such as coins, buttons and harmonicas. While these activities resulted in thousands of non-battle related objects deposited on the battlefield landscape, and made the identification of battle related objects more challenging, they do not significantly affect the integrity of the battlefield.

Battlefield Pattern Analysis

Traditional battlefield interpretations and reconstructions rely primarily on historical information (e.g., battle accounts, narratives, diaries, etc.), occasionally augmented by oral histories and random collections of battle-related objects. These reconstructions tend to focus only on the analysis of the spatial distribution of battle related objects which resulted in a static reconstruction of the battlefield, referred to as Gross-Pattern Analysis. Douglas Scott, Richard Fox, and others have advocated for an approach to battlefield archeology that moves beyond the particularistic and synchronic approach characteristic of Gross-Pattern Analysis in battlefield reconstructions.¹⁰ This approach was developed to document the Battle of the Little Big Horn. This approach referred to as Dynamic-Pattern Analysis, adds a temporal dimension to battlefield reconstruction by integrating discrete battlefield events and their archeological signatures into a cohesive spatial and temporal sequence.

The key to a dynamic battlefield analysis as defined by Scott and Fox is the identification of individual and unit actions that “allows resolution of individual positions and movements across the battlefield.”¹¹ In the case of the Battle of the Little Bighorn this was largely achieved through modern forensic ballistic analysis of thousands of rifled bullets and cartridge cases which allowed researchers to track individual firearms (bullets and shell casings) across the battlefield. This model integrating spatial and temporal dimensions of the battlefield has been the paradigm for Civil War and post-Civil War battlefield archeology since 1985.

A dynamic reconstruction of battlefield events requires an ongoing assessment of the congruence of the historical and archeological record to identify discrete group (units) or individual actions and movements on the battlefield to place them in a temporal framework. This approach would seemingly not work on seventeenth-century battlefields where the projectiles were musket balls and the actions of individuals could rarely if ever be identified. Nonetheless a modification of this approach that focused on group actions was successfully adapted to document the Great Falls/Peskeompskut battlefield.

Although individual actions could not be identified based on the identification of a unique ballistic signature, several distinct unit actions were identified on the Great Falls battlefield. In one instance a Native flanking attack was documented in an action referred to as

¹⁰ Douglas D Scott, *Archeological Perspectives on the Battle of the Little Bighorn* (Norman, OK: University of Oklahoma Press, 1989); Fox and Scott, “Post-Civil War Battlefield Pattern.” Pp. 92-103.

¹¹ Scott. *Archeological Perspectives on the Battle of the Little Bighorn*. P.148.

“The Mountain Gap,” (Locus C) which is a narrow east-west oriented 15-yard-wide natural break through a steep north-south trending bedrock ridge that English forces had to pass through during their retreat. Fifty-five small diameter musket balls (e.g., .28” to .38” diameter) were recovered within the gap, mostly on the north slope of the gap indicating they were fired from south to north in a flanking movement. In another example a concentration of thirteen large diameter musket balls (e.g. .50-54” diameter) were distributed near the crest of a long flat plain in Upper Factory Hollow (Locus F). The musket balls were recovered in direct association with horse tack suggesting that English troopers were fired upon by several Native soldiers as they used their disabled horses for cover and were unable to escape on foot. Another example is the English fire at a ridge overlooking the Green River Ford where Coalition forces positioned themselves to ambush the English as they crossed the ford (Locus J). None of these examples are explicitly mentioned in the battle narratives but nonetheless can be associated with a particular combatant and action based on their spatial and temporal context. Initially, the linear nature of the battle often made it difficult to discern Native from English fire unless the direction of fire could be determined in association with terrain features (e.g. the “gap”, swales, etc.). It was also assumed that the majority of the musket balls recovered from the battlefield were fired by the Native combatants (and still may be). However, a re-analysis of historical information and musket ball data (e.g. diameters, direction of fire) associated with terrain features resulted in the identification specific unit actions associated with English and Coalition forces. It now appears that some of the English eventually mounted a cohesive defense and fought hard along portions of the retreat resulting in a number of Native casualties.

Military Terrain Analysis (KOCOA)

A key aspect of battlefield reconstruction is to try to understand and view the battlefield terrain through the soldiers’ eyes. The military has developed a process for evaluating the military significance of the terrain denoted by the mnemonic KOCOA—Key Terrain, Obstacles, Cover and Concealment, Observation and Fields of Fire, Avenues of Approach and Retreat.

Key Terrain: Ground that when controlled and occupied gives its possessor an advantage. Examples within the Great Falls battlefield include the White Ash Swamp, elevated terraces overlooking the Deerfield River Ford, bedrock ridges at the Mountain Gap, and the fords at the Green and Deerfield Rivers. These areas were used by the Native combatants to attack the retreating English column and set ambushes.

Obstacles: Terrain features at the time of the battle that prevented, restricted, channeled or delayed troop movements included steep slopes and bedrock ridges, the White Ash Swamp and the Connecticut, Deerfield, and Green Rivers. Other examples include the “Mountain Gap” the English were forced to pass through to escape Native counterattacks, the swales leading to high ground from lower to upper Factory Hollow and the fords over the Green and Deerfield Rivers. Some of the very steep terrain along the English route of approach and retreat would not have been an obstacle for soldiers on foot but significantly restricted use and access of these areas if soldiers were on horseback. Examples include the terrace edge along the west bank of the Green River and the very steep slopes overlooking the Falls River along the east side of the river.

Cover and Concealment: Cover is protection from the enemy’s fire, such as the brow of a hill, a ravine, or lip of a terrace. Concealment is cover from observation by the enemy. Examples include the White Ash Swamp that provided concealment to the Native combatants and opportunities to set ambushes.

Observation and Fields of Fire: The ability to observe the movements of the enemy and to prevent surprise is a major advantage in battle. This might require occupying high ground that was not necessarily key terrain. An example of a terrain feature that provided Native combatants with an opportunity to observe the retreating English were the elevated bedrock outcrops along the route of retreat such as Rocky Mountain and Canada Hill assuming there were fewer trees.

Avenues of Approach and Retreat: The transportation networks in the broader Turners Falls area at the time of the battle consisted of paths, trails, and cart paths. Jonathan Wells, a soldier who was separated from the main body of English during the retreat mentions traveling along a footpath “which led up to the path the army returned in” as he could see hoof prints. These networks connected Native villages and Colonial settlements, and fishing places and were used by the English and Native combatants to facilitate movement at the time of the battle.

Defining Terrain Features

The Native and English combatants at the Battle of Great Falls oriented themselves on the battlefield by the cultural and natural landmarks of the historic landscape. A *defining feature* may be any feature mentioned in battle accounts or shown on historic maps that can be located within the battlefield boundary. Defining features referenced in historic sources at the time of the battle or shortly after are depicted in Figure 6.

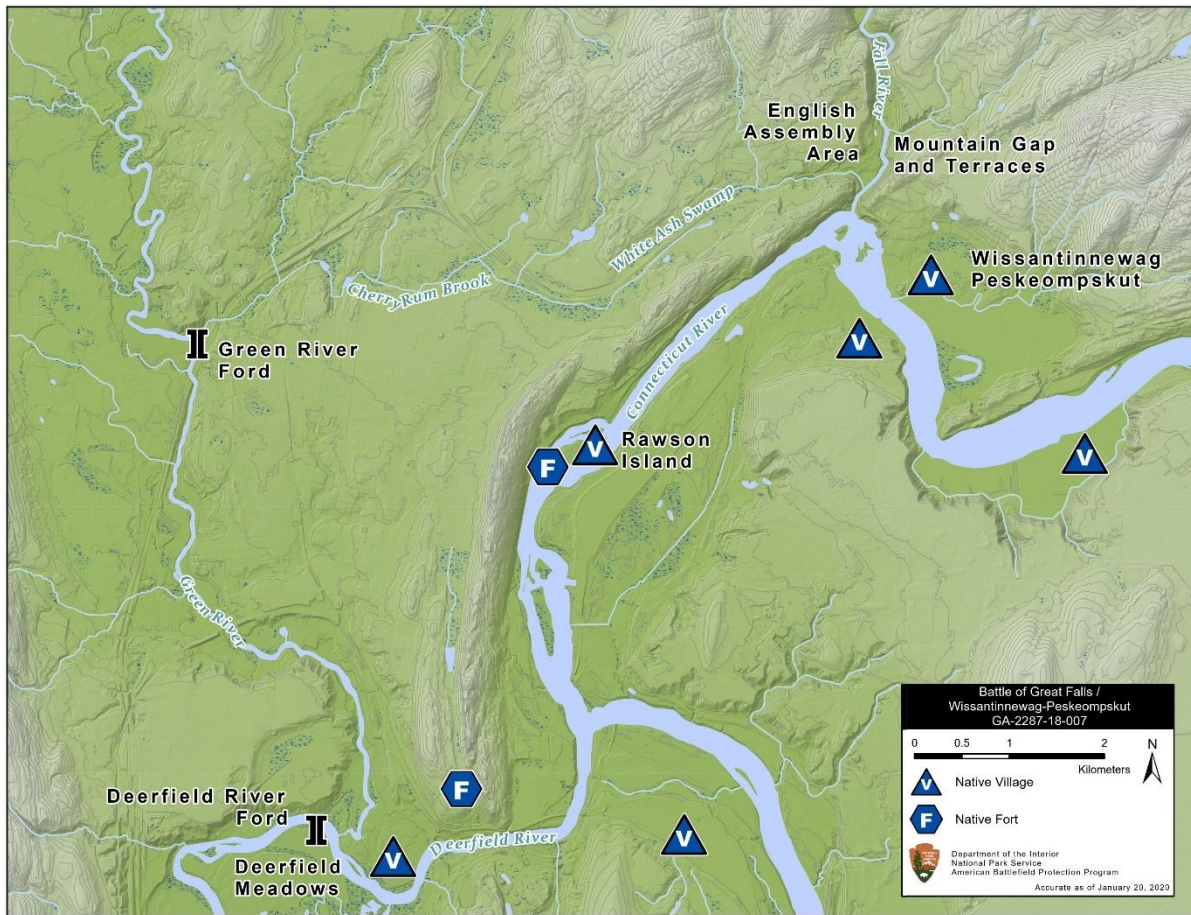


Figure 6. Battlefield Landscape and Defining Terrain Features.

Several other defining features were identified based on the presence and distribution of battle-related objects including “The Mountain Gap” (Locus C), the terraces overlooking the Falls River (Locus D), the Swales leading from Lower to Upper Factory Hollow (Locus E), The White Ash Swamp (Locus G), The ridge overlooking the Green River Ford (Locus J), and the terrace overlooking the Deerfield River Ford (Figure 3; Table 1). The Cherry Rum Brook (Locus H & I) is also considered a defining terrain feature based on the fighting that occurred along its 2-mile (3.2-kilometer) length from the White Ash Swamp to the Green River and because the English used the brook to orient themselves in unfamiliar territory during the retreat.

Table 1. Defining Terrain and Cultural Features. Battle of Great Falls

Name	Location	Relevance to Battle	Field Comment	KOCSA Analysis	Integrity
Defining Terrain and Cultural Features					
Locus A Peskeompskut	A 150-acre floodplain along the west bank of the river adjacent to the Great Falls	site of the Coalition village attacked by the English on May 19, 1676	heavily impacted by 19 th and 20 th century industrial and residential development	key terrain as it was the objective of the English attack	physical and visual integrity very low
Locus B Initial Coalition Counterattack	situated between Peskeompskut and the Mountain Gap	area of initial Native counterattacks on the 20 men who served as the rear guard	several musket balls were fired south to north indicating fire from pursuing Natives	A relatively flat plain until a moderate slope on the western end leading to the Mountain Gap. Was the only avenue of retreat for the English	excellent physical and visual integrity
Locus C Mountain Gap	north-south bedrock ridge with east-west gap 125 yards east of the Fall River	site of an ambush by Coalition forces as 20 English rear guard retreated from Peskeompskut to reach their horses on the west side of the Fall River	high density of musket balls fired from south to north as English passed through the gap	a chokepoint used by Coalition forces to ambush the English as they passed through the gap to recover their horses	excellent visual and physical integrity
Locus D Terraces	high ground situated between the Fall River and the Mountain Gap overlooking the Fall River	after exiting the Mountain Gap, the English retreated across the terraces to descend to the Fall River and cross to recover their horses	nature and distribution of musket balls indicate English split into two groups	level, open ground which provided the English an avenue of escape from pursuing Coalition forces	excellent visual and physical integrity
Locus E Lower Factory Hollow	rising slope between Fall River and steep slope leading to Upper Factory Hollow	location where the English tied their horses and had to fight Coalition forces to recover their horses. Swales leading up the western slope provided access to flat ground for English to escape on horses.	very high concentration of buckshot in swales leading from Lower to Upper Factory Hollow as Coalition forces tried to prevent English from escaping	the relatively lower relief of the swales allowed mounted English to ascend the steep slope	area east of steep slope heavily impacted, steep slope has excellent visual and physical integrity

Locus F Upper Factory Hollow	level plain between Lower Factory Hollow and White Ash Swamp	when the mounted English escaped up the swales from Lower Factory Hollow the level ground allowed them to put some distance from the Coalition forces	majority of musket balls are large diameter as Coalition forces target English at greater distance	The level ground allowed the mounted English to put distance from Coalition forces	Excellent visual and physical integrity
Locus G White Ash Swamp	The swamp is located .45 miles west of Upper Factory Hollow and extends for .6 miles	Coalition forces set an ambush at eastern end of swamp scattering the panicked English into several groups	Musket ball are distributed in a linear pattern along dry ground along the northern edge of the swamp.	used as cover and concealment by coalition forces to set an effective ambush	good visual and physical integrity
Locus H Cherry Rum Engagement	located along Cherry Rum Brook in area of low ground .9 miles west of White Ash Swamp	high density of musket balls most appear to be English fire. Indicates English began to regain some cohesion.	musket balls distributed over 10 acres 10 yards either side of brook.	area may have been a thicket or swamp used by Natives for concealment. English may have suspected and fired many musket balls	excellent physical and visual integrity
Locus I Cherry Rum Brook	brook from White Ash Swamp to Green River a distance of two miles. used by the English to orient themselves during the retreat	as Coalition forces could anticipate English movements as they stuck close to the brook to guide to during their retreat Coalition forces could predict when and where they would be.	residential in some areas wooded in others. Intermittent areas of steep ground and level ground musket balls recovered all along the brook.	used by the English as a route of retreat and used by Coalition forces as to attack and ambush English of the brook.	
Locus J Green River Ford	ford used by the English at the confluence of Cherry Rum and Green Rivers	Coalition forces set an ambush along the ridge overlooking the ford. Turner was killed as he crossed to the west side of the Green River	Musket balls recovered on slope of ridge indicating English fire at Coalition forces	Chokepoint as English had to maneuver within a very narrow valley to cross the ford. Used by coalition forces to set an ambush	Visual integrity is good, physical integrity poor from construction of town park
Locus K Holyoke's Retreat	level plain on west side of Green River extending south from Green River Ford	few musket balls found south of Green River Ford suggesting English used level ground to distance themselves from Native pursuers.	Only three musket balls recovered over a distance of 1-mile indicating little contact between combatants	Used by mounted English as route of retreat and could maximize usefulness of horses	good physical and visual integrity

Locus L Deerfield River Ford	Forms a boundary between present-day Deerfield and Greenfield.	Deerfield River Ford was used by the English as an Avenue of Approach and Retreat. The terrace above ford was a bottleneck and Coalition forces attacked the English as they waited to descend.	Moderate residential development, lightly wooded.	The ford and the terrace above were natural bottlenecks that slowed the English retreat	Good visual and physical integrity
Native Villages and Forts	Five Native villages and one or two were distributed along the CT River from Cheapside to the Miller River.	The villages/forts contributed men in the battle against the English.	Moderate Residential Development, Wooded, Public Roads	Key Terrain, Observation (Native), Obstacles, Fortified Place	Fair physical and visual integrity
Connecticut River	The CT River runs south from the border with Quebec, Canada and discharges at Old Saybrook, CT.	The portion of the CT River beginning south at Deerfield and running north to Gill served as a major obstacle to English and used by Native forces to move men into battle	Substantial Industrial development around the towns of Gill and Montague, Open Space, Wooded	Key Terrain, Obstacle (English & Native), Avenue of retreat & approach (Native)	Good: Location, setting, feeling, association, material
Fall River	A tributary of the Connecticut River which empties just below the Great Falls.	English forces dismounted and left their horses and a small guard west of Fall River. The main force crossed Fall River and continued east.	Moderate Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Obstacles, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material culture
Deerfield River/Petty Plain	Located north of the Deerfield River and west of the Green River	English forces forded the Deerfield River and crossed Petty Plain towards the Green River.	Moderate Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Avenue of Approach & Retreat (English & Native)	Fair: Location, setting, feeling, association, material culture

Battlefield Landscape.

Four types of resources make up the battlefield landscape; *natural features*, *cultural features*, *military engineering features*, and *artifacts*. An important aspect of the battlefield analysis is the reconstruction of the historic and battlefield landscape to identify natural and

cultural features present within the Battlefield Boundary and to determine how they were used by the combatants and which may have influenced the outcome of the battle.¹² A cultural landscape is defined as a geographic area which includes both cultural and natural resources associated with the historic battlefield event and which contributes to the landscape's physical appearance.¹³ In addition to vegetation and topography, cultural landscapes include water features, such as ponds, streams, wetlands, and rivers; circulation features such as paths, roads, and fords, and the built environment such as fences, corn fields, and villages.

To identify, document, survey, and map a battlefield landscape relevant historical accounts must be searched to identify the historic landscape that defined the battlefield through terrain analysis and identification of natural and cultural features associated with the battlefield. Elements of the Great Falls battlefield landscape that can still be seen today include the Connecticut, Fall, Green, and Deerfield Rivers, Cherry Run Brook and White Ash Swamp as well as the numerous bedrock ridges, terraces, and swales that define and influenced the course of the battle (Figure 6).

Natural Features

The natural terrain or topography of the battlefield landscape is defined by the drainage pattern and relative elevation. Natural features within the Great Falls battlefield include rivers, streams, swamps, hills and valleys, and the natural land cover at the time of the battle which included stands of young and old trees, abandoned and newly planted corn fields, and swamp vegetation. Nuances of the terrain that are not necessarily apparent on a contemporary map may have influenced how the battle was fought. Rocky outcrops along the east side of the Fall River provided cover for Native attackers during the flanking attack at "The Mountain Gap." (Locus C). The several swales leading from the lower to the Upper Factory Hollow Area provided the only avenues of escape for mounted Englishmen (Locus E). The steep terrace overlooking the Deerfield River Ford allowed for only a few mounted English at a time to descend to the ford along a narrow trail, essentially acting as a *cul-de-sac* where the retreating English had to wait their turn to descend (Locus L). This area proved to be an ideal terrain by which the Native

¹² John Carman & Patricia Carman, "Mustering Landscapes: What Historic Battlefields Share in Common" in Eds. Douglas Scott, Lawrence Babits, and Charles Haecker. *Fields of Conflict: Battlefield Archeology from the Roman Empire to the Korean War* (Washington, D.C.: Potomac Books, 2009).

¹³ Susan Loechl, S. Enscoe, M. Tooker, & S. Batzli. *Guidelines for Identifying and Evaluating Military Landscapes* (Washington, DC: Legacy Resource Management Program, Army Corps of Engineers, Washing, D.C. 2009).

attackers could pour fire into the massed group of English waiting to descend to the ford forty feet below. It is also important to assess how much the terrain has changed since the battle event. Have streams been diverted or channeled? Have swamps and bogs been drained or filled? Have terrain features been destroyed by sand and gravel operations? Have any of the steep terrain features along the Fall, Green, and Deerfield Rivers have been altered by erosion? Peter Thomas' analysis of the changing course of the Deerfield River over the last two hundred years indicates that the original fords may have been destroyed or altered (Figure 7). Erosion along the east bank of the Fall River and Green River may have impacted portions of the battlefield. Finally, the construction of State Route 2 and Interstate 91 may have significantly impacted portions of the battlefield through cutting and filling.

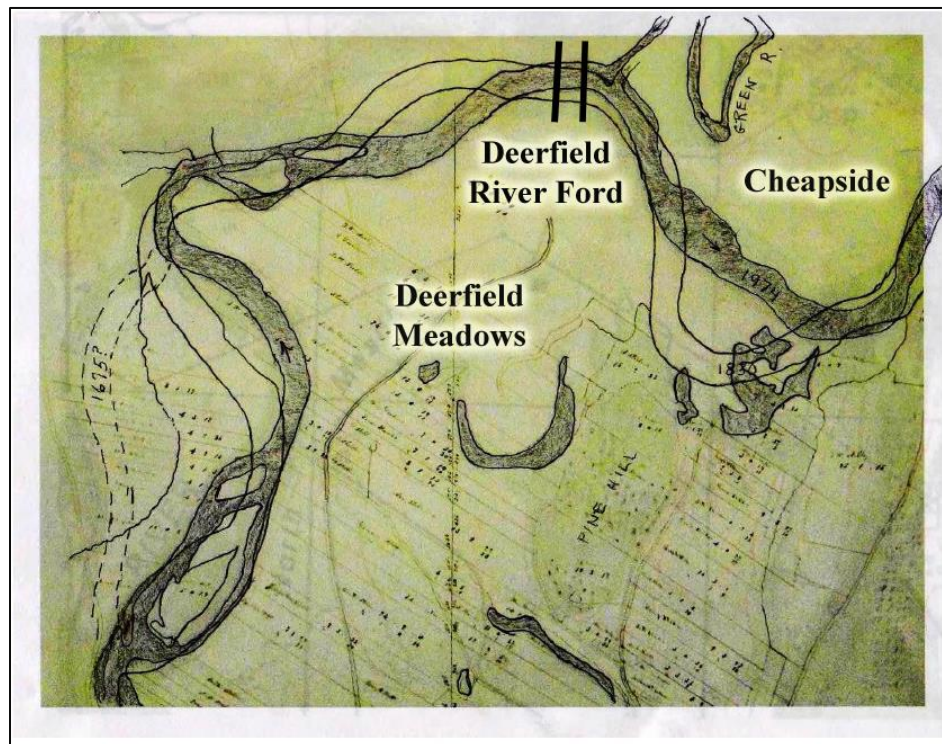


Figure 7. Changing Channels of the Deerfield River. Ca. 1675 – 1974
(Map Courtesy of Peter Thomas).¹⁴

Cultural Features

Cultural features are elements of the historic landscape created by humans. The Great Falls battlefield landscape was the result of hundreds if not thousands of years of Native land use that included fishing camps and villages, fortifications, agricultural fields, burial and ceremonial

¹⁴ The map depicts the river's configuration in 1830 and 1974. It undoubtedly shifted between 1675 and 1830.

places, and networks of paths and trails that connected communities and important resources. A brief description of Rawson Island a month after the Great Falls Battle provides an interesting perspective on the built environment and cultural landscape at the time of the battle. Except for the fort the cultural features described at this location would have been found at any of the Native villages:

*June. 28. About thirty of ours adventured to go up the River towards the Falls at Deerfield, to see what Indians they could espy thereabouts, but coming they found none. They went to an Island where they found an hundred Wigwams, and some English plundered Goods, which they took, and burnt the Wigwams. Also they marched up to a Fort which the Indians had built there, and destroyed it. Digging here and there they found several Indian Barns, where was an abundance of Fish, which they took and spoiled, as also thirty of their Canoos".*¹⁵

The cultural landscape, in turn, was shaped by topography, natural drainages, elevations, mountain gaps, fords, and soil quality. The presence of the Great Falls and the numerous river confluences in the Great Falls area were ideal locations to capture anadromous fish in the spring and greatly influenced the locations of fishing camps and villages. The cultural landscape influenced the speed, location, nature, and direction of combat. River fords, paths and trails suitable for horses largely dictated the speed and routes of the English approach and withdrawal and could be used by the Native combatants to predict the route of the English retreat and set ambushes at key locations.

There were at least six Native villages in the immediate vicinity of the Great Falls area between the Green and Miller Rivers (Figure 6). In addition to Wissantinnewag-Peskeompskut (Riverside) on the west bank of the Connecticut River, English sources identify many others; the east bank of the Connecticut River across from Wissantinnewag-Peskeompskut, at the confluence of the Deerfield and Green Rivers at an area known as Cheapside, one (fort and village) at Rawson Island, one east of Deerfield Meadows, and one further upriver from Wissantinnewag-Peskeompskut perhaps near the Miller River. These villages were occupied at the time of the battle and contributed fighting men to the battle. It is not entirely clear why the English decided to attack the village at Wissantinnewag-Peskeompskut, but that decision influenced their route of approach, where they tied their horses, their Avenue of Approach, and their deployment during the attack. The locations of the remaining villages greatly influenced the

¹⁵ Mather. *A Brief History*. P. 57.

outcome of the battle based on their positions near or adjacent to the English route of retreat, the number of Native men they contributed to the battle, and the speed and location with which they engaged the English during the counterattack. Native men from all the remaining five villages sent men against the English during the counterattacks (Figure 1):

...& Captain Wells says that ye difficulties they were exposed to in the retreat was probably owing to y^e long stay they made in the place of victory [Wissantinnewag-Peskeompskut]...this gave time to ye Indians that were at Deerfield, Cheapside, & the island & up above & on y^e east side of y^e river to get together & when they did make head against our men y^e army drew off in great order and confusion.¹⁶

The soldiers so cut off were surprised by a party of the enemy belonging to the Indians at Deerfield.¹⁷

In the meanwhile, a party of Indians from an Island (whose coming on shore might easily have been prevented, and the Souldiers before they set out from *Hadly* were earnestly admonished to take care about that matter) assaulted our men; yea, to the great dishonour of the English.¹⁸

Military Engineering Features

Military earthworks (field fortifications, palisades, entrenchments, trenches) are an important resource for understanding a battle event. Surviving earthworks often define critical military objectives, opposing lines of battle, and no-man's land. Two Native fortifications are mentioned around the time of the battle, one at Rawson Island, "they [English] marched up to a Fort which the Indians had built there, and destroyed it" and a second possibly at Cheapside "and their fort close by Deerfield River,"¹⁹ It is unlikely this is a reference to the fort on Rawson Island on the Connecticut River, as the confluence with the Deerfield River is located 1.3-miles downstream, and Cheapside is located 2-miles f up the Deerfield River. From the confluence with the Connecticut River. Just east of and adjacent to Cheapside is the southern terminus of a large ridge known as Canada Hill. The ridge rises some 200 feet above Cheapside and the Deerfield River making it an ideal location for a fort.

¹⁶ Thomas. "Rev. Stephen Williams's Notebook." Pp. 13, 15.

¹⁷ Roger L'Estrange, *A True Account of the Most Considerable Occurrences that have Happened in the Warre Between the English and the Indians in New England, From the Fifth of May, 1676, to the Fourth of August Last* (London, UK: Printed for Benjamin Billingsly at the Printing Press in Cornhill, 1676). P. 4

¹⁸ Mather. *A Brief History*. P.49.

¹⁹ Mather. *A Brief History*. P. 59; CSL. Colonial Wars, Series I. Doc. 74.

Battle Related Artifacts

Although the contemporary visible landscape may present a quiet, pastoral scene, it belies the fact that many artifacts related to the battle lie hidden beneath the ground surface. Beneath the surface of the battlefield landscape is physical archeological evidence of the many actions and domestic sites and activities associated with the Battle of Great Falls. This includes the English attack on the village at Peskeompskut, the initial Native counterattacks, the disintegration of English forces at the English Assembly Area while regaining their horses, ambushes around the White Ash Swamp, fighting at Deerfield Ford as the English fought to cross the Deerfield River, locations where English soldiers were tortured, and other actions yet to be documented. The archeological record provides a direct physical link to recorded battle events and identifies actions that were not recorded in battle narratives. Archeological evidence is the key to documenting the battlefield as the nature and distribution of battle-related objects anchors the battle events to the landscape. Without physical evidence there is no proof of the battlefield.

A battle-related artifact is only valuable in terms of its relationship, context, and association with other artifacts. The recovery of a single musket ball may be the result of hunting activity, but dozens of impacted and dropped musket balls of various diameters within a circumscribed area and associated with key terrain features such as “The Mountain Gap” or other battle-related objects such as horse tack and horse shoes indicate they are associated with battle events. Battlefield archeologists and historians can use this evidence to verify or identify troop movements, map out battle actions in time and space, reconstruct and interpret a battle's progress, reveal previously unrecorded aspects of the battles, confirm locations of Native villages, verify or disprove long-believed myths or “official” accounts of the battle, elucidate short and long term effects of the battle on English and Native communities, and in some instances provide important information on the experiences of battle participants through the recovery of personal and domestic objects from the battlefield.

Most defining features identified in the historic documents, and in the field, have archeological resources associated with them such as the village at Peskeompskut and the White Ash Swamp. Conversely, archeological resources can also identify key terrain features that were not mentioned in primary sources such as the Mountain Gap and terraces and the terraces overlooking the Deerfield River Ford. Defining features are often the most important resource to preserve and protect on the battlefield landscape.

Methods of Analysis of Battle Related Objects

One of the main goals of the Phase II analysis was to conduct a thorough examination of all musket balls and associated terrain contexts across the entire battlefield, and within each locus to determine to the extent possible which musket ball diameters and caliber of firearms could be associated with Native Coalition or English forces to achieve a more complete and nuanced reconstruction of the battlefield.

Full musket calibers (interior bore diameter of the weapon) regardless if they were a flintlock, matchlock, snaphaunce, or wheellock, usually ranged between .60 and .70 caliber and had four-foot barrels. Carbines usually had a barrel length of between two and three feet and usually ranged between .50 and .60 caliber. Regardless of the ignition system (match, flint, wheellock) smoothbore weapons had an effective range of 50-75 yards for shorter barreled weapons and a range of 100-150 yards for longer barreled weapons. Pistol calibers can vary but are most often between .40 and .50 diameter and had an effective range between 30 and 50 yards.

The first step was to redefine the categories of musket ball diameters used in the Phase I survey to accommodate new information and a better understanding of the potential association of musket ball diameters and firearm calibers with one combatant or the other based on Phase II survey results (Figures 8 & 9). One of the primary reasons the musket ball categories were redefined was the realization that existing categories served to mask potential variation of firearm calibers and the use of small shot (buckshot) across the battlefield. The new musket ball categories were based on the correlation of specific musket ball diameters, or patterns of musket ball diameters with battle events that could be inferred to be associated with either Native or English fire (see below).

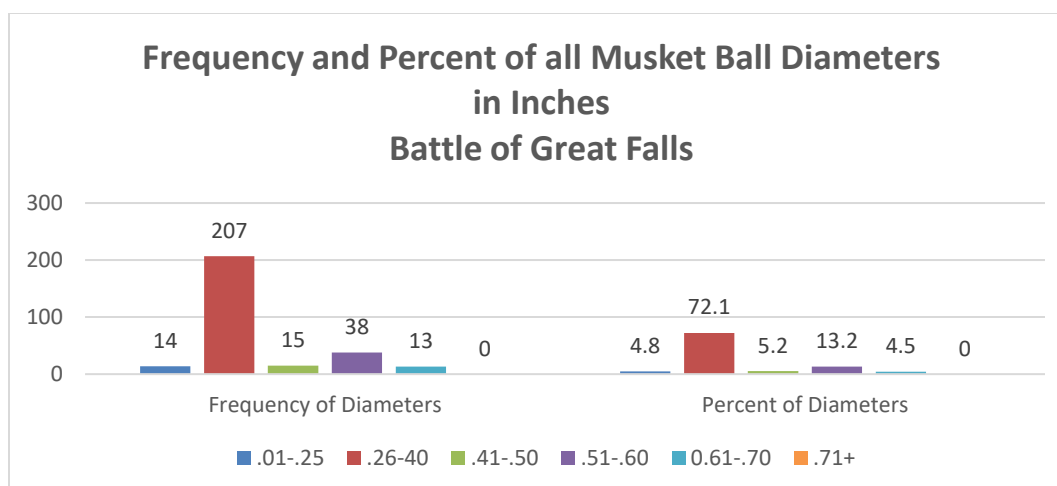


Figure 8. Musket Ball Diameters Battle of Great Falls – Phase I Survey.

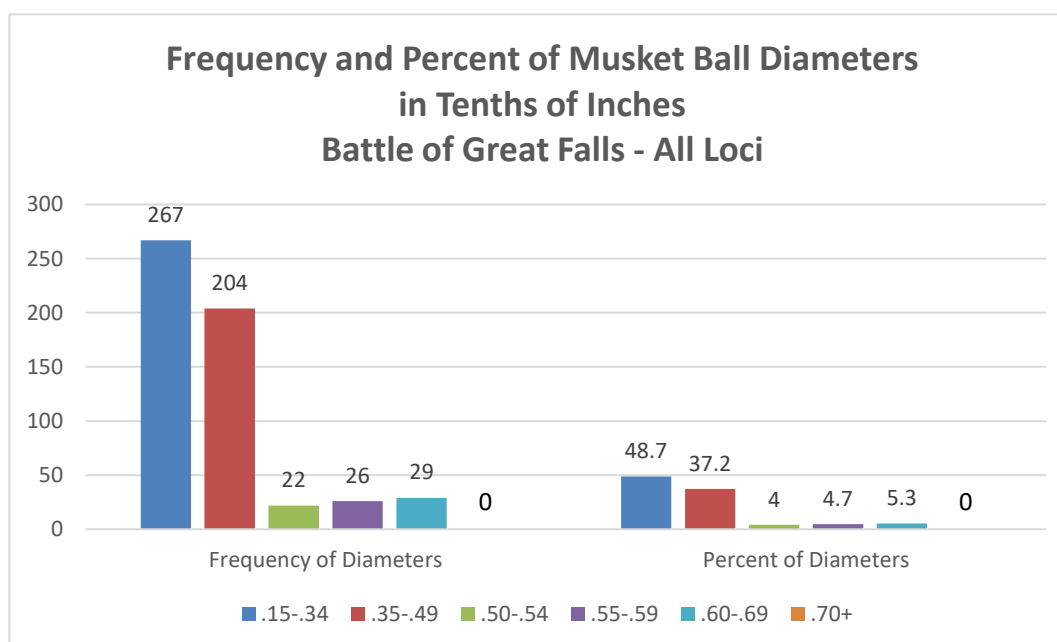


Figure 9. Musket Ball Diameters Phase I and II Surveys.

Table 2. Phase I Musket Ball Diameter Categories

.01-.25"	.26-.40"	.41-.50"	.51-.60"	.61-.70"	.71"+
small shot	small shot	pistol/carbine	carbine/musket	musket	musket

Although several of the loci identified during the Phase I battlefield survey could fairly confidently be associated with Coalition forces (particularly Loci C-F), it was difficult to attribute recovered lead shot from many of the newly identified Loci (G-L) with one combatant or the other. This was due to several factors including fewer documentary sources detailing battle

events and actions west of the Factory Hollow area (Loci G-L), and fewer indications of “directional fire,” as the terrain became less variable and more even. As a result, a re-analysis of the musket ball data from Loci B-F was conducted as these loci had the best associations with combatants based on particular battle events, primary sources, terrain, and direction of. These loci provided baseline signatures of Coalition or English firearms and associated calibers, and tactics (e.g. use of small diameter shot as buckshot) which could be applied to other loci. Part of the re-analysis also focused on identifying unique casting and mold flaws evident on individual musket balls which could potentially be used to distinguish between combatants or perhaps even track individuals on the battlefield.

Table 3. Revised Musket Ball Diameter Categories.

.15-.34"	.35-.49"	.50-.54"	.55-.59"	.60"+
small shot	pistol	carbine	carbine/musket	musket

The analysis was largely successful and we were able to associate categories of musket ball diameters and caliber of weapons carried by either the English or Native Coalition forces in many instances (Table 5). Musket balls in the .15-.34" and in the .50-.54" diameter ranges are almost exclusively associated with Coalition forces. Musket balls in the .55-.59" diameter range seem to be associated with both Coalition and English forces, while musket balls in the .35-.49" and .60-.69" diameter ranges tended to be associated with English forces.

Native Coalition forces tended to fire multiple loads of small caliber shot (buckshot) in the .15-.34" diameter range and appear to have preferred lighter carbine or muskets that fired musket balls in the .50-.54" diameter range (e.g. .54"- .58" caliber). Both sides seem to use weapons that fired musket balls in the .55"- .59" diameter range (e.g. .59-63" caliber). English forces tended to fire musket balls in the .35-.49" diameter range from pistols or carbines (.39-.53" caliber), and musket balls in the .60-.69" diameter range (e.g. .64"- .73" caliber).

Musket Ball Analysis

Five hundred and forty-eight lead musket balls were recovered from the Battle of Great Falls battlefield Phase I and Phase II surveys. Interpreting the nature, distribution, and context of the musket ball assemblages proved to be very challenging due to two major factors. First, unlike the Pequot War (1636-1637) where the Pequot had only a few firearms and used the bow (tipped

with brass arrow points) as their primary weapon, firearms were the primary weapon of both Native Coalition and English forces during King Philip’s War and opposing sides *generally* carried similar arms. With few exceptions, it is difficult to associate the nature and distribution of lead shot across the Great Falls battlefield with one combatant or the other, or which side fired particular projectiles, or which caliber of firearm was used or preferred. Secondly, like most King Philip’s War combat, fighting during the Battle of Great Fall was asymmetrical in nature and some areas of the battlefield may have initially been dominated by projectiles fired by one side or the other (or both) but given the linear nature of the battlefield the terrain may have been traversed by various combatants several times over, making it difficult to attribute lead shot to one side or the other. These factors necessitated the need for a more comprehensive analysis of the ammunition carried and expended by Coalition and English forces.

All musket balls were initially brushed to remove any soil and then weighed to determine the diameter of “impacted” (i.e. no longer spherical; showed evidence of impact) and “dropped” (i.e. spherical and no evidence of impact) balls using the Sivilich formula developed at the Monmouth Revolutionary War battlefield (diameter in inches = $.223204 \times (\text{weight in grams})^{1/3}$).²⁰ The diameter was measured with calipers if the ball was not deformed but in all cases diameters measured by caliper and those calculated using the Sivilich formula were virtually identical. Musket balls were examined under a 10x binocular microscope to identify casting features, deformations from loading or firing, and/or evidence of slight or minimal impacts (e.g. striations, gouges). Table 4 lists various musket ball features that were recorded for each ball.

Table 4. Musket Ball Features.

Diameter	(Inches)
Composition:	Lead, Lead Alloy (Pewter)
Shape:	Round, Cylindrical
Number of Facets	(If Present)
Sprue:	Round, Oval, Single or Double Clip, Casting Cavity
Casting Seam:	Present, Present, Prominent (mold halves not tight), Misaligned (offset)
Mold Flaws:	Jupiter Ring, Cool Casting Wrinkles
Deformation from Loading or Firing:	Ramrod Mark, Middle or End (segmented or double shot), Firing Hemisphere (single shot), Bore Edge Facet (small diameter buckshot), Number of Facets (small diameter buckshot)
Impact Damage:	None (dropped), Heavily Impacted (high velocity or impact on hard or sharp surface), Moderately Impacted (medium velocity or impact on flat solid surface), Low Velocity/Slight Impacted (striations or gouges), Ricochet, Chewed

Casting, Firing, and Impact Features

²⁰ Sivilich

One avenue of musket ball research was to conduct a detailed study of lead shot to identify unique casting features to potentially track similarly cast lead shot across the battlefield and perhaps attribute certain casting flaw patterns with particular combatants. This analysis has not been completed and is ongoing. All of the musket balls recovered from the Battle of Great Falls were examined to identify features resulting from casting, firing, and impacts.

Casting Features

Traces of the manufacturing (casting) process are often visible on lead shot: the casting seam where the two halves of the bullet mould join; the sprue, a vestige of the opening where the lead was poured into the mould; and the sprue scar that results from the sprue being trimmed or cut. Sprues are most often circular but on occasion they can be oval or triangular reflecting some irregularities in the mould (Figures 10 & 11).

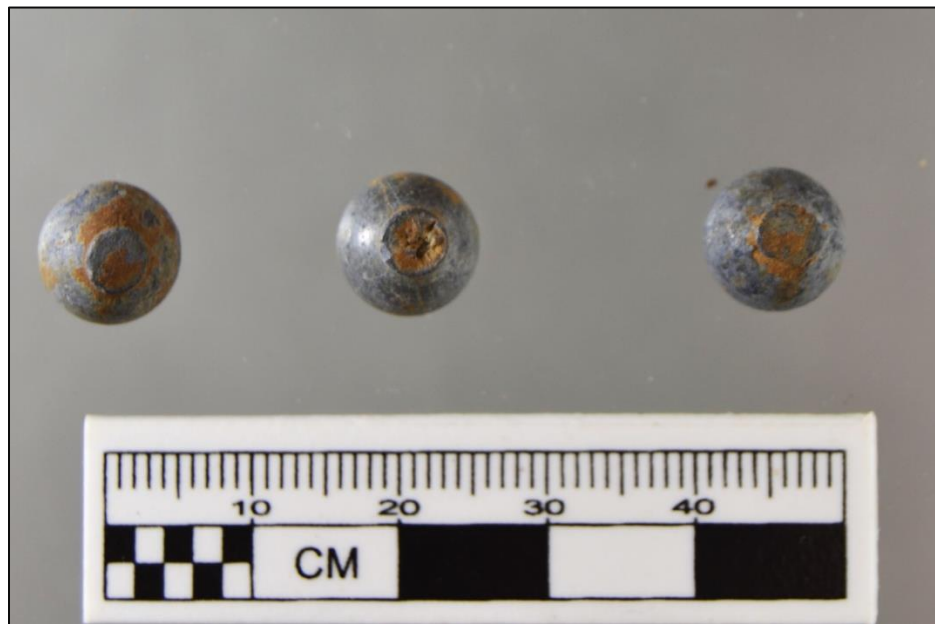


Figure 10. Sprue Shapes, Oval (left), Round (middle and right).

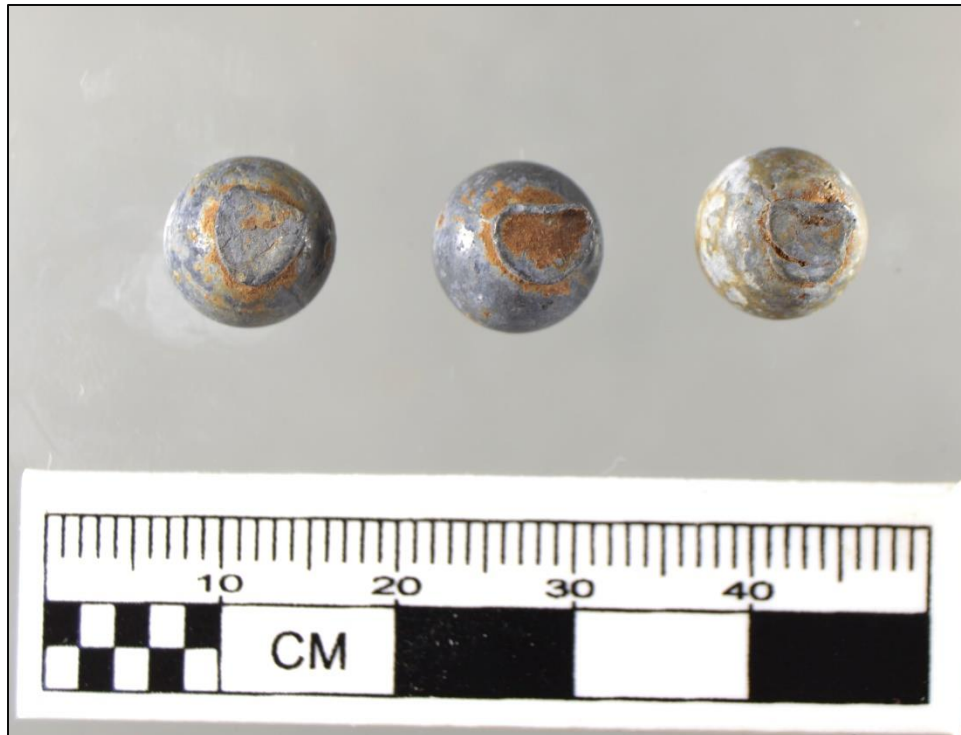


Figure 11. Triangular (left) and Odd Shaped Sprues (middle & right).



Figure 12. Misaligned Seam (left two); Prominent Seam from spillage (third from left); Normal Seam (far right).

The casting seam on a musket ball is a line around the ball from pole to pole where the two halves of the mould meet. The seam is sometimes prominent if the mould halves do not meet properly either because they are misaligned (offset) or because the rims of the hemispherical cavities were not sharp and ‘spillage’ occurs (Figure 12)

“Jupiter Rings” are features caused by tool marks left in the mould cavity by the abrasive rotating tool which hollowed out the cavity during manufacture of the mould (Figure 13). Depending on the nature and location of the ring it could be a unique signature for a particular mould and be evident on musket balls made from that mould. Eight musket balls from the battlefield exhibit Jupiter Rings.

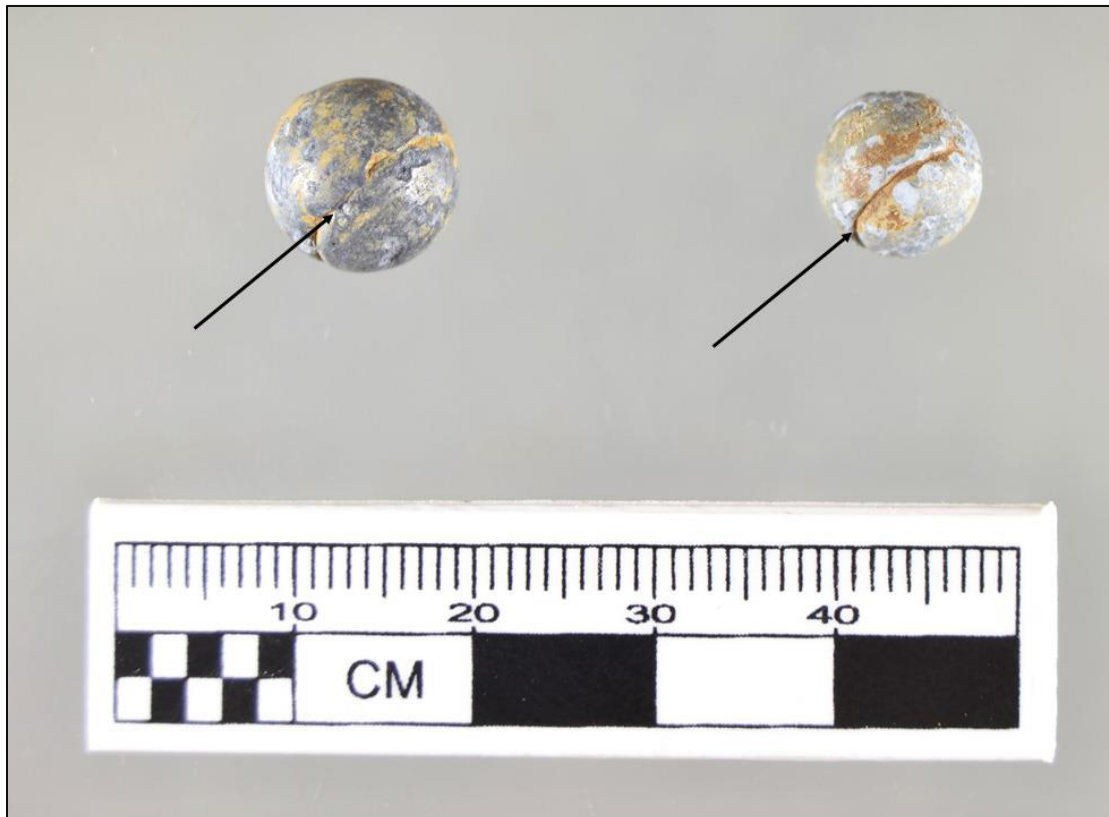


Figure 13. Jupiter Rings.

Firing Features

Musket Balls were examined to determine if a firing hemisphere or “set up” was evident around the circumference of the ball which would indicate both the caliber of the weapon and a single-shot potentially taken at a distance (> 40 yards), versus multiple small-shot loads employed at close-range (< 40 yards). A musket ball undergoes deformation in the barrel while

its inertia is being overcome by the compressive forces of propellant gasses as it is squeezed outwards against the interior of the musket barrel. If the diameter of the musket ball is close to the interior diameter (caliber) of the gun barrel (e.g. .10") the circumference acquires a distinctive cylindrical zone or band from the interior surface of the gun barrel as it moves through the barrel (Figure 14). This is described as "firing hemisphere."



Figure 14. Firing Hemisphere.

Smoothbore weapons such as were used in King Philip's War fired a musket ball that measured approximately 0.05 – 0.10" less than the barrel bore caliber. The difference allowed the ball to be more easily loaded down the barrel and prevent jamming. The difference between the musket ball diameter and the weapon's bore diameter (caliber) is referred to as windage. Thirteen musket balls exhibited firing hemispheres which provides direct evidence of the caliber of the firearm (Table 5). Those musket ball diameters between .33" and .48" were likely fired from pistols (see below), diameters in the .50" - .60" diameter range were fired from carbines, and those in the .60"+ range were fired from muskets.

Table 5. Musket Ball Diameters with Firing Hemispheres.

.33"	.36"	.45"	.48"	.50"	.54"	.56"	.58"	.60"	.60"	.63"	.66"	.68"
Pistol				Carbine				Musket				

Small Shot and Bore Facets

Flat facets or ‘dimples’ often occur on one or more areas of small-shot ammunition if several were fired in a single load as buckshot. The facets result from being compacted during the loading process and/or from the pressure of being discharged. Upon firing, the load of closely packed musket balls is squeezed together against the barrel by escaping gasses and inertia resulting in the distinctive facet pattern (Figures 15 & 16). Facets can also occur as a result of long-term storage and the movement that occurs from being transported aboard ships or overland on wagons. The presence of facets may suggest a high velocity discharge due to a greater powder charge and the use of wadding but cannot be used to identify a particular combatant on the battlefield. Much like the firing hemisphere that occurs on a single round ball, a unique mark known as a “bore facet” can form along the areas of the small-shot pressed against the barrel wall when discharged (Figures 15 & 16). A “bore edge facet”, essentially a partial firing hemisphere, can occur on small musket balls that have been pressed against the barrel when fired. Theoretically the curvature or partial circumference of a bore facet can be used to reconstruct the bore diameter (caliber) of the musket from which the shot was fired from. This avenue of research could potentially be used to attribute certain calibers of weapons to particular combatants.

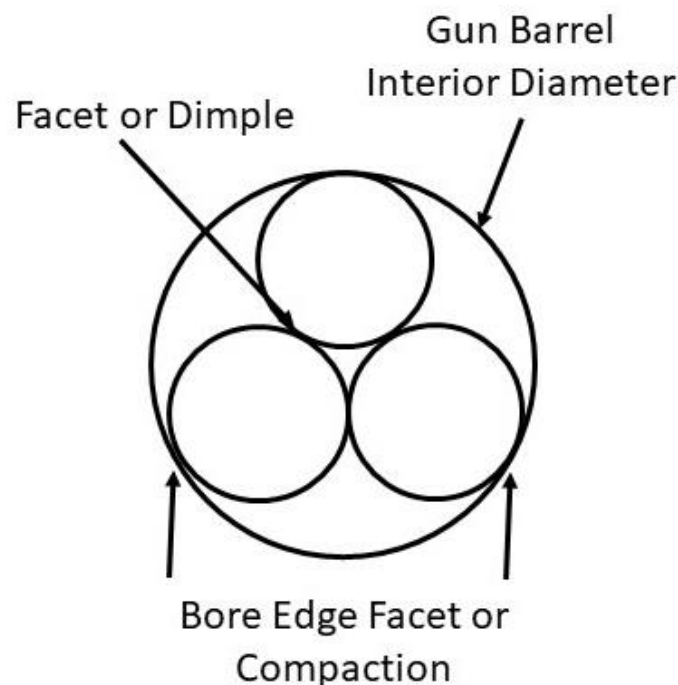


Figure 15. Bore Facet Diagram.



Figure 16. Small Diameter Musket Balls with Facets.



Figure 17. Bore Edge Facet.

The most common form of projectile recovered the Great Falls battlefield was small shot in the .15-.34” diameter range which constituted 48.7 percent (n=267) of the musket ball assemblage (Table 6). One hundred sixty-nine musket balls in this category (63.3 percent) exhibited “facets” or “dimples” indicating combatants loaded their weapons with several (6-8) small diameter shot for a buckshot effect. In comparison, only 6.9 percent (n=14) of the musket balls in the .35-.49” diameter category exhibited facets indicating they were not as likely to have been as buckshot, but as single shot in a pistol or carbine. However, the absence of facets does not necessarily mean the ball was not fired as buckshot. The hardness of the ball, how loose or compact the load of buckshot was, whether wadding was used, and the amount of gunpowder in the charge all could have been factors that negated or minimized the appearance of facets. Nonetheless, all things being equal, the difference of 63 percent of ball with evidence of facets in the .15”-.34” diameter range compared to 7 percent of ball in the .35-.49” diameter range with evidence of facets is considered to be statistically significant and likely indicates ball in the .15”-.34” diameter range was primarily used as buckshot.

Table 6. Frequency of Musket Ball Categories with Facets.

	.15-.34” di.	.35-.49” di.	.50-.54” di.	.55-.59” di.	.60-.69” di.
Freq./% of all musket balls	267 48.7%	204 37.3%	22 4%	26 4.7%	29 5.3%
Freq./% with facets	169 63.3%	14 6.9%	0 0%	0 0%	0 0%

Ramrod Marks: A few musket balls exhibit marks from repeated hits by a ramrod to seat the lead ball(s) in the barrel in order to tightly pack the powder charge, wadding, and ball in preparation for firing (Figures 18 & 19). Slamming the ramrod down the barrel with great force is not necessary and would likely only increase the chances of a wooden ramrod snapping in the process. Ramrod marks were evident on nine musket balls and all appear to have been formed by a metal-headed ramrod. One ramrod mark could have been formed either by the ramrod hitting fabric/wadding or the ramrod tip was a thimble used as a ramrod tip which was a common practice (Figure 19).



Figure 18. Ramrod Mark, .38" Diameter Musket Ball.



Figure 19. Ramrod Mark with Wadding / Fabric or Thimble Impression.

Musket Ball Types

One cylindrical shot was recovered which is the only example discovered thus far on the battlefield. Cylindrical shot is also referred to as “plug shot” or a “slug.” Based on the weight the shot was cast as a .62” roundball and then hammered into a .58” diameter slug suggesting that it was meant to fit a barrel between .60-.62” caliber (Figure 20). Cylindrical shot was either cast to size or hammered into shape from an existing musket ball to make a larger musket ball fit a smaller caliber. Cylindrical shot presumably results in greater stopping power and damage due to more mass than the ball that would normally fit the caliber of the weapon, and because the shot would tumble in flight and therefore cause a terrible wound if the projectile struck its target.²¹



Figure 20. Impacted Cylindrical Shot.

Two or Multiple Ball Loads of Full Caliber

Two musket balls recovered from the Great Falls battlefield show patterns of deformation that resulted from being fired as ‘sandwich shot’ i.e., two-ball or three-ball loads of full caliber (Figure 21). The musket balls were spherical and or sandwiched or stacked upon another, which resulted in a multi-projectile discharge with more stopping power than small-shot. This does not appear to be a common practice given the rarity of such ball on the battlefield. During the

²¹ David Harding. *Lead Shot of the English Civil War* (London: Foresight Books, 2012). Pp. 100-101.

English Civil War, two and three-ball loads were presumably use for short range and against troops *en masse*.²² The two ‘sandwich’ shot were .52” and .60” diameter suggesting that multiple ball loads were used at least twice on the battlefield. Both were recovered from Locus L (Deerfield River Ford).



Figure 21. Sandwich Shot. .52” (left) and .60” Diameter (right).

Impact Damage:

Impact damage on musket balls or the lack of it on the Great Falls battlefield is potentially important for the interpretation of the battle and for comparative analysis of battlefield loci. The analysis of impact damage is ongoing, but a few inferences can be made. Lead shot that appears pristine with no evidence of deformation, striations, or gouges, and has clear casting lines and/or sprues and has no firing hemisphere was designated as “dropped” and not discharged and impacted. Approximately 47 (9 percent) of the musket balls from the Battle of Great Falls were considered to be dropped (Figure 21). Dropped shot may indicate the position of a combatant who was in the process of reloading.

²² Harding. *Lead Shot of the English Civil War*. Pp.84-85.

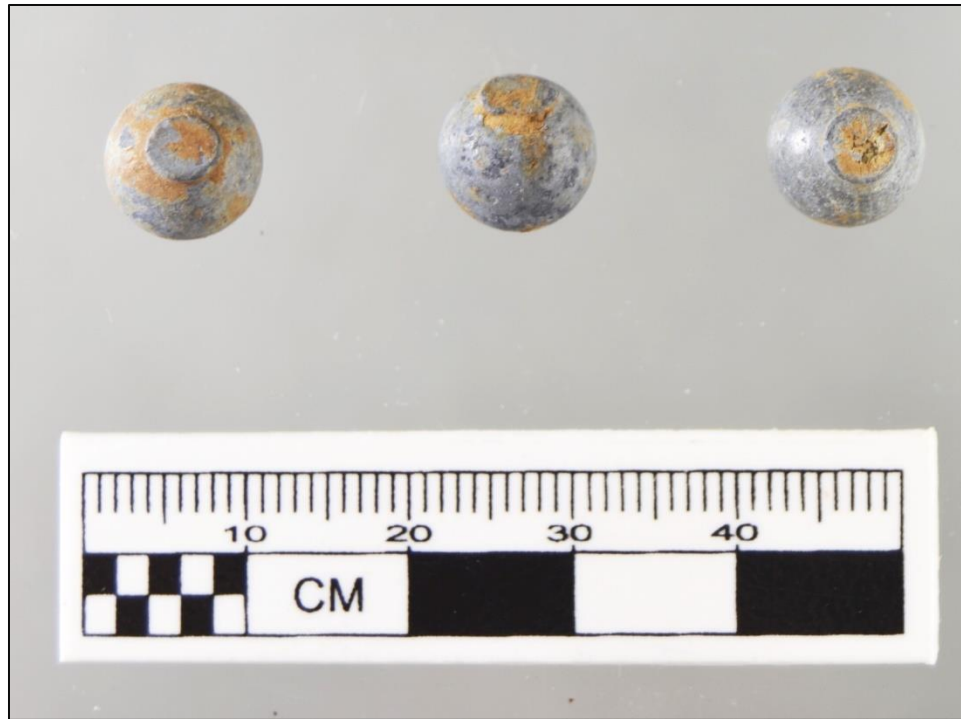


Figure 22. Dropped Musket Balls.

Lead shot that exhibited signs of deformation, gouges, striations, missing fragments, microscopic rock fragments, firing hemispheres or ramrod marks were designated as “impacted”. Five hundred and one (91 percent) of the musket balls recovered from the Great Falls battlefield were considered to be impacted and exhibited impact damage in a variety of forms and degrees of severity. There are certain recurrent and distinctive forms of impact damage that can provide clues as to whether the projectile hit a target, the ground, or something beyond the intended target. Sometimes the direction of fire can be determined if the musket ball impacted against a steep hill or rock. Differences in the severity of the impact can also provide clues regarding the angle of fire and whether the projectile was traveling at a low or high velocity depending on the charge. Musket balls that are severely impacted either hit a target directly or a ricochet, or fired at a low or horizontal angle and bounced along the ground for a great distance. Figures 23 – 26 are examples of various types of impacts on musket balls recovered from the battlefield.

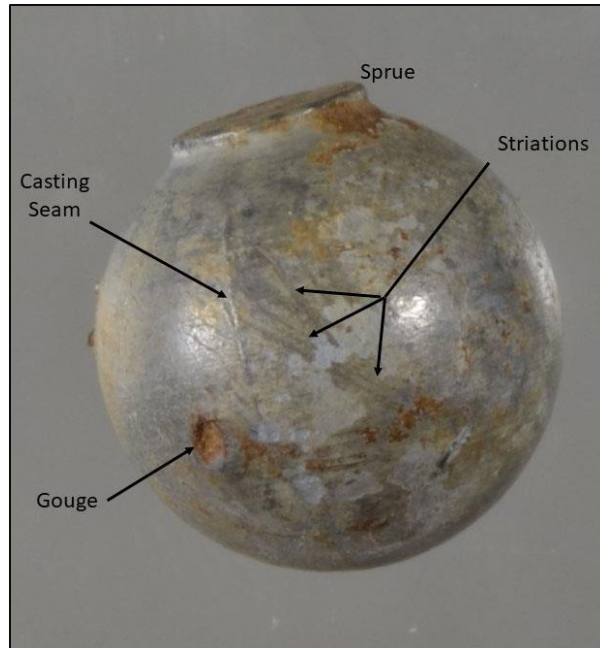


Figure 23. Locus H Musket Ball with Gouges and Striations.

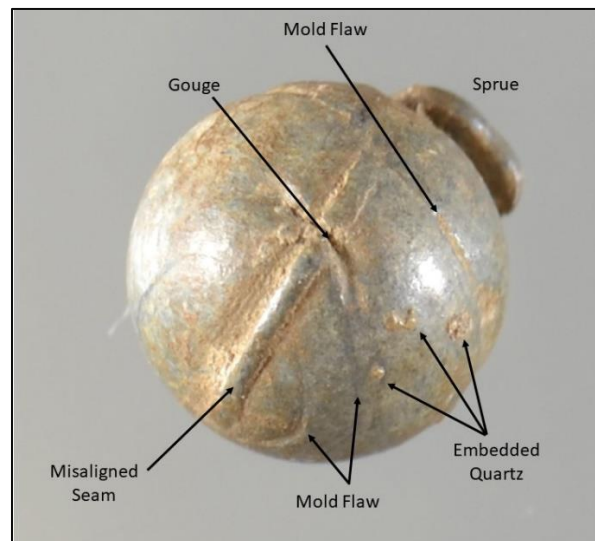


Figure 24. Locus H Musket Ball with Mold Imperfections and Impact.

Some examples of impacted shot do not have prominent deformations and appear dropped to the naked eye. Under close examination these musket balls have slight striations and gouges and are imbedded with small grains of rock or minerals and most often recovered from fine grained soils from wetlands or floodplain silts. Figures 23 and 24 are examples of impacted musket balls that were not deformed or misshapen in any way and exhibited very slight evidence

of impact in the form of slight striations or gouges only discernible under a microscope. Soil conditions may not be the only factor to explain these subtle impacts. Another factor could be that the balls were fired directly into the ground as most of the damage that occurs on musket balls is when they skip and bounce along the ground for some distance. Another factor could be the musket balls were traveling at a very low velocity at the time of impact. This could result from a light powder charge and/or a lack of wadding between the powder and lead shot which would have reduced the inertia and compressive forces and subsequently the force of impact. This phenomenon was observed at Locus H where 147 musket balls in the .35”-.49” diameter range were recovered of which 82 percent were considered impacted although none exhibited any deformation or other obvious signs of impact. The balls did exhibit evidence of impacts in the form of slight striations, gouges, and embedded fragments of stone (Figures 23 & 24).



Figure 25. Severe Impact at High Velocity.

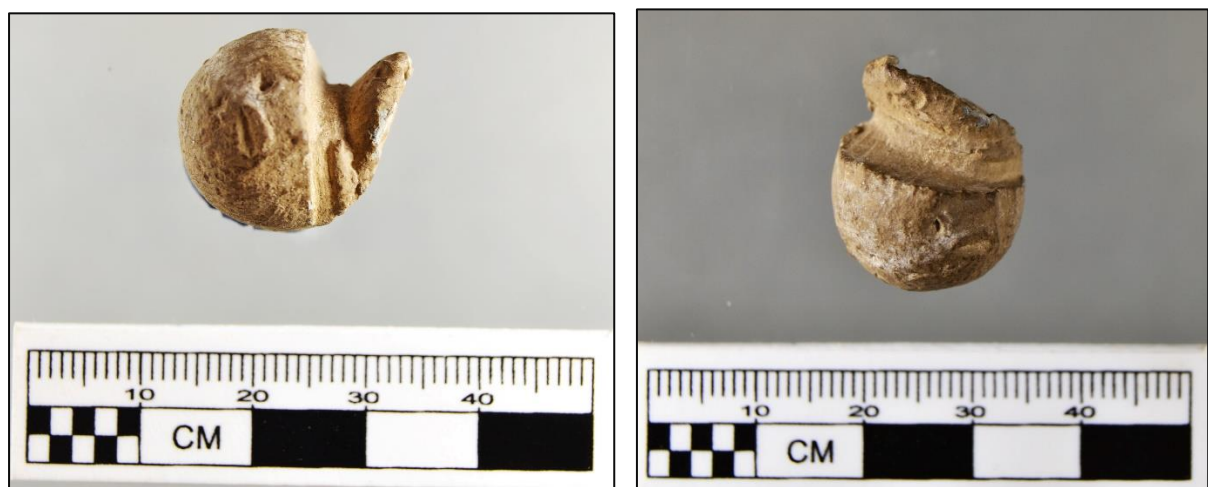


Figure 26. Severe Impact at High Velocity Against a Sharp Object

Calibers, Musket Ball Diameters, and Combatant Tactics

The small shot in Locus C (96.5 percent, n=55) and Locus E (75.3 percent, n=67) can be demonstrated to be Native Coalition fire based on primary sources, terrain features, and direction of fire. At locus C 96.5 percent (n=55) of the musket balls were in the .15”-.35” diameter range and 58 percent (n=32) of the small shot at Locus C exhibited facets. At Locus E 75 percent (n=67) of the musket balls were in the .15”-.34” diameter range and 75 percent (n=50) exhibited facets. Based on the patterns at these two loci it can be argued that Coalition forces were more likely to load their weapons with small shot for a buckshot effect in ambushes and close-range situations (Table 7).

Musket Balls in the .50-.54” diameter range are also believed to be primarily associated with Coalition forces. Thirteen impacted musket balls in the .50-.54” diameter range (.51-.55” caliber) were recovered from Locus F and believed to be associated with Coalition forces based on their close association with horse tack. The context and association suggest horses were shot as the English tried to escape Factory Hollow and were used by English soldiers as cover. Other associations indicate that musket balls in the .55-.59” diameter range (.56-.60” caliber) were used by both Native Coalition and English forces.

Two other lines of evidence suggest Coalition forces preferred lighter smaller caliber weapons and used small diameter musket balls as small shot (buckshot). The Squakeag Fort Hill site is located along the Connecticut River in Hinsdale, New Hampshire 20 miles north of the Great Falls. Peter Thomas estimates the site was occupied for a six-month period in late 1663 through early 1664. Thomas’ excavations recovered a lock plate and two-gun barrels which he believed to be of French origin. Twenty-one musket balls were also recovered “ranging in diameter from BB-size, buck shot to .60” caliber (i.e. diameter) slugs”.²³ The majority (n=15, 71.5 percent) were in the .30-.36” diameter range and the remaining five appear to be between .50-.60” diameter suggesting the use of carbines or small bore muskets. The caliber of the gun barrels was .50” and .56” diameter (.52-.58” caliber) which is consistent with a carbine or small bore musket.

The Burrs Hill Cemetery in Warren, Rhode Island is associated with Metacom’s

²³ Peter Thomas, “In the Maelstrom of Change, The Indian Trade and Cultural Process in the Middle Connecticut River Valley: 1635-1665.” PhD Dissertation, University of Massachusetts. Amherst, MA, 1979, pp. 377-378.

Pokanoket band of Wampanoag.²⁴ The cemetery is estimated to have been used between 1660 and 1680 and temporally overlaps with King Philip's War and the Battle of Great Falls. Sixty-one objects of military relevance were recovered including a matchlock plate with serpentine, two flintlock plates, a brass pistol barrel (.39" diameter), three-gun barrels (.59", .70", .70" diameter), a 28 cavity bullet mold all of which were .34" in diameter, and 53 musket balls. Forty-seven of the musket balls (89 percent) were .35" diameter, five (9 percent) were .51" diameter, and one (2 percent) was .43" diameter. Based on the bullet mold and musket balls the evidence from Burrs Hill and Fort Hill support the contention that Natives preferred small diameter shot and tended to prefer lighter, smaller bore weapons such as muskets under .60 caliber, carbines, and fowlers. The exception is the matchlock serpentine and the two .70" caliber barrels indicating full muskets which could be effectively loaded with small shot.

Bore edge facets on small shot can also indicate the caliber of the weapon they were fired from. Bore edge facets were evident on 46 of the small shot between .29-.38" diameter. Bore edge facets occur when upon firing gas pressure forces the musket balls against the gun barrel leaving a distinctive elongated facet reflecting the inside diameter of the gun barrel as the ball passes down the barrel (Figures 15 & 17). As the entire small diameter ball is not pressed against the barrel, the bore edge facet occurs on only a portion of the musket ball unlike a firing hemisphere. The partial circumference of the bore edge facet can be measured and the circumference (caliber) of the barrel can then be calculated. Based on a preliminary analysis of the circumference indicated on bore edge facets, the majority of small shot was fired from firearm barrels ranging between .49" and .58" diameters with a few indicating they were fired from .60" caliber weapons.

As mentioned above, musket balls in the .35-.49" diameter range are believed to be associated with English forces. This conclusion is based largely on the assemblage of musket balls recovered from Locus H (Cherry Rum Engagement), which by the process of elimination, and admittedly weak inference, the assemblage can be argued to be the result of English fire. The musket ball assemblage recovered at Locus H is quite unique compared to any of the other battlefield loci. The 151 (95.5 percent) musket balls in the .35"-.49" diameter range were almost all in a 'pristine' condition. Most had a prominent sprue and a recognizable casting seam, features that often disappear once the musket ball has been fired (Figure 23). None of the musket

²⁴ Susan G. Gibbon, Ed. *Burr's Hill: A Seventeenth Century Burial Ground in Warren, Rhode Island*

balls in that category exhibited obvious signs of deformation or impacts. Only when each musket ball was examined under a microscope were striations and gouges observed indicating they impacted the ground, and did not impact on anything more solid such as a tree or rock. It appears they hit the soft ground quickly after firing, likely at a steep down angle from someone mounted, and did not ‘skip’ across the landscape for any distance. In some instances, tiny fragments of quartz were observed embedded in the musket ball from impacting on the ground (Figure 24).

Of the 156 musket balls recovered in Locus H, 151 (95.5 percent) of the ball were in the .35-.49” diameter range, five (3.2 percent) were in the .15-.34” diameter range, and two (1.3 percent) were in the .60-.69” diameter range (also believed to be an English signature). Musket balls in the .15”-.34” diameter range are strongly associated with Coalition fire at Locus C (Mountain Gap) and E (Lower Factory Hollow). Ninety-six percent (n=55) of the musket balls at Locus C were .15-.34” diameter as well as 75 percent (n=67) at Locus E. No musket balls in the .35”-.49” diameter range were recovered at Locus C. Seventeen (19 percent) of the musket balls recovered from Locus E were in the .35-.49” range, but were in contexts that suggested English fire. In addition, almost all of the musket balls recovered from the swales at Locus E were in the .15-.34” and 75 percent exhibited facets.

None of the 151 musket balls in the .35-.49” diameter range at Locus H exhibited facets, usually a signature of small shot (buckshot). Additionally, five ball in the .35-.49” diameter range showed evidence of ramrod marks (Figures 18 & 19), and one (.48” diameter) exhibited a firing hemisphere further suggesting ball in that range were fired as a single shot from a pistol or possibly carbine.

Based on these contexts it appears that Native Coalition forces were more likely to use multiple loads of .15”-.34” diameter shot, and rarely used musket balls in the .35”-.49” diameter range. Only five (3 percent) musket balls in the .15”-.34” diameter range were recovered from Locus H, and four (80 percent) had facets. The occurrence of facets only on ball in the .15”-.34” diameter range indicates a Coalition signature and it can be argued that the majority of the musket balls recovered from Locus H were from English and not Coalition fire.

The musket balls recovered from Locus J (Green River Ford) are largely if not entirely the result of English fire based on direction of fire toward a ridge where Coalition forces positioned themselves to fire on the English as they crossed the Green River Ford. Two musket balls (.33” and .36” diameter) from Locus J exhibit firing hemispheres suggesting they were fired

from pistols. Six of the musket balls in the .15-.34" diameter range (43 percent of the total assemblage) exhibited facets indicating that the English did carry and used small shot as buckshot in certain situations. It would be interesting to see what the pattern would be associated with the English attack on Peskeompskut but unfortunately the area was too disturbed and no musket balls were recovered.

Evidence for the use of pistols among Captain Turners' men based on primary sources is mixed. Although about half of Turners' men were garrison troops, many of them previously served as dragoons under Captain Turner or other commanders for a brief period, and presumably some, perhaps many, would have carried pistols. Both Massachusetts (1672) and Connecticut (1673) stipulated the equipment and firearms dragoons/troopers should carry, with specific mentions of pistols and/or carbines suggesting it may have been a common practice among dragoon companies, at least officers and non-commissioned officers, to carry pistols:

...every Trooper shall keep alwayes a good Horse, and be well Trooped fitted with Saddle, Bridle, Holsters, Pistols or Carbines and Swords, under the penalty of ten fallings for every defect, and having Lifted his Horse, shall riot change or put him off without License from his Captain or chief Officer under the like penalty.²⁵

...each dragoone be provided with a good sword and belt, and serviceable musket or kirbine, with a shott powch and powder and bullitts, viz: one pownd of powder made into cartiridges fit for his gunn, and three pownd of bulletts fit for their guns, or pistol bulletts; and a horss to expedite their march.²⁶

According to Hubbard, Holyoke carried two pistols at the Battle of Great Falls:

The said Capt. *Holiokes* horse was shot down under him, and himself ready to be assaulted by many of the Indians, just coming upon him, but discharging his pistols upon one or two of them, who he presently dispatched.²⁷

Table 7 lists the frequency and percent of musket ball diameters across the battlefield as a whole and for each locus (Table 7). Based on the discussion above regarding associations of calibers and musket ball diameters with specific battle contexts (loci) and terrain features, some conclusions can be made regarding which combatant's fire dominates a particular battle event based on the musket ball diameter signature. In some instances, the pattern is mixed indicating

²⁵ Whitmore, William Henry, *The Colonial Laws of Massachusetts*, Boston : Rockwell and Churchill, City Printers, 1890. p. 164.

²⁶ Trumbull, *Colony of Connecticut*. Pp. 2:207-208.

²⁷ Hubbard, *A Narrative of the Troubles with the Indians*, pp. 85-86

both sides contributed roughly equal amounts of fire to an engagement. These signatures were helpful in reconstructing individual battle events in Section VII: Summary and Conclusion.

Table 7. Musket Ball Categories by Loci and Combatant (English in Red; Native in Blue).

Locus	Small Shot .15-.34" di. Freq/ %	Pistol/Carbine .35-.49" di. Freq/ %	Carbine/Musket .50-.54" di. Freq./ %	Musket .55-.59" di. Freq./ %	Musket .60-.69" di. Freq./ %	Primary Combatant Signature English Native	Total Musket Balls
All Loci	266 48.6%	203 37.2%	22 4.0%	26 4.7%	30 5.5%		547
A Village	6 60%	1 10%	0	2 20%	1 10%	Mixed	10
B Initial Eng. Retreat	19 70.4%	3 11.1	0	3 11.1%	2 7.4%	Native	27
C Mountain Gap	55 96.5%	0	0	0	2 3.5%	Native	57
D Terraces	20 58.8%	7 20.6%	1 2.9%	4 11.8%	2 5.9%	Mixed	34
E Eng. Assembly Area	67 75.3%	17 19.1%	1 1.1%	3 3.4%	1 1.1%	Native	89
F Upper Factory Hollow	3 15.8%	3 15.8%	13 68.4%	0	0	Native	19
G White Ash Swamp	32 71.1%	5 11.1%	1 2.2%	4 8.9%	3 6.7%	Mixed	45
H Cherry Rum Engagement	5 3.2%	151 95.5%	0	0	2 1.3%	English	158
I Cherry Rum Brook	39 76.4%	5 9.8%	3 5.9%	1 2.0%	3 5.9%	Native	51

J Green River Ford	10 71.4 %	2 14.3%	0	0	2 14.3%	English	14
K Holyoke's Retreat	0	1 33.3%	0	1 33.3%	1 33.3%	Mixed	3
L Deerfield River Ford	13 30.2%	9 20.9%	3 7.0%	8 18.6%	10 23.3%	Mixed	43

King Philip's War Battlefields and Engagements Database

A thorough analysis of primary and secondary source materials was conducted to identify every engagement that could be identified in King Philips War (1675-1678) no matter how small. Although town histories are not generally considered primary sources they often contain oral traditions or segments of written histories that pertain to King Philip's War that are often overlooked by historians. A database was created by compiling any mention of fighting from a primary sources while different sources regarding the same engagement were cross referenced to get the most accurate information on the number of combatants, type of action, who initiated it, how the attack was conducted, the outcome, casualty estimates, number of captives, structures and property destroyed, and tactics. When information conflicted on casualties from various sources (as was often the case) the most consistent information was used or an average taken. The survey identified 218 separate engagements which were divided into six operational theaters of the war (Figure 27).

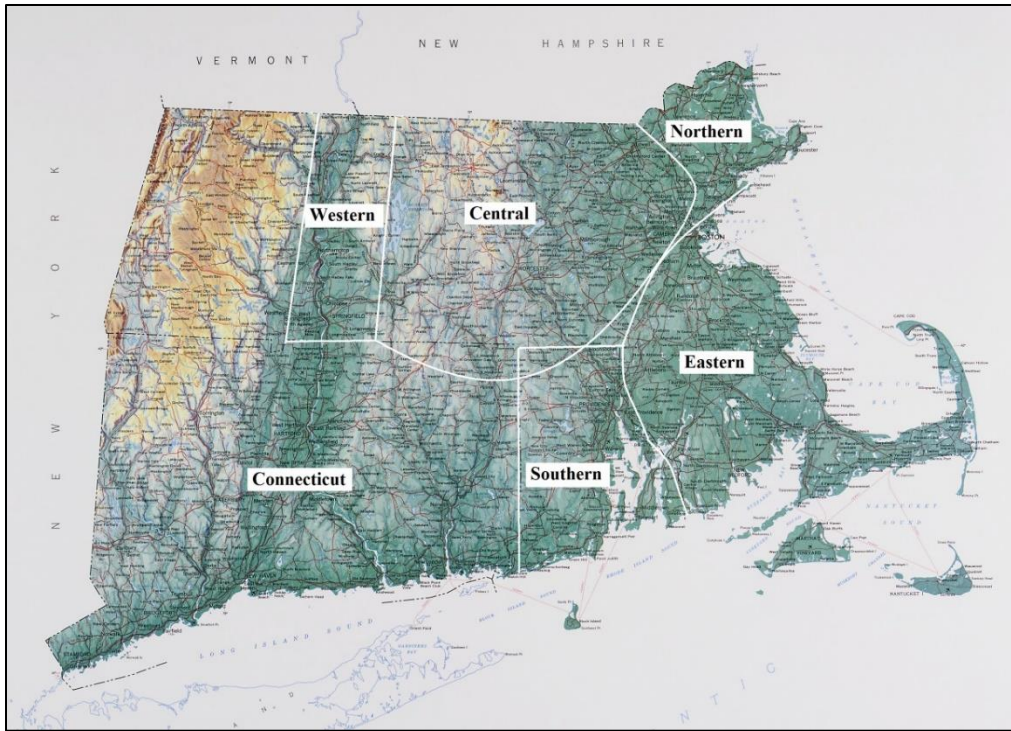


Figure 27. King Philip’s War Theaters of Operation.

The theaters were delineated based primarily on areas in which sustained fighting or long-term campaigns occurred and generally involved particular English colonies, or colonial forces, as well as the traditional homelands of the Northeastern Native American tribes who inhabited the region.. The ”theaters of operation” are defined as follows:

Northern: The “Northern Theater” includes the northeastern corner of present-day Massachusetts and southern Maine. Tribes inhabiting the theater included the Nashaway and various Eastern Abenaki groups in southern Maine. Massachusetts Bay Colony was the only colony that conducted field operations in this theater.

Southern: The “Southern Theater” is entirely within the boundaries of Rhode Island Colony and abuts the western boundary of Plymouth Colony. The Narragansett were the principal Native tribe inhabiting the Southern Theater. Connecticut conducted most of the field operations in the theater although Rhode Island, Plymouth and Massachusetts conducted a few operations in the northern and eastern portions of the theater. The only joint colonial operation in the theater was the Narragansett Swamp Fight of December 19, 1675 and a brief operation by a combined army in the northern portion of the theater shortly after the swamp fight.

Eastern: The Eastern Theater is defined from just outside Boston and forms a broad arc to the east side of Narragansett Bay and to Rhode Island Sound. Various Wampanoag bands including the Pokanoket and Pocasset inhabited the more southern portions of the

theater. Plymouth Colony conducted almost all the field operations in the southern portion of the theater within the boundaries of the colony. Massachusetts conducted all field operations in the northern portion of the theater.

Western: The Connecticut Valley from Springfield (Agawam) to Northfield (Squakeag) extending a few miles east and west of the Connecticut River inhabited by the Squakeag, Pocumtuck, Norwottock, Nonotuck and Agawam. Connecticut conducted most of the field operations in this theater. Massachusetts Bay conducted some field operations late in the war but mostly provided soldiers for garrison duty.

Central: From Brookfield (Quabaug) east to just a few miles outside of Boston and north to Maine and south to Narragansett Country in Rhode Island and Connecticut. Tribal groups within the theater include the Nashaway, Nipmuc (multiple bands), and Quabaug. Massachusetts conducted most of the field operations in the theater although Connecticut conducted field operations at Wabaquasset, Watchusett, and Quabaug.

Connecticut: This theater is entirely within the boundaries of Connecticut Colony. There were some minor actions and raids there but no major actions aside from the burning of Simsbury as most of the Native population in the theater were allied with the English. Many of the raids and actions were conducted by Natives from outside the colony.

Identified combat actions were characterized by type of engagement: Battle, Skirmish, Raid on an English Settlement or Native Village, Native Ambush, English Ambush, Mass Native Surrender, and Massacre (Figure 28). Some actions such as the Great Swamp Fight and the Battle of Great Falls may appear in several categories such as Raid on Native Settlement, Battle, and Massacre. Information was also entered on Date, Location, Native Strength, Native Leaders, Native Casualties, Native Non-Combatants Killed, Captured Natives, English Strength, English Leaders, English Casualties, Captured English, English Non-Combatants Killed, Destruction of Property, evidence of Torture and Mutilation, Destruction of Food Stores, Duration of Action, and when possible, the precise longitude and Latitude of the action. The types of actions were defined as follows:

Battle: A sustained engagement with at least one hundred combatants on each side.

Skirmish: An engagement conducted by small detachments of combatants, generally less than one hundred combatants on either side.

Raid on Native Settlement: Defined as the destruction of Native villages including the destruction of wigwams and food stores by English forces. Generally, Native casualties resulted from these attacks.

Raid on English Settlement: Any type of attack on an English settlement that may or may not have resulted in casualties but did result in the destruction or stealing of property (often livestock).

Native Ambush: Native forces conducting a surprise attack on English combatants and noncombatants from a concealed position

English Ambush: English forces conducting a surprise attack on Native combatants and noncombatants from a concealed position.

Mass Native Surrender: Natives groups that turned themselves in to the English.

Massacre: The indiscriminate killing of unarmed English or Native non-combatants

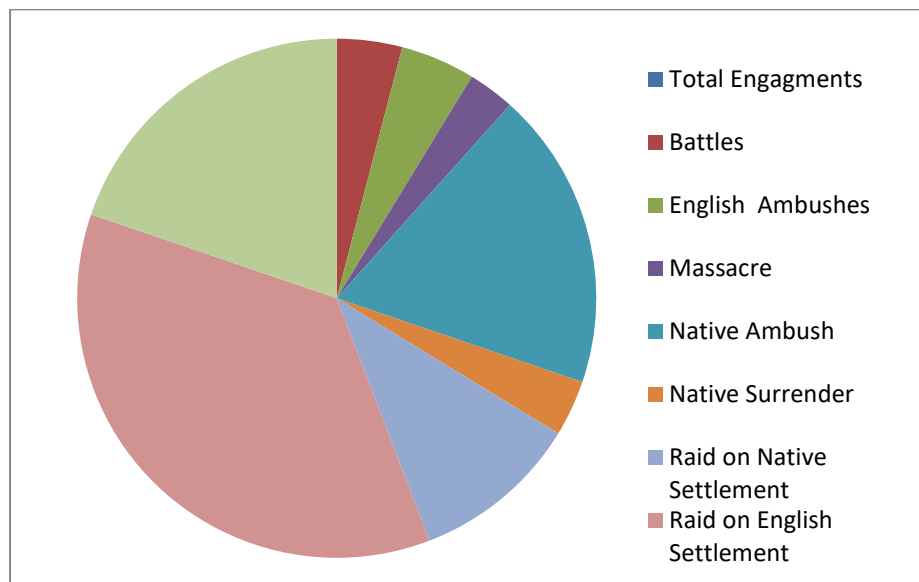


Figure 28. All Engagements, June 1675 – September 1676.

Figures 28-30 were created using the database of 218 actions recorded for King Philip's War. The data synthesized in these figures can potentially provide information on evolving Native Coalition and English strategies and tactics during the war by theater and over time. Coalition raids on English settlements and ambushes were by far the most common Native offensive actions in the war (Figures 29, 32-35). Coalition forces generally tried to avoid pitched battles unless they clearly had the tactical advantage (e.g. Bloody Brook, Pierces Fight, Sudbury) or if they were forced to engage the English to buy time for non-combatants to escape. Most of the examples of Native initiated battles (versus attacks or raids on settlements) took place when the English were approaching a group of Natives that included women and children. In these

instances, a contingent of Native soldiers would break away from the group to engage the English to buy time for the women and children to escape. This occurred at the First Battle of Nipsachuck (August 4, 1675) when Philip and his men fought a four-hour delaying action against almost 200 Plymouth Colony and Mohegan/Pequot soldiers to buy time for the Pokanoket and Pocasset communities time to escape. Philip may have lost as many as 50 men in this engagement. In late February Mary Rowlandson described a delaying action near the Millers River during her fifth remove in Late February, 1676. One source estimated that 90 Native men were killed in the battle:

The occasion (as I thought) of their removing at this time, was the English army's being near and following them: for they went as if they had gone for their lives, for some considerable way, and then they made a stop, and chose out some of their stoutest men, and sent them back to hold the English army in play whilst the rest escaped.²⁸

The most common offensive action on the part of the English was skirmishes followed by attacks on Native villages, and occasionally ambushes (Figure 30). English forces were largely incapable of staging an ambush unless there was a contingent of Natives allies accompanying them such as Praying Indians with Massachusetts Bay forces or Mohegan and Pequot with Connecticut forces. Native allies did not always accompany an English force (particularly Massachusetts Bay and Plymouth forces) which explains the large difference in Coalition initiated ambushes and English initiated ambushes (Figures 29 & 30). The key to a successful ambush was stealth and silence which most English soldiers were not prepared or trained for. Daniel Gookin relates two anecdotes that illustrate English ineptitude in field operations:

One of the English soldiers had on a new pair of shoes that made a creaking noise as they travelled. The Indian Captain was not quiet until he had persuaded the fellow with the creaking shoes to take his moccasins and wear them, and the Indian carried the Englishman's shoes at his back, and went himself barefoot. Another English soldier had on a pair of leather breeches, which being dry made a rustling noise; the Indian Captain was not satisfied until he had persuaded the man to take off his breeches, or else to wet them in the water to prevent their rustling. By this relation, which is a truth, we may observe how circumspect and careful they are in order to obtain advantage over their enemies.²⁹

²⁸ Rowlandson. *A Narrative*. P. 31.

²⁹ Daniel Gookin. *An Historical Account of the Doings and Sufferings of the Christian Indians in New England, In the Years 1675, 1676, 1677* (Cambridge, UK: Folsom, Wells, and Thurston, 1912). P. 442.

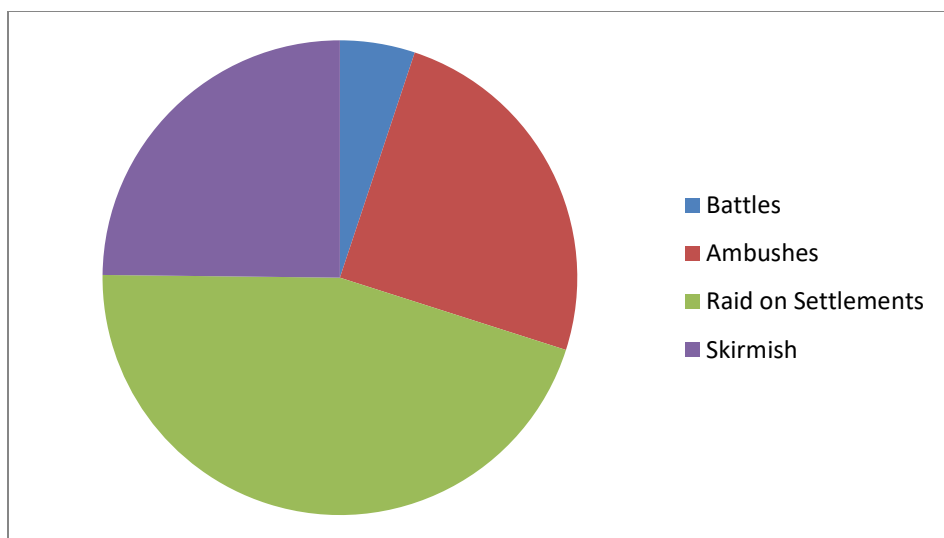


Figure 29. Native Offensive Operations, June 1675 – July 1676.

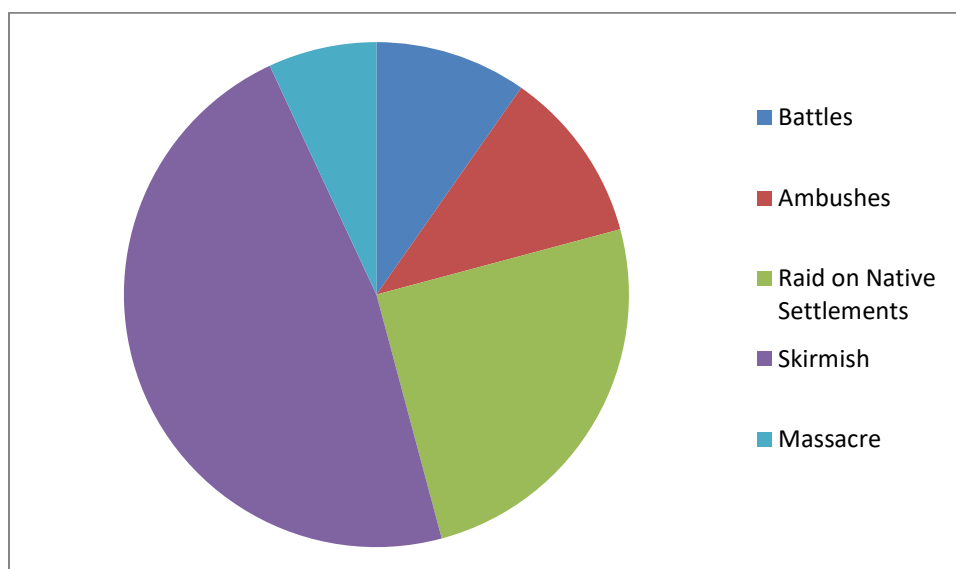


Figure 30. English Offensive Operations, June 1675 – September 1676.

III. Historical Context of the Battle of Great Falls/Peskeompskut

Analysis of Primary and Secondary Sources

The first step in the process of battlefield reconstruction was to develop a comprehensive military and cultural history of the Battle of Great Falls by identifying relevant primary and secondary accounts that provide information on battlefield events, movements, and sites. Once these accounts were identified they were analyzed to assess the quality, veracity, relevancy, and

significance of the material they contained. Very few primary written or published materials survive which discuss the fighting at Great Falls and the subsequent English retreat in detail, but a number of accounts were identified that were written at the time of the battle or shortly after.³⁰ Many of the accounts were written by individuals who participated in the battle or by historians who interviewed battle participants immediately or shortly after the battle. Although primary sources were relied upon whenever possible to reconstruct battle events, secondary sources published in the nineteenth and early twentieth century were also consulted to better understand the historiography and historical memory of the event, and which sometimes contained primary sources. Secondary sources were also assessed for any local lore, oral traditions, early photographs and sketches, and geographic clues to the locations of battle events-.³¹

Important considerations were given to assess the veracity of individual accounts including: determining who the author was (battle participant or chronicler), why the account was written (e.g., field report, history, colonial records, trial), how long after the battle was the account written, and if the information included in the account could be corroborated by other sources. *Atlas.ti*, literary software, was used to systematically code, compare and arrange information from a wide range of sources, primary and secondary, regarding the Battle of Great Falls. Using optical character recognition and applying a wide variety of search terms to these digitized documents, *Atlas.ti*, is able to quickly query any given term and highlight all instances of that term in any given document.

Some of the more important primary sources consulted in the course of this research include the narrative of Jonathan Wells (sixteen-year old soldier in the battle), Roger L'Estrange (chronicler), William Hubbard (chronicler), and Increase Mather (chronicler). These sources have provided important insights into the sequence of battle events, physical terrain features and combatants (Native and English). Both Increase Mather and William Hubbard relied on local intelligence made available to them from soldiers, fellow ministers and official letters as they were both tasked to publish a history of Massachusetts Bay Colony and the Indian war.³²

Manuscript collections containing letters to and from officials of the Massachusetts (Military Series) and Connecticut War Councils (Colonial War & Indian Series I) also provided

³⁰ For a list of identified primary sources see: Chapter IX : Works Cited

³¹ For a list of identified second sources used to reconstruct the battlefield narrative see: Chapter XXX : Works Cited

³² Nelson, Anne Kusener. "King Philip's War and the Hubbard-Mather Rivalry," *William and Mary*, Series III, Vol. 27, No. 4 (Oct. 1970). Pp. 615-629.

important details of the battle including effects of diseases and illness, mortality rates, movements of Colonial and Native forces, logistics, supplies, military compensation and requests for inter-colony support. The Reverend John Russell of Hadley was a central figure reporting on the events leading up to and immediately after the battle and his letters to the Massachusetts and Connecticut War Councils were important sources of information. His letters provided information on the disposition of Native communities and the vengeful mood of the local settlements, and advocated an immediate attack on the Native encampments at the falls in spite of Connecticut's wishes to delay any action to see how the peace process unfolded. Other sources include Newport Court records that provide the testimony of captured Native (Narragansett/Coweaset) men who were at the Battle of the Great Falls and subsequently executed for their role in King Philip's War.

King Philip's War has been the subject of many publications including early antiquarian histories, dime-novels, plays, travel guides, popular histories and academic works.³³ Most localities affected by the war published histories of the particular event that impacted their town in the form of pamphlets, newspaper articles, town histories, or other historical writings. These sources provide fascinating insights into local events and commemoration which often reflect the biases, prejudices, and Anglo-American perspectives of the period in which they were produced. One of the more useful sources includes several town histories written by twentieth century

³³ Numerous published works concerning King Philip's War have been produced since the seventeenth century. The following lists includes some representative samples of secondary sources often consulted by historians and the public: James David Drake, *King Philip's War: Civil War in New England, 1675-1676* (Amherst, MA: University of Massachusetts Press, 1999); Samuel G. Drake, *Indian Biography, Containing the Lives of More than Two Hundred Indian Chiefs: Also Such Others of that Race as Have Rendered Their Names Conspicuous in the History of North America. Giving Their Most Celebrated Speeches, Memorable Sayings, Numerous Anecdotes; And a History of Their Wars. Much of Which is Taken from Manuscripts Never Before Published* (Boston, MA: J. Drake, 1832); Samuel G. Drake, *The History of King Philip's War* (Boston, MA: J. Munsell, 1862); Yasuhide Kawashima, *Igniting King Philip's War: The John Sassamon Murder Trial* (Lawrence, KS: University Press of Kansas, 2001); Douglas Leach, *Flintlock and tomahawk; New England in King Philip's War* (New York, NY: Macmillan, 1958); Jill Lepore, *The Name of War: King Philip's War and the Origins of American Identity* (New York, NY: Knopf, 1998); Patrick Malone, *The Skulking Way of War* (Lanham, MD: Madison Books, 1991); Kevin McBride, "Mohantic Fort: The Pequots in King Philip's War" in Gaynell Stone, Ed. *Native Forts of the Long Island Sound Area* (Stoney Brook, NY: Suffolk County Archaeological Association, 2002); John McWilliams, "A Cloud of Blood: King Philip's War" in *New England's Crises and Cultural Memory: Literature, Politics, History, Religion 1620-1860* (New York, NY: Cambridge University Press, 2004); Eric B. Schultz & Michael J. Tougas, *King Philip's War: The History and Legacy of America's Forgotten Conflict* (Woodstock, VT: Countryman Press, 1999); Richard Slotkin & James K. Folsom, eds. *So Dreadfull a Judgment: Puritan Responses to King Philip's War, 1676-1677* (Middletown, CT: Wesleyan University Press, 1978); Jason W. Warren, *Connecticut Unscathed: Victory in the Great Narragansett War 1675-1676* (Norman, OK: University of Oklahoma Press, 2014).

historian Sylvester Judd who provided some additional details on the Battle of the Falls.³⁴ Judd was responsible for organizing the Connecticut Colonial War Series at the Connecticut State Library which also contained the John Russell letters and he assembled the Judd Collection at the Forbes Library, Northampton, Massachusetts. Judd also conducted oral histories with local descendants of English soldiers who were engaged in the battle for inclusion in his publications.

Similarly, the historian George Madison Bodge published an extremely detailed account of the war in his 1891 book *Soldiers in King Philip's War* in which included both extensive primary source research and oral traditions of many English descendants. Bodge also compiled comprehensive rosters of English forces and English and Native casualty figures. He also took great care to insure the accuracy of his reconstructions of individual engagements in terms of tactics, movements, and combatants, and Bodge's history still stands as one of the definitive books regarding the history of King Philip's War.³⁵

All of the above-mentioned documentary sources were deconstructed to identify defining cultural and physical features of the Battle of Great Falls/Wissantinnewag-Peskeompskut including locations of Native villages and encampments, battle events and locations, movements of combatants on the battlefield and avenues of approach and retreat. An integrated analysis of all relevant primary and secondary accounts provided a much richer and more complex narrative of the battle and greatly assisted in refining the scope and scale of the battlefield study areas.

Brief History of King Philip's War

A letter written by Nipmuc Christian Indian James the Printer, and scribe for Metacom, was nailed to a bridge post following the Battle of Medfield on February 21, 1676. It warned:

Know by this paper, that the Indians that thou hast provoked to wrath and anger will war this 21 years if you will. There are many Indians yet. We come 300 at this time. You must consider the Indians lose nothing but their life. You must lose your fair houses and cattle.³⁶

³⁴ Judd, *History of Hadley*.

³⁵ George M. Bodge, *Soldiers in King Philip's War: Containing lists of the soldiers of Massachusetts Colony, who served in the Indian war of 1675-1677. With sketches of the principal officers, and copies of ancient documents and records relating to the war* (Boston, MA: Printed for the author, 1891).

³⁶ Gookin. *Christian Indians in New England*. P. 494

The letter epitomizes the anger Native people throughout New England felt toward the English and their deep concern for their futures. It also speaks to a broader Native strategy in King Philip's War to destroy the English livelihood and infrastructure.³⁷ English settlements were established in Native homelands at an astounding rate which greatly impacted their lifeways and forced them into ever diminishing territories. Thirty-Four English settlements were established in Plymouth and Massachusetts Bay between 1636 and 1673 and the rate continued to increase in the decade before King Philip's War (Figure 31).

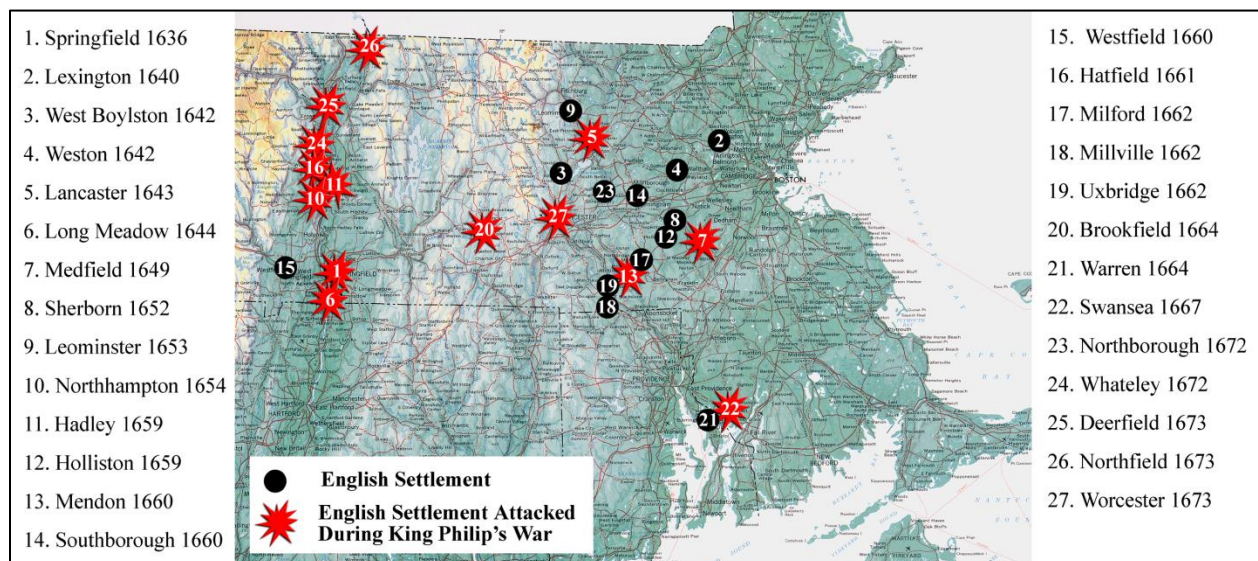


Figure 31. English Settlements on the Eve of King Philip's War

King Philip's War was not the first time Native peoples in New England contemplated a general war against the English, as Native people clearly understood the long-term implications of the expanding English settlements decades before King Philip's War. Shortly after the Pequot War began in September of 1636 the Pequots approached their traditional enemy the Narragansett to make peace and to enlist their aid in their war against the English. Their arguments to the Narragansett to unite against the English, and the tactics they proposed are eerily similar to those used by Metacom in King Philip's War forty years later:

The Pequods...did at the last by all subtle insinuations and persuasions try to make their peace with the Narragansetts, using such arguments as to right reason

³⁷ King Philip's War has also been referred to as the First Indian War, Metacom's War, or Metacom's Rebellion. Most recently, Major Jason Warren has referred to the conflict as the Great Narragansett War in his book *Connecticut Unscathed: Victory in the Great Narragansett War* (2014).

seemed not only pregnant to the purpose but also most cogent and invincible...That the English were strangers, and began to overspread the country, which would soon be possessed by them to the depriving the ancient inhabitants of their right, if they were not timely prevented, and that the Narragansetts would but make their way for their own ruin, by helping to destroy the Pequods, for after themselves were subdued, it would not be long ere the Narragansetts themselves, would in the next place be rooted out likewise; whereas if they would but join together against the English they could demonstrate how the English might easily either be destroyed or forced to leave the country, and that without any danger to themselves: Telling them also that they never need come to any open battles, they might destroy them only by firing their houses, and killing their cattle, and lying in wait for them as they went on their ordinary occasions; which course, if it were pursued, they said their new and unwelcome neighbors could not long subsist; but would either be starved with hunger and cold, or forced to leave the country.³⁸

In 1642, Miantonomoh, one of the chief sachems of the Narragansett Tribe also tried to enlist Native tribes throughout southern New England and Long Island in a plan “for destruction of the English and generally throughout New England to make war upon the English because the English did get possession of all the best places and did drive the Indians away and were likely to take away the country from them.”³⁹ Many of the sachems were reluctant to become a part of the conspiracy “as that the English were too strong for them.” In a speech to the gathered sachems on Long Island Miantonomoh replied:

So are we all Indeans as ye English are, and Say brother to one another, So must we be one as they are, Otherwise we will all be gone shortly, for you know our fathers had plentie of deare, & Skins, our plaines weare full of dear as also our woods and of Turkies, and our Coves full of fish and foule, but these English having gotten our land, they with Sythes cut downe ye grass, and with axes fell the trees their Cowes & horses eat ye grass and their hoggs spoyle our Clambanks, and we Shall all be starved: therefore it is best for you to do as wee for wee are all the Sachems from East to west both Moquakues & Mowhauks Joyning with us, and we are all resolved to fall upon them all at one appointed day.⁴⁰

These complaints were echoed 33 years later, one week before King Philip’s War began, during a meeting between King Philip (Metacom) and the Rhode Island Deputy Governor John Easton. Easton invited Metacom and 40 of his men to discuss Pokanoket grievances in the hopes

³⁸ Hubbard. *Narrative*. Pp. 29-30.

³⁹ James Kendall Hosmer, Ed. *Winthrop’s Journal History of New England, 1630-1649* (New York, NY: Charles Scribner’s Sons, 1908). P. 79.

⁴⁰ Lion Gardener. *Relation of the Pequot Warres* (Hartford, CT: Acorn Club. 1901). P. 26.

of finding a solution and prevent a war. Metacom and his councilors listed many grievances that echoed Miantonomoh's speech forty years earlier:

They said they had been the first in doing good to the English, and the English the first in doing wrong; they said when the English first came, their king's father was as a great man and the English as a little child. He constrained other Indians from wronging the English and gave them corn and showed them how to plant and was free to do them any good and had let them have a 100 times more land than now the king had for his own people. But their king's brother, when he was king, came miserably to die by being forced into court and, as they judged, poisoned. And another grievance was if 20 of their honest Indians testified that a Englishman had done them wrong, it was as nothing; and if but one of their worst Indians testified against any Indian or their king when it pleased the English, that was sufficient. Another grievance was when their kings sold land the English would say it was more than they agreed to and a writing must be proof against all them, and some of their kings had done wrong to sell so much that he left his people none, and some being given to drunkenness, the English made them drunk and then cheated them in bargains...that now they had no hopes left to keep any land. Another grievance was that the English cattle and horses still increased so that when they removed 30 miles from where the English had anything to do, they could not keep their corn from being spoiled, they never being used to fence, and thought that when the English bought land of them that they would have kept their cattle upon their own land. Another grievance was that the English were so eager to sell the Indians liquors that most of the Indians spent all in drunkenness and then ravened upon the sober Indians and, they did believe, often did hurt the English cattle, and their kings could not prevent it.⁴¹

The immediate cause of King Philip's War was Plymouth Colony's execution of three of King Philip's men in June of 1675. The three men had been tried and found guilty of murdering John Sassamon, a Harvard educated Christian Indian who had served as an interpreter and advisor to Metacom, but whom Metacom had accused of spying for the colonists. Increase Mather claimed, "but the main ground why they murdered him seems to be, because he discovered their subtle and malicious designs, which they were complotting against the English."⁴² In fact, the causes of the war were far more complex. The murder and executions ignited a tinderbox fueled by the underlying tensions between Indians and the English that had been smoldering for over 50 years over competing land claims, disputes over the grazing of

⁴¹ John Easton, Franklin B. Hough, Editor, *A Narrative Of the Causes which led to Philip's Indian War, of 1675 and 1676, by John Easton, of Rhode Island*. (Albany, NY: J. Munsell, 1858). Pp 11-13.

⁴² Mather. *A Brief History*. P. 11.

colonial livestock, impacts on Native hunting, and fishing grounds, and agricultural fields, interracial insensitivities, and English cultural encroachment on Native lifeways.

King Philip's War Begins

King Philip's War (June 1675 – August 1676) was an armed conflict between dozens of Native American tribes and bands who inhabited (and still do) present-day southern New England who fought against the United Colonies of Connecticut, Massachusetts Bay, and Plymouth. The war is named after the Pokanoket sachem Metacom, known to the English as "King Philip," as the war began in Plymouth Colony, the homeland of the Pokanoket, and due to King Philip's leadership role during the conflict. Dozens of frontier towns in central Massachusetts and the Connecticut Valley were attacked and burned during the war, as were settlements in Providence Plantations, Plymouth Colony and eastern Massachusetts (Figure 31). The conflict is often referred to as the deadliest in American history based on English and Native civilian and military casualties per capita relative to the population.⁴³

There is some evidence that Metacom had been planning a war against the English for years; accumulating firearms, storing food, and forging alliances with Native tribes through the region. There is strong circumstantial evidence for such a conspiracy if English sources are to be believed. As early as 1671 Plymouth Colony accused Metacom of plotting a war against them: "Phillip and his council did acknowledge that they had bine in a preparation for war against us; and that not grounded upon any injury sustained from us, nor provocation given by us, but from their own naughty harts."⁴⁴ In 1675 Plymouth Colony accused Philip of sending his messengers to several Indian sachems to join with him in a confederacy against the English to which he apparently confessed:

...to enter into a confederacy with him against the English, and himself arms about 700 of his men, and obtains 1000 more of his confederates: and what others besides these he hath engaged to his party, is to the English unknown, though its shrewdly suspected this cruel subtle fellow hath engaged most of the Indians in the country to espouse his quarrel as a common cause. All this spring Philip's soldiers (who were well fitted with guns, powder, shot, etc. which they had long since gotten of the Dutch, French, yea and of some English themselves) were seen marching in their arms even at the planting of their corn.⁴⁵

⁴³ Douglas Leach, *Flintlock and tomahawk; New England in King Philip's War* (New York, NY: Macmillan, 1958).

⁴⁴ Nathaniel Shurtleff, Ed. *Records of Plymouth Colony*, Vol. 5 (Boston, MA: William White, 1671). P. 63.

⁴⁵ Roger L'Strange. *A Brief and True Narration of the Late Wars Risen in New England* (London, UK: Printed for J.S., 1675). P. 4.

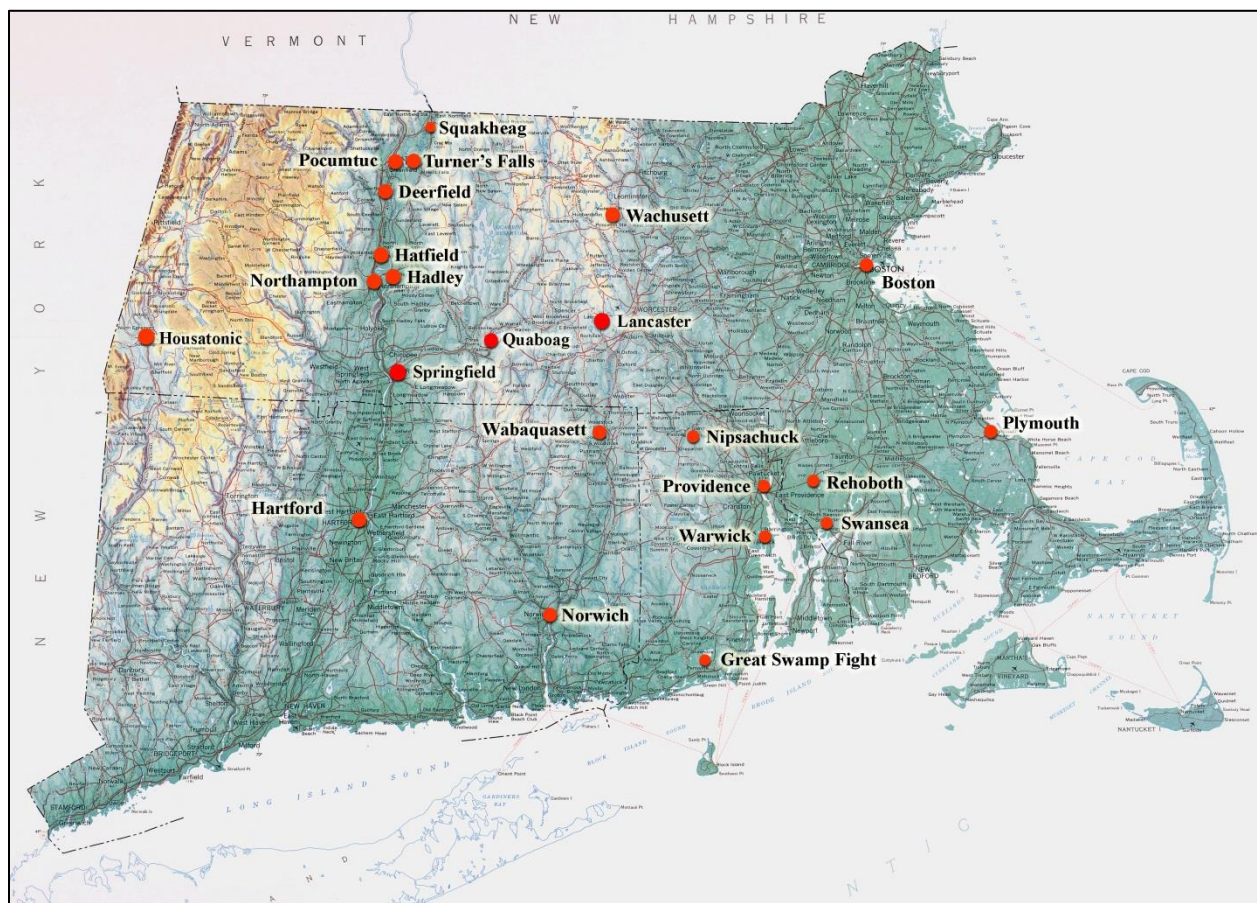


Figure 32. Selected Towns, Native Communities, and Place Names (1675-1676).

William Harris of Providence removed to the relative safety of Newport at the outbreak of the war but was aware of the events taking place in Pokanoket territory just a few miles away. In 1676 he wrote a letter to Sir Joseph Williamson, Secretary of State for the British crown outlining many of the events of King Philip's War:

Phillip did intend this war long since: aboute foure years, & had executed it: but y^e god's Imedyate hand then preuented him: twice at y^e least by great mighty raynes, which after ward was made knowne by Some Indeans, And he being required then to answer: had all moste broke out then, very neer he was to a war, & then stode vpon his gard in Armes; but at y^e last he apeared (much adoe) & then confesed his guilt of y^e sd fact. He hath resolued this war: thoughe y^e s^d writt had nevr come out against him, And all y^e Indeans with him in these partes, apears, by they^r preparation for it, laying up great quanteties of corne, not after theyr useall manner, but y^e year before: as a store for y^e war, and Soe layd up, as cannot easely be founde, makeing y^e ground level: & grass growing vpon them: yl they layd up y^e last year; and y^l they layd up this year (wher y^e grass had not time to be made to grow over it) they make hills in they^r fields like hills of Corne on

they^r barnes, & put dead stalkes of corne as if they had the^r grew, whereas: at all other times of peace: they make theyr barnes y^l any Child y^l paseth by may see where they are (y^l are vsed to them) And by they^r prouiding powder: & Shott & Arrowes, which y^e English perceiueing: & takeing notice of the Indeans pretended they^r preparation against ye moowhagues [Mohawks].⁴⁶

King Philip's War began on June 25, 1675 when a group of Metacom's men attacked and killed several English at Swansea, Massachusetts because of rising tensions between the Pokanoket and Plymouth Colony following the execution of three Pokanoket men by the English several months earlier.⁴⁷ This action initiated a sequence of events that engulfed all of New England in a full-scale war within a few months. Once the Pokanoket (Bristol, RI), Pocasset (Tiverton, RI), and other Wampanoag bands eluded English forces at Mount Hope (Metacom's homeland) and fled to central Massachusetts in late August, almost all the Native groups in Massachusetts joined the war against the English.⁴⁸ It was reported that there were even some Mohegan's who fought for Philip. Roger Williams reported that after the Great Swamp Fight "14 Monhiggins are now marcht away with the Nahigonsiks."⁴⁹ The Narragansett of Rhode Island entered the war in December of 1675 following a surprise attack on their fortified village in South Kingston by the United Colonies on December 19, 1675.

The movements of Metacom following his escape from Mount Hope indicate the close kinship ties the Pokanoket had with the Quabaug of west central Massachusetts, and by extension the tribes in the Connecticut Valley as the Quabaug had kin ties with the Agawam, Norwottuck, and Woronoco.⁵⁰ Metacom's immediate goal after leaving Pokanoket territory was to seek the protection and aid of the Quabaug (Brookfield) who had long acknowledged Massasoit (Philip's father) and Philip as their sachem. Metacom arrived at Quabaug Old Fort on August 5. There is evidence to suggest that Mattaump and the other Quabaug sachems anticipated Metacom's arrival as "the sachems had sent men to Philip to conduct him to

⁴⁶ William Harris. *A Rhode Islander Reports on King Philip's War; The Second William Harris Letter of August 1676*, Transcribed and Edited by Douglas Edward Leach. Providence: Rhode Island Historical Society. 1963. Pp. 20, 22.

⁴⁷ George Madison Bodge, *Soldiers in King Philip's War: Being a Critical Account of that War* (Boston, MA: Rockwell and Churchill Press, 1906). Pp. 25-27

⁴⁸ The Nipmuc of central Massachusetts and northeastern Connecticut, as well as the Pocumtuck (Deerfield), Norwottuck (Hadley), Agawam (Springfield), Woronoco (Westfield), Nonotuck (Hadley), Squakheag (Northfield) of the middle Connecticut Valley, and various Nipmuc tribes including the Quabaug (Brookfield) and Nashaway, and the Quahmsit, and Segunesit of north central Massachusetts.

⁴⁹ LaFantasie. *Correspondence of Roger Williams*. P. II:714

⁵⁰ *Collections of the Massachusetts Historical Society*, "Letter from Nathaniel Thomas to Governor Winslow, June 25, 1675." (Boston, MA: Samuel Hall, 1798). Pp. 86-87.

Squabauge [Quabaug], with assurance that they would protect him.”⁵¹ The first attacks on the English outside of Plymouth Colony were on the English settlement at Brookfield in Quabaug territory on August 2nd. Attacks on English settlements in the middle Connecticut Valley followed a month later.

From the summer of 1675 through the early winter of 1676 The Pokanoket and Pocasset Wampanoag, Narragansett, Nipmuc, middle Connecticut River Valley tribes (Pocumtuck, Nonotucks, Agawam, Norwottock) and the Quabaug, Nashaway, and Sokokis, launched dozens of highly successful attacks against English settlements in the Western, Central, and Eastern theaters (Figures 32-35). These attacks had a devastating impact on English settlements. The experiences of John Kingsley of Rehoboth echoed those throughout the English settlements:

I now, in my sickenes, my skin is ready to cleave to my bones. Now being unknowne to you beloe on the river, I say I am the 1 man & onely left of those that gathered the Church that is now in Dorchester, yet of late have lived at Rehoboth or Seconke & hath suffered deepe, with my neighboures. Now to tel you what wee have & how wee are like to suffer, my hart will not hould to write & sheetes would [not] contain. I am not able to beare the sad stories of our woeful day, when the Lord made our wolfish heathen to be our lordes, to fire our townc, shout & holler to call to us to come out of our garisones. Some did goe out alive, with success; but had not our God restrained them, thay were enough to have swallowed us all up. Thay burnt our milles, brake the stones, y^e, our grinding stone; & what was hid in the earth they found, corne & fowlcs, kild catel & tooke the hind quarters & left the rest, yea, all that day that the Lord gave license they burnt cartes wheles, drive away our catel, shipe, horses, in a word had not the Lord restrained thay had not left one to have told of our Woeful day. We lost but one silly man that day. We are shut up in our garisones & dare not goe abroad far to our outlande, without some strength. Some of our souldiers are removed. Nobody comes to say, how doe ye...but alas, what will we doe against famine!

Coalition attacks on the middle Connecticut Valley settlements forced the English settlements at Northfield (Squakeag) and Deerfield (Pocumtuck) to be abandoned in September of 1675. In October Native attacks on English corn and grist mills in the middle Connecticut valley forced Massachusetts Bay and Connecticut to send soldiers to garrison and fortify the remaining settlements of Springfield, Westfield, Hatfield, Hadley, and Northampton during the winter of 1675-1676. This greatly increased the burden on the local population who had to feed and house

⁵¹ J. H. Temple. *History of North Brookfield, Massachusetts* (North Brookfield, MA: Town of North Brookfield, 1887). P. 99.

the soldiers, and they often complained of overcrowding and shortages in medicine, food and clothing.

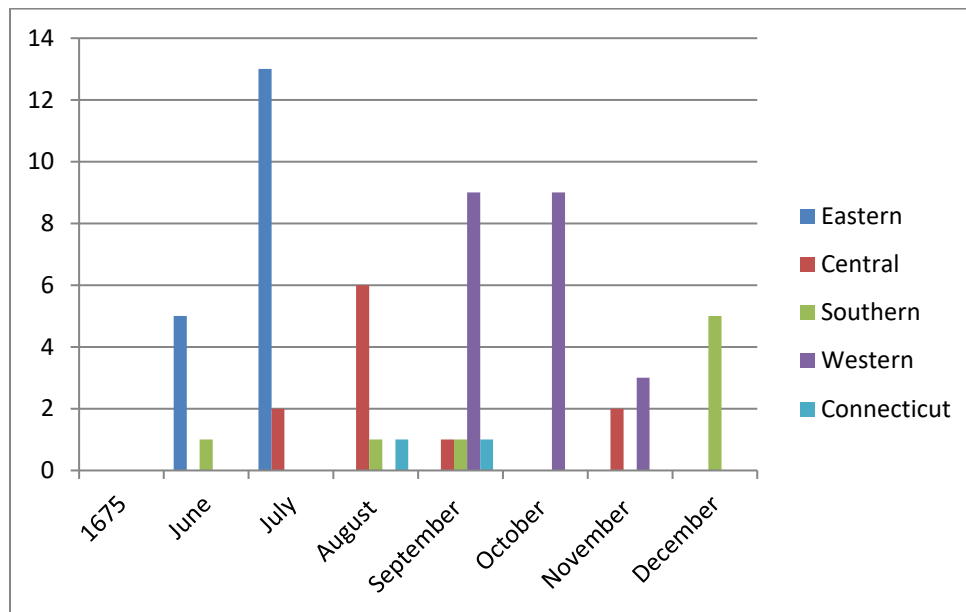


Figure 33. Native Attacks by Theater, June – December 1675

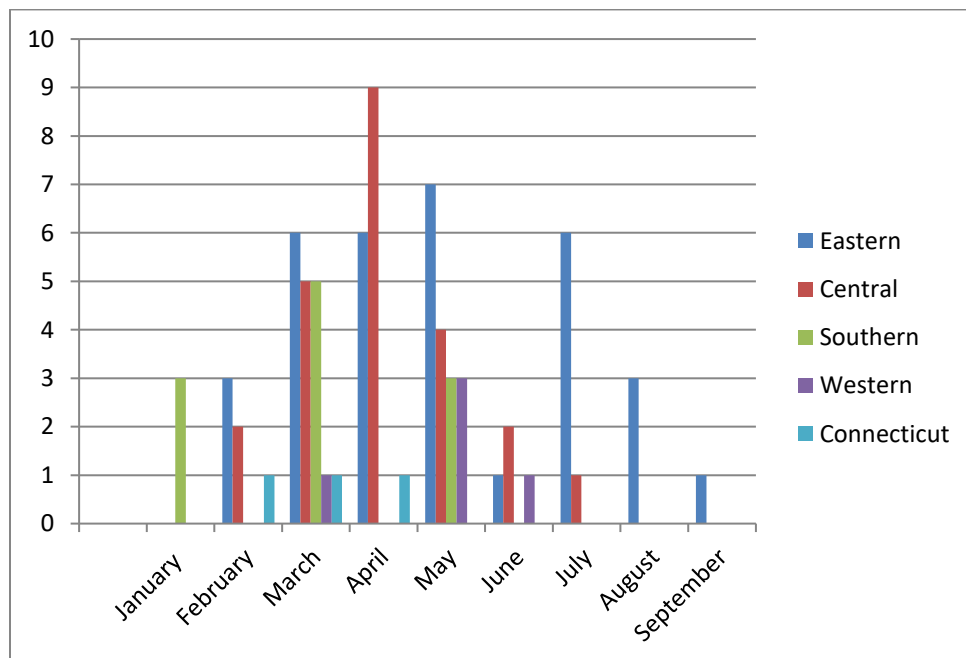


Figure 34. Native Attacks by Theater, January 1676 – September 1676.

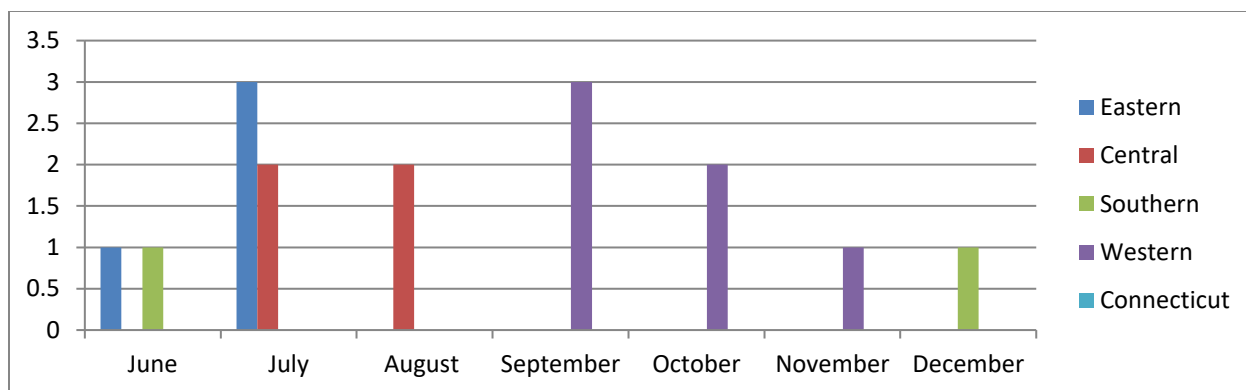


Figure 35. Native Attacks on English Settlements, June 1675 – December 1675.

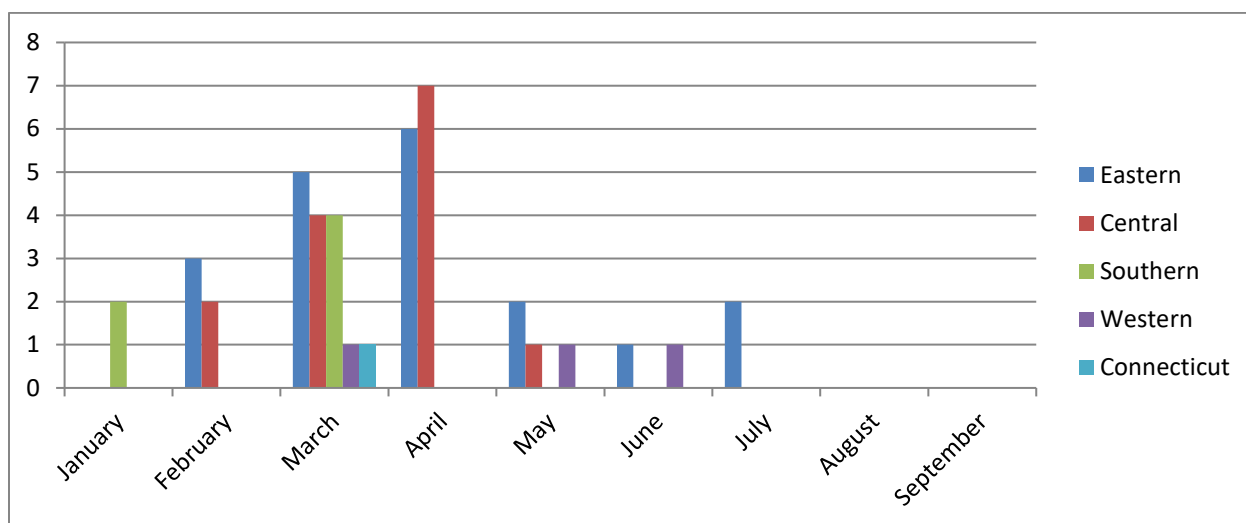


Figure 36. Native Attacks on English Settlements, January 1676 – September 1676.

During the winter of 1675-1676 English towns experienced severe hunger and famine, but not nearly to the extent that Native communities did. Chronic food shortages, malnutrition, and consumption of spoiled meat (e.g., decomposed horse legs) led to a severe deterioration in the overall health of Native communities. Mary Rowlandson was captured in the raid on Lancaster on February 10, 1676 and spent almost three months with Native Coalition communities. During that time, she was able to observe their diet on a daily basis:

It was thought, if their corn were cut down, they would starve and die with hunger; and all that could be found was destroyed, and they driven from that little they had in store, into the woods, in the midst of winter...Though many times they would eat that that a hog would hardly touch; yet by that God strengthened them to be a scourge to his people. Their chief and commonest food was ground nuts, they eat also nuts and acorns, artichokes, lilly roots, ground beans, and

several other weeds and roots that I know not. They would pick up old bones, and cut them in pieces at the joints, and if they were full of worms and maggots, they would scald them over the fire, to make the vermine come out, and then boil them, and drink up the liquor, and then beat the great ends of them in a mortar, and so eat them. They would eat horses guts, and ears, and all sorts of wild birds which they could catch.⁵²

Dysentery (“bloody flux”) spread throughout the Native communities in the winter of 1676 along with a dramatic increase in the number of deaths from battlefield casualties, exposure to the elements, and other unidentified illnesses. Although not documented in Native communities during the war, smallpox was frequently reported in English settlements and undoubtedly had a significant impact on Native communities as well. Massachusetts Bay soldiers may have inadvertently spread sickness and disease throughout the English and Native communities when they returned home from the field or as captives. Though European peoples had developed some antibodies protecting them against such viruses, illnesses such as smallpox and influenza were opportunistic and unknown but highly infectious diseases infected thousands of Natives and English during the war, particularly during the winter and spring of 1676.⁵³ James the Printer spent the winter and spring with Coalition forces and reported: “many of the Indians are dead since this War began; and that more have dyed by the hand of God, in respect of Diseases, Fluxes, and Fevers, which have been amongst them, then have been killed with the Sword.”⁵⁴ Increase Mather reported “In these two months of May & April [1676], besides the Sword of War, in respect to the Heathen, the Sword of the Lord hath been drawn against this Land, in respect of Epidemical Disease, which sin hath brought upon us; Sore and (doubtless) Malignant Colds prevailing everywhere.”⁵⁵ Native settlements in Narragansett country, central Massachusetts and the middle Connecticut Valley were abandoned as Massachusetts Bay and Connecticut forces destroyed their cornfields and food stores, and kept Native communities on the run to prevent them from gathering and hunting to “see to it the Indians would likewise face hardships come winter.”⁵⁶

⁵² Mary Rowlandson. *Narrative of the Captivity and Removes of Mrs. Mary Rowlandson*. P. 67-68. Lancaster: Carter, Andrews & Co. 1828.

⁵³ Increase Mather, *Diary, March 1675-December 1676* (Cambridge, MA: John Wilson and Son, 1900). P.18.

⁵⁴ Mather. *Brief History*. P. 62.

⁵⁵ Mather. *Brief History*. P. 62.

⁵⁶ Gookin. *Christian Indians in New England*. P. 448.

By the spring of 1676, the war had raged for nearly a year with heavy casualties on both sides, but the Native coalition was far more successful on the battlefield than were the English. Even so, the tide of the war began to turn in favor of the English as they began to aggressively pursue, harass, and attack Native communities throughout the region, not allowing them time to rest, gather food, or plant their fields (Figures 36 & 37). By the early spring both sides were exhausted and there was a brief pause in the war as they took time to rest and resupply. English forces in Connecticut, Massachusetts Bay, and Plymouth refitted their armies, provided for the defense of their towns, and prepared for spring offensives against the Native coalition.

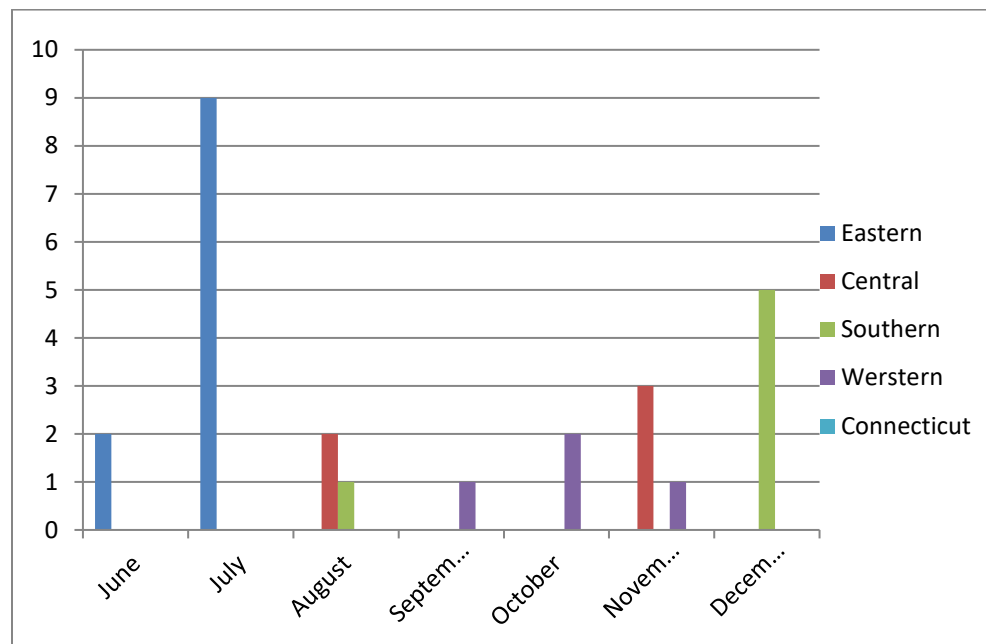


Figure 37. English Offensive Operations, June 1675 – December 1675.

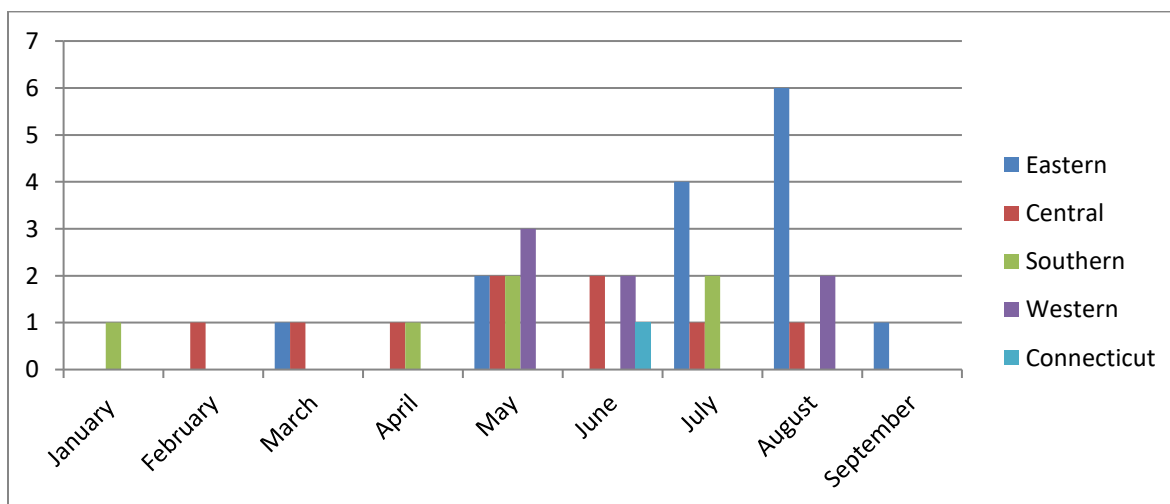


Figure 38. English Offensive Operations, January 1676 – September 1676

Native communities began gathering in the middle Connecticut River Valley in early spring to find refuge and recover from the long winter, plan future strategy, rearm and refit, plant corn, and gather food supplies, particularly fish, for immediate consumption and as food stores to continue the war for next year. There were far more Native attacks in all theaters between January and May of 1676 than in the previous five months in part because of the addition of the Narragansett to the Coalition and likely because the Coalition used the winter to plan and prepare for wide ranging offensive operations (Figures 32-38). Similarly, we see a dramatic increase in English offensive operations in the spring of 1676 as well (Figures 37 & 38). This surge may have been partly in response to Native attacks but was also the result of developing English experience in battlefield operations and execution, as well as logistics and planning. The English operations in the spring of 1676 (mostly attacks on Native communities) had a tremendous impact on Native people throughout the region. These operations prevented Native communities from gathering food supplies, planting, and directly and indirectly caused thousands of deaths from battlefield casualties, malnutrition, sickness, and disease.

By April the broader Peskeompskut/Great Falls area of the middle Connecticut River Valley, had become a center of a multi-tribal gathering with at least a dozen villages located between Deerfield and Squakeag (Figure 38). In a May 1 letter, the Connecticut War Council identified several Coalition leaders and communities at Squakeag including Pessicus (Narragansett), Wequaquat (Pocumtuck), Wanchequit (Norwottuck), Sunggumachoe (Nonotuck) “and the rest of the Indian sachems up the river at Suckquackheage [Squakheag].”⁵⁷ Jonathan Wells identified six Coalition communities in the immediate vicinity of Great Falls at the time of the battle at Peskeompskut, directly across the river, further upriver near the confluence of the Millers River, Cheapside (east of the confluence of the Deerfield and Green Rivers), Deerfield and Rawson Island.⁵⁸

The immediate area around Peskeompskut consisted of two broad floodplains along the west and east banks of the Connecticut River adjacent to the falls. The bedrock formation at Peskeompskut forms one of the largest waterfalls along the Connecticut River where anadromous fish such as shad, alewife, salmon, and eels were easily caught as they make their way upriver to spawn. The confluences of the Green and Deerfield Rivers, the Fall and

⁵⁷ Trumbull, *Colony of Connecticut*. P. II:439

⁵⁸ Thomas, *Historiographic Analysis*, pp. 11, 13-14.

Connecticut Rivers, and the Banquaug (Miller's) and Connecticut Rivers were all ideal fishing places to capture anadromous fish which attracted Native people to these areas (Figure 39).

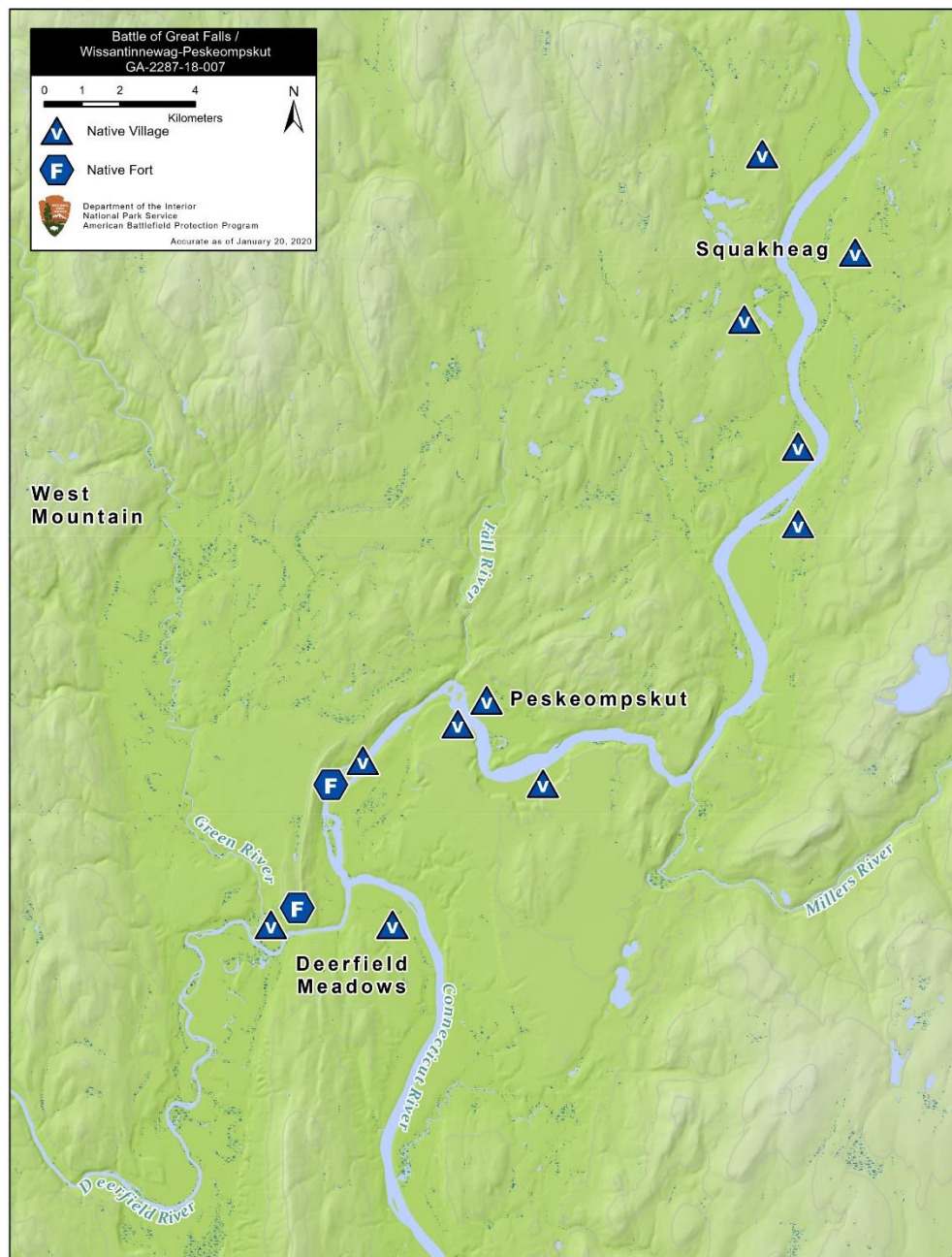


Figure 39. Coalition Forts and Village Locations, Spring of 1636.

The English the Coalition tribes were war weary by the early spring of 1676, and each began to make peace overtures. Earlier messages were exchanged between the Narragansett

sachems and the English in early January after the Great Swamp fight, but nothing came out of these early attempts. The English thought the Native leaders were playing for time (which they probably were), but also because there were serious divisions among the Native leaders whether to even engage in peace negotiations. Seventeenth-century historian William Hubbard reported that on January 12, 1676 a messenger came from the Narragansett Sachem Canonicus “desiring the space of a month longer, wherein to issue the treaty, which so provoked the Commander of our forces, that they resolved to have no more treaties with the enemy, but prepare to assault them, with God’s assistance, as soon as the season would permit.”⁵⁹ Hubbard also reported the “rest of the winter was spent in fruitless treaties about a peace, both sides being well wearied with the late desperate fight, were willing to refresh themselves the remaining part of the winter with the short slumber of a pretended peace at least with a talk or a dream thereof.”⁶⁰ Metacom and other sachems were vehemently opposed to any peace negotiations with the English. Just before her release from captivity on May 2 Mary Rowlandson reported that a council of Coalition leaders were gathered at Watchusett to “consult and determine whether I should go home or no. And they all seemingly consented that I should go, except Philip, who would not come among them”.⁶¹

On March 11, the Commissioners of the United Colonies issued a letter to the respective Colonial governments stating:

We are well informed that the enemy hath given it out that they keep some English which they have taken captive in order to their making of peace and for that end our council have it in consideration to commission two or more meet persons...to embrace & improve all ...with assurances that they shall not be remanded by the English so as to be sold for slaves or to lose their lives...the enemy are far the greatest part of them weary of the war, as well as the English, only the youngest and their pride and fear of slavery have propose for a peace...⁶²

The return of English captives and the peace process were now inexorably linked. For their part the Connecticut War Council sent a letter dated March 28 to “the Indians in hostility against us” proposing a prisoner exchange at Hadley. They also offered “if the said Indians do desire any treaty with us, and make appear that they have been wronged by any of the English,

⁵⁹ Hubbard, *Narrative*. P. 148.

⁶⁰ Hubbard, *Narrative*. P. 145.

⁶¹ Mary Rowlandson, *The Narrative of the Captivity and Restoration of Mrs. Mary Rowlandson*. Cambridge, Massachusetts, 1682. P. 101.

⁶² Connecticut State Library, *Connecticut Archives, Colonial War, Series I, 1675-1775*. Document 45.

we shall endeavor to have that wrong rectified and hear any propositions that they shall make unto us; and that if any of the sachem have a desire to treat with us, they shall have liberty to come to us and go away without any molestation.”⁶³ The letter was carried by a Narragansett man named Towcanchasson who was a trusted advisor to Narragansett Sachem Pessicus and Squaw Sachem Quiapan. Towcanchasson was called upon on several occasions in the winter and spring of 1676 to serve as an intermediary between the English at Connecticut and Massachusetts Bay and the Narragansett, Wampanoag, Nonotuck, Pocumtuck and Norwottuck sachems around Squakeag. Towcanchasson was later killed along with Quiapan at the Second Battle of Nipsachuck on July 3, 1676.

No immediate reply was forthcoming from the sachems, perhaps because Connecticut and Massachusetts Bay continued to attack the Narragansett and other tribes in the Connecticut Valley, as well as communities in Nipmuc and Narragansett territory as well. The silence on the part of the sachems which so frustrated the English may also have been because of the deep divisions within the coalition whether to pursue peace or not. English strategy was to: “put the greatest dread upon the enemy...so also the prudently to embrace and improve all opportunities for obtaining a peace, so that the enemy with thorough hopelessness of having a case of submission be made desperate in their designs.”⁶⁴ Understandably Native leaders were loath to expose their communities to the uncertainties of an English peace. In early April the Narragansett Sachem Canonchet, a highly respected leader among Natives and English alike, was captured by Connecticut Dragoons and executed by the Pequot and Mohegan when he returned to Narragansett Country to retrieve seed corn and raid English settlements for livestock. Canonchet’s death was a tremendous blow not only to the Narragansett but the entire coalition. The principal Narragansett Sachem Pessicus (Suckquance) responded to the Connecticut War Council’s peace proposal in late April and stated that he would gather the other sachems to present Connecticut’s terms and requested that any Narragansett sachems imprisoned by the English to be released.⁶⁵ On May 1, 1676, the Connecticut Council sent a message to:

Pessicus [Narragansett], Wequaquet [Pocumtuck], Wanchequit [Norwottuck], Sunggumachoe [Nonotuck] and the rest of the Indian sachems up the river at Suckquackheage [Northfield]...we have received your writing brought by our two messengers and by Pessicus his messenger [presumably Towcanchasson],

⁶³ Trumbull, Ed. *Public Records of the Colony of Connecticut*. P. II:425.

⁶⁴ Trumbull, *Colony of Connecticut*. P. II:425.

⁶⁵ Trumbull, *Colony of Connecticut*. P. II:425.

and in it we find no answer to what we proposed, and therefore once again we have sent these lines to you, to inform you that, as we sayd before, we are men of peace, and if they will deliver unto us the English captives that are with them, either for money or for captives of yours in our hands, to be returned to them, we shall accept of it so far ; and if they will attend a meeting at Hadley within these eight days, if the Sachems will come thither bringing the captives with them as a sign of their real desire of peace, we shall appoint some to meet them there, and to treat them upon terms of peace.⁶⁶

It appears that Connecticut was serious about peace negotiations, primarily to secure the release of captives held by Coalition forces. Connecticut was negotiating chiefly with Pessicus and sachems from Pocumtuck, Norwottock and other River Indian tribes based at Squakeag, while Massachusetts Bay opened negotiations with the Narragansett, Quabaug, and Nipmuc sachems based at Quabaug. In early May the Connecticut War Council instructed Reverend Russell and the settlers at Hadley not to take any aggressive action as “in any onset should be made upon the enemy whilst the captives are in their hands they will destroy each of them...if they accept a treaty we may send a good guard to attend the messengers that shall be sent to joyne with such...accordingly to be improved to best advantage.”⁶⁷ The council offered to exchange Native prisoners for English captives and proposed to meet the sachems at Hadley within eight days (May 9).⁶⁸

The sachems never responded and it appears that there were significant differences within the coalition regarding whether to return the English captives and pursue a peace with the English. Roger L'Estrange reported that “were it not for him [Philip] and one sachem more [Megunneway, an Eastern Abenaki sachem], the Indians would gladly yield to any terms of peace with the English.”⁶⁹ These differences may have contributed to the dissolution of the coalition following the Battle of Great Falls/Wissantinnewag-Peskeompskut:

This treaty about the captives, and the consequences thereof, had no small influences into the abatement of the enemy's violence and our troubles, and had a tendency to dividing them and break their union, and consequently their strength; for Philip, and some others of the enemy's chief men, were utterly against treating with the English or surrendering the captives. But some of their principal sachems, that were more inclinable to a reconciliation with the English, thought that their compliance with the English about surrendering the captives (especially being well paid for their redemption) would mollify the Englishmen's

⁶⁶ Trumbull, *Colony of Connecticut*. P. II:439.

⁶⁷ CSL, *Colonial War, Series I*. Document 67.

⁶⁸ Trumbull, *Colony of Connecticut*. P. II:439.

⁶⁹ L'Estrange. *A True Account*. P. 262.

minds in order to make peace. This contest about the treaty, caused them to fall and divide. Philip and most of the Narragansett Indians separated from the inland Indians, and went into their own country, and the inland Indians staid about Watchusett Mountain.⁷⁰

On May 15, 1676 Russell reported to the Connecticut Council that captive Mary Rowlandson had been released (on May 2) and a Mr. Hoar “brought a letter subscribed by Philip: The Old queen [Quiapan] & sundry sachems containing a desire of peace or rather an overture for a cessation that they might quietly plant at Menden, Groton, Quaboag etc.”⁷¹ In late May it was reported that the “enemie” was planting at “Quabaug & at Nipsachook, nigh Coweesit: that Philip’s men & the Narraganset are generally come into these above mentioned places, only Pessicus, one of the chief of the Narragansett sachems did abide up at Pocumtuck with some few of his men.”⁷² It is not clear why Pessicus stayed at Pocumtuck, but a few months later he abandoned the valley for Paquiag on the west side of the Hudson River in Mahican country rather than return to Narragansett country. These letters suggest that with the exception of Pessicus and probably the River Indians, the Pokanoket, Nipmuc, and many of the Narragansett left Peskeompskut shortly after the Great Falls battle and began to return to their homelands.

Evidence indicates a growing rift within the coalition with each tribe considering different courses of action; whether to continue to fight or to sue for peace and return to their homelands to plant. English sources place the Narragansett Sachem Pessicus at Pocumtuck in late May, and Metacom and Quiapan at Watchusett in early May. It does not appear that Metacom and Quiapan were at the Battle of Great Falls/Peskeompskut, although some of their soldiers may have been.

Native Strategy and Tactics

The broader strategic goals of the Native coalition are difficult to discern as Native voices rarely come through in the English narratives or battle accounts. Many historians have questioned King Philip’s leadership role in the war as there is no evidence that he was ever present on a battlefield after he left Pokanoket territory. Benjamin Church reported that “it was

⁷⁰ Gookin. *Christian Indians in New England*. Pp. 508-509.

⁷¹ CSL, *Colonial War, Series I*. Document 71.

⁷² CSL, *Colonial War, Series I*. Document 80a.

Philips custom to be fore-most in the flight”.⁷³ This statement likely does not indicate Metacom was a coward but rather that as the leader in the war effort against the English it was not in his or the Coalition’s interest to put himself in harm’s way.

There is considerable circumstantial evidence that Metacom was a central figure in planning and implementing the broader strategic goals of the Coalition during the war and in acquiring much needed supplies and ammunition for the Coalition. The characterization of Metacom as a war leader, grand strategist, and leader of the “rebellion” are overly simplistic and does not convey his important role and broader influence in the war effort. It does appear that Metacom initiated the “insurgency” and was planning for it for years, but after the war started he does not appear to have been a field or military commander.⁷⁴ George Memicho was a Praying Indian captured by the Quabaug on August 2, 1675 when the Quabaug attacked a party of twenty-two English led by Captains Wheeler and Hutchinson which included Memicho and two other Indian guides as they were on their way to meet with the Quabaug sachems to discuss peace. During the engagement, Captain Wheeler and eight others were killed and five others wounded. Memicho was captured and was present when Philip arrived at Quabaug following the First Battle of Nipsachuck on August 2, 1675. He related that:

Upon Friday the 5th [6th] of this instant (August) Philip and his company came to us at this swamp, six miles from the swamp where they killed our men. Philip brought with him about forty men, but women and children many more, the number I cannot tell. Philip's men were about 30 of them armed with guns, the rest had bows and arrows. He observed there were about ten of Philip's men wounded. Philip was conducted to the swamp by two Indians, one of them Caleb of Tatumasket, beyond Mendon. The Indians told Philip at his first coming what they had done to the English at Quabaug; then he presented and gave to three sagamores, viz. John, alias Apequinash, Quanansit, and Mawtamps, to each of them about a peck of unstrung wampum, which they accepted. Philip, as I understood, told Quabaug and Nipmuc Indians, that when he first came towards the Nipmuc country and left his own, he had in his company about 250 men, besides women and children, including the Squaw Sachem [Weetamoo] and her company, but now they had left him, and some of them were killed, and he was reduced to 40 men, besides women and children.⁷⁵

This brief account provides some important information on the number of soldiers under Metacom and their armaments. When Metacom left Pokanoket territory he had 250 Pokanoket

⁷³ Church, Benjamin, and Thomas Church. *The Entertaining History of King Philip's War*. Early American Imprints, Series 1, no. 12352. P. 43.

⁷⁴ Metacom was not present at any of the battles following the First Battle of Nipsachuck on August 1-2, 1675.

⁷⁵ Temple. *History of North Brookfield, Massachusetts*. Pp. 100-101.

and Pocasset fighting men. Metacom's men suffered heavy casualties following attacks by the Mohegan at Smithfield, Rhode Island in late July and by Plymouth Colony forces at the First Battle of Nipsachuck on August 2, 1675. The high casualties were not necessarily the result of superior numbers of the enemy or better armaments, but as commonly noted throughout the war Native men were willing to take heavy casualties in delaying actions to buy time for women and children to escape. After the Nipsachuck battle Weetamoo, Squaw Sachem of the Pocasset, left Metacom at Nipsachuck and sought safety with the Narragansett. She eventually rejoined Philip and was with him in Nipmuc country and in the middle Connecticut Valley during the winter and spring of 1675/76.

Memicho states that of the 40 men with Philip 30 were armed with guns and ten with bows. It would be dangerous to assume that the percentage of firearms (75 percent) counted among the Pokanoket in early August 1675 carried through to all the Native combatants during King Philip's War. As the war continued, and Native victories mounted, Native soldiers could better munition themselves by taking English weapons, powder, and shot on the battlefield or purchasing arms and powder from the French or from Mahican middlemen along the Hudson River who purchased them from the Dutch at Albany. It is also noteworthy that Memicho mentioned bows which are rarely mentioned in English narratives. During the Siege of Brookfield (August 2-5) Captain Wheeler's narrative makes frequent reference to bows but always in the context of shooting fire arrows at the garrison house. When the siege was lifted on August 5, 1675 the English found a "great store of arrows they had also prepared to shoot fire upon the house that night" indicating that they were intended for use as incendiary devices.⁷⁶ Englishman Joshua Tift fought with the Narragansett at the Great Swamp Fight and was captured a few weeks later and executed. At his trial he said that there were "about 800 fighting men' in the fort and 400 guns."⁷⁷

The number of Pokanoket combatants identified in English sources rarely exceeds 100, suggesting that Metacom's influence and contribution during the war was not in the numbers of men he could bring to battle, but in his contributions as a strategic planner, diplomat, and logistician. In this context Metacom was active in pursuing and maintaining alliances within the coalition and with obtaining material support (arms, ammunition, and other resources) from

⁷⁶ Temple. *History of North Brookfield, Massachusetts*. P.86.

⁷⁷ LaFantasie. *The Correspondence of Roger Williams*. P. II:712.

Native groups outside of the coalition (e.g., Paquag [Mahican], “French Indians”) as well as Europeans (e.g., French, Dutch). Joshua Tift related at his trial “The Nahigonsiks [Narragansett] powder is (generally) gone and spent but Philip hath sent them word that he will furnish them enough from the French...and that the French have sent Philip a present viz a brass gun and bandoleers Suitable.”⁷⁸

There are several examples of Metacom offering wampum to the Quaboag, Nashaway and Nipmuc sachems presumably to solidify or confirm their allegiance to him and the broadening coalition. When Metacom arrived at Quabaug on August 5, 1675:

The Indians told Philip at his first coming what they had done to the English at Quabaug [Brookfield]; then he presented and gave to three sagamores, viz. John, alias Apequinash, Quanansit, and Mawtamps, to each of them about a peck of unstrung wampum, which they accepted.⁷⁹

In late August it was reported that:

King Philip now beginning to want money (having a coat made of all of Wampampeag, (i.e., Indian Money) cuts his coat into pieces, and distributes it plentifully among the Nipmoog sachems and others, as well to the eastward and southward, and all round about.⁸⁰

In January Metacom went to Albany (perhaps Schaghticoke) with “4 or 500 hundred North Indians [River Indians and Abenaki? and probably some Narragansett], fighting men” ostensibly to enlist the aid of the Mohawk against the English and perhaps to acquire powder and shot.⁸¹ Mary Rowlandson’s son told her that Philip and others had gone to Albany at that time “to buy powder from the French”.⁸² In a January 21 letter to Governor Andross the Connecticut Council reported “that the enemie do boast of great supply from those parts about Albany; whether it be directly, or indirectly by Indians there inhabiting, is not yet so known to us”.⁸³

The diplomatic and strategic overture to the Mohawk failed and they attacked Metacom’s company killing a number of his men. Even while near Albany Metacom seemed to have maintained control over matters of policy and strategy. In mid-January Praying Indians James Quannapohit and Job Kattenanit were sent by Massachusetts authorities to Quaboag to gain

⁷⁸ LaFantasie. *The Correspondence of Roger Williams*. P. II:712.

⁷⁹ Temple. *History of North Brookfield, Massachusetts*. P. 100.

⁸⁰ Roger L’Estrange. *The Present State of New England with Respect to the Indian War* (London, 1675). P. 13.

⁸¹ Trumbull. *Public Records of the Colony of Connecticut*. P. II:397.

⁸² Rowlandson. *The Narrative of the Captivity and Restoration*. P. 63

⁸³ Trumbull. *Public Records of the Colony of Connecticut*. II:397.

intelligence on the “state of the enemy [principally the Narragansett]. On his return Quannapohit reported that the Quabaug sachem Mattaump told him “that he should accompany him [Mattaump] to visit Philip [near Albany], and to acquaint and inform him of affairs at Boston, and of the breach between the English and Narragansets.”⁸⁴ Quannapohit also reported on the broader strategic goals of the coalition:

...and that Philip and his soldiers not far from Albany. The Nipmuc and divers others at Menumese [Quaboag] That they intended a general Rondezvous in the spring of the year, and then they would prosecute the war vigorously against the English, burn and destroy the towns. They heard of the fight between the English and the Narragansets, and rejoiced much at that breach, hoping now to be strong enough to deal with the English, when the Narragansets were joined.⁸⁵

This Indian [Nashaway sachem Monoco or One-Eyed John] told me, they would fall on Lancaster, Groton, Marlborough, Sudbury, and Medfield; and that the first thing they would do is cut down Lancaster Bridge, so to hinder their flight, and assistance coming to them; and that they intended to fall upon them in about twenty days time from last Wednesday.⁸⁶

Quannapohit indicated that Philip was considered the leader of the coalition by the other tribes, and that while he was at Quabaug “there were messengers sent from the Narraganset to the Nipmucs that quartered about Menumesse, declaring their desire to join with them and Philip.”⁸⁷

The military arm of the coalition had some very capable leaders such as Matoonas [Nipmuc sachem], Sagamore Sam [Upchattuck/Shoshanim/Uskattuhgun, Nashaway sachem], Canonchet [Narragansett sachem], Quiapan [Narragansett squaw sachem], Mattaump [Quabaug sachem] and Tuspaquin or the Black Sachem [Assawamsets/Nemasket sachem]. These men collectively and individually planned and implemented some very sophisticated attacks on English settlements and fortifications during the war including Hadley, Hatfield, Deerfield, Sudbury, Mendon, Marlborough, and Providence by employing a variety of siege and open field tactics and stratagems. The coalition forces under their command were also very successful against English troops at the battles of Bloody Brook, Pierces Fight, and Captain Beers Fight.

In many attacks the coalition forces were comprised of men from several different tribes, and the leader of the attack was not necessarily from the tribal territory where the attack took place. In the Hadley attack on June 21, 1676 the Quabaug sachem Mattaump led a diverse

⁸⁴ Gookin. *Christian Indians in New England*. P. 488.

⁸⁵ Gookin. *Christian Indians in New England*. P. 488.

⁸⁶ Gookin. *Christian Indians in New England*. P. 488-489.

⁸⁷ Gookin. *Christian Indians in New England*. P. 488.

coalition force that included Narragansetts, Pocumtuck and Wampanoag.⁸⁸ On the attack on Providence on March 29 (and presumably on Captain Pierce's men a few days before) Roger Williams reported the enemy force of 1,500 was composed of "Nahigonsets, and Cowwesets, and Wampanoags, and Neepmucks, and Quntocoogs [Connecticut Valley Indians]."⁸⁹ Roger Williams also provided information on the command structure within the coalition: "I [Roger Williams] asked who commanded here: They said many captains and inferior sachems, and councilors."⁹⁰ Even though the attack was in Narragansett/Cowweset territory Williams identified the leader of the attack as "A Qunniticut [Connecticut Valley] sachem A stout lustie brave fellow, and I think the chief in command of them."⁹¹ Although the attack on Providence involved an unusually large number of coalition forces, the basic command structure described by Roger Williams was probably similar for smaller attacks commensurate with the number of men involved in the attack

There is no doubt that when the Narragansetts entered the conflict the entire complexion of the war changed. Joshua Tift, an Englishman who fought with the Narragansett at the Great Swamp Fight on December 19, 1675 had intimate knowledge of the number of fighting men at the Great Swamp Fight and the number that survived. At his trial for treason Tift stated at "their fort where was about 800 fighting men with 97 slaine and 48 wounded."⁹² James Quannapohit, the Natick Indian sent by Massachusetts Bay to gather intelligence on the whereabouts and intentions of the Narragansett in mid-January 1676 soon after the Great Swamp Fight, reported "there is seven hundred fighting men, well-armed left of the Narragansett's."⁹³ Although the spring offensive was likely planned before the Narragansett entered the war, the number of attacks documented between January and April of 1676 in the Central and Southern theaters, where the Narragansett would have been most active before they went north to the Great Falls, increased from eight between September and December of 1675 to 24 between January and April of 1676 (Figures 32-35). Even after the casualties suffered at the Great Swamp Battle the Narragansett could still field 700 men, a significant increase to Coalition forces.

⁸⁸ Mather. *Troubles*. Pp. 155-156.

⁸⁹ LaFantasie. *Correspondence of Roger Williams*. P. II:722.

⁹⁰ LaFantasie. *Correspondence of Roger Williams*. P. II:722.

⁹¹ LaFantasie. *Correspondence of Roger Williams*. P. II:722.

⁹² LaFantasie. *Correspondence of Roger Williams*. P. II:714.

⁹³ Gookin. *Christian Indians in New England*. P. 488.

Prelude to the Battle of Great Falls/Wissatinnewag-Peskeompskut

Coalition Forces conducted 21 attacks on the English in the middle Connecticut valley between September and November of 1675, six of which were major attacks on English settlements (Figures 32 & 33). The English settlements at Deerfield and Northfield were destroyed and abandoned in September of 1675 (For a map of English towns in the middle Connecticut River Valley see Figure 31). By the fall of 1676, the northernmost English settlements along the middle Connecticut River Valley were the towns of Northampton, Hadley, and Hatfield. The English also suffered significant military defeats in ambushes during the month of September at Northfield when Captain Beers and his company of 37 men were killed, and at Bloody Brook in Deerfield when 57 soldiers and local teamsters were killed.

The attacks were part of a broader Coalition strategy to force the English out of the middle Connecticut valley, and it was succeeding. The winter of 1675/76 was relatively quiet in the middle valley with virtually no attacks recorded as the Coalition shifted their attention to the eastern and southern theaters (Figures 33 & 34). By the spring of 1676 a false sense of security developed within the English settlements in the middle valley with the promise of peace negotiations and the cessation of Coalition attacks during the winter. That perspective changed when an estimated 500 Narragansett, Pocumtuck, Wampanoag, and Nipmuc soldiers attacked Northampton on March 14, 1676. The attack brought an immediate response by Reverend John Russel of Hadley who wrote the Connecticut War Council days after the attack on March 16:

Although the Lord hath granted us an interval of quiet this winter yet since the coming on of y^e Spring the war here is renewed with more strength and violence here than in any other part while we remaine for as we had intelligence by the Captain who is returned (commonly called “Speckled Tom”), Philip intended with his whole power to come upon these towns and taking them to make his planting place a fort this year at Deerfield so on y^e 14th instant the enemy to the number of 1,000 as judged made a sudden and violent irruption upon Northampton...Here also above Deerfield is the great place of their fishing which must be expected to afford them their provisions for the yere, so that the swarm of them being here and like to continue here we must look to feele their utmost rage except the Lord be pleased to break their power.⁹⁴

By the early spring of 1676 the Great Falls and surrounding area had become a gathering place for many tribes and bands in the Coalition where they could rest and resupply and escape the relentless pursuit of Connecticut and Massachusetts Bay forces. The English in the valley

⁹⁴ Bodge. *King Philip's War*, P. 236.

recognized the threat from the Native tribes gathering near the falls and well understood the broader Native strategy to force the English from the valley so they could plant corn and resettle the middle valley. With the planting season just weeks away, control over “one of the best granaries” in the colony could disrupt one side or the other’s ability to support their war effort.⁹⁵ What emerged was a debate between the English at Connecticut and Massachusetts Bay, and the leaders of the remaining English settlements in the middle Connecticut valley on the best strategy to deal with the Native threat. Massachusetts advocated that the English settlers abandon Westfield, Northampton, and Hatfield and take refuge in Hadley and Springfield. In early April the Massachusetts Council had:

...come to a conclusion to draw in the out garrisons of the town...and to contract their fortifications...The Bay Council had advised that Westfield should be abandoned, and its inhabitants remove to Springfield.⁹⁶

Connecticut and Massachusetts Bay had very differing opinions on the best strategy to gain and maintain control of the valley given the increasing Coalition presence in the area and the expectation of renewed attacks. Connecticut advocated for a strategy to maintain the settlements in the middle valley by a policy of prisoner exchanges tied to peace negotiations while focusing on field operations in lieu of augmenting garrison troops. In early April, Towcanchasson, a Narragansett diplomat and councilor for Narragansett Sachems Pessicus and (squaw sachem) Quiapan carried a letter dated March 31 from the Connecticut War Council to the Indian sachems in the upper Connecticut River Valley. The letter stated that:

...we haue thought meet to declare to the said Indians that we are willing to tender them an exchange of captives, for such English as they have in their hands; and that upon the return of o" to Hadley, where we will meet them, theirs shall be set at liberty to come to them. We allso tender that if the said Indians doe desire any treaty with us, and can make appeare that they haue been wronged by any of the English, we shall endeavour to haue that wrong rectified, and heare any propositions that they haue to make unto us.⁹⁷

The Connecticut War Council expressed their concern to the Massachusetts Council in late April regarding Massachusetts’ strategy to abandon most of the English settlements in the valley and

⁹⁵ CSL. CT Archives, Colonial Wars, Series I. Doc. 66.

⁹⁶ Trumbull. *Public Records of the Colony of Connecticut*. P. II:432.

⁹⁷ Trumbull. *Public Records of the Colony of Connecticut*. P. II:425.

consolidate the populations into one town and pointed out the broader strategic implications of such a move. The council wrote that:

We received a letter from our friends of Hadley and those townes intimating an advice given to them to gather into one towne for more safety, & so desert the rest unto w^{ch} we returned our apprehensions negative & gave our reasons viz that herby our enemy will be animated immediately to destroy the deserted places and possess themselves of the land for rendezvous and to plant great numbers upon such desireable, rich & ready accommodations...and when the enemy is so strengthened and accommodated for reception of a great confluence of Indians to them then it may be very difficult to bring them off & and when all our store is spent; for we hear they have great ambition to possess those parts which would suffice thousands of them: If so one of the best granaries in your colony will be lost.⁹⁸

The English settlers in the valley refused to abandon their farms and settlements and argued for a more aggressive course of action against the Native communities gathering at Great Falls in spite of the ongoing peace negotiations which to date had born no fruit. In late April English settlers in the middle valley were advocating for an immediate attack on Coalition villages at the Great Falls and laid out a strategy and plan of attack. On April 29, Reverend John Russell, Captain William Turner, and others wrote to the General Court of Massachusetts and argued:

The enemy is now come so near us that we count we might go forth in the evening, and come upon them in the darkness of the same night. ...now is the time to distress the enemy; and that could we drive them from their fishing and keep out though but lesser parties against them famine would subdue them.⁹⁹

In a letter to the Connecticut War Council on the same date, Russell, Turner, and others laid out a case to attack the villages at Great Falls:

Such things will weaken the enemies strength and spirits: and rational it is to think y^t might be undertaken against them here in conjunction with what is in other parts it might at such a time sinke their harts and brake their rage and power; and make them more real for peace...The spirit of man with us are more than ever heightened with desire and earnestness to be going forth against the enemy.¹⁰⁰

The Connecticut War Council replied on May 1 and cautioned patience and restraint while peace negotiations continued:

⁹⁸ CSL. CT Archives, Colonial Wars, Series I. 66.

⁹⁹ Ellis and Morris. *King Philip's War*. P. 225.

¹⁰⁰ CSL. CT Archives, Colonial Wars, Series I. 67a.

We having so far proceeded in a treaty with them we cannot judge it rational whilst this treaty is in hand to use hostility against this but we judge it expedient to be silent for the present as to action, we have confirmed them [sachems] to five days to bring an answer to Hadley that they will meet with us...we feare that any onset should be made upon our enemie whilst the captives are in their hands they will destroy each of them as are with them.¹⁰¹

The events of May 13, 1676 made the argument moot and provided the final justification for the valley settlements to conduct an attack on the Native communities at Great Falls. Coalition forces from the Great Falls area raided Hatfield meadows and captured seventy cattle and horses which they drove north to Deerfield Meadows.¹⁰² This incident enraged the English settlers at Hadley and the other river towns, who had been urging colonial officials to attack the upriver Native settlements for weeks and were concerned that the tribes would be able to gather enough dried fish and eventually corn to continue the war for the following year. Revenge was likely a factor as well. The deaths of more than 100 English soldiers and settlers in the upper valley at the hands of Coalition forces in the previous six months certainly contributed to a growing desire on the part of the settlers to attack the Native people gathered at Wissatinnewag-Peskeompskut. There were probably several soldiers in Turner's command from outside the valley who may also have sought vengeance. For example, Ephraim Roper, a private in Turner's company at the Battle of Great Falls, was a resident of Lancaster when coalition forces attacked on February 10 and killed his wife.¹⁰³ Several others in Turner's Company were survivors of both the ambush on Beer's Company (including Beer's son) and the Battle at Bloody Brook.¹⁰⁴

On May 15, two days after the cattle raid, Reverend John Russell of Hadley and others, including Captain William Turner, wrote to the Connecticut War Council to press Connecticut to join the middle valley settlements in an attack against the Natives gathered at the falls. Russell informed the War Council that the settlements in the middle valley were going to take immediate action against the Native encampments at Peskeompskut whether Connecticut was willing to assist or not, and regardless of any ongoing peace negotiations:

We have yet no return from the Indians: and are now past expecting of anything further...They sit by us secure without watch, busy at their harvest work storing

¹⁰¹ CSL. CT Archives, Colonial Wars, Series I. 67b.

¹⁰² For information regarding the cattle raid see: L'Estrange. *A True Account*. P. 3; Hubbard. *A Narrative*. P. 85; CSL, Connecticut Archives, Colonial War, Series I.Doc. 71.

¹⁰³ Ellis and Morris. *King Philip's War*. P. 172.

¹⁰⁴ Wilson. The Probable Composition of Captain William Turner's Forces: February 20 – May 19, 1676. Pp 10-11.

themselves with food for a year to fight against us and we let them alone to take the full advantage...This being the state of things we think the Lord calls us to make some try and what may be done against them suddenly without further delays and therefore the concurring resolution of men here seems to be to goe out against them tomorrow night so as to be with them the Lord assisting before break of day.¹⁰⁵

In the letter Russell also mentioned “about sunrise came into Hatfield one Thomas Reedy [Reed], a soldier who was taken captive [at Hadley] when Deacon Goodman was slain [April 1].”¹⁰⁶ Thomas Reed was taken captive in an attack on Hadley by Coalition forces from several villages located near present-day Hinsdale, New Hampshire. Mary Rowlandson was with this group and mentioned “About this time [April 3] they came yelping from Hadley, where they killed three Englishmen, and brought one captive, viz. Thomas Reede.”¹⁰⁷ Rowlandson related that Reed’s captors “all gathered around the poor man, asking him many questions.”¹⁰⁸ As a soldier on garrison duty at Captain Turner’s headquarters at Hadley, Reed would likely have shared any information he had on troop strength in the various settlements, and he would certainly have known that Connecticut and Massachusetts Bay troops had pulled out of the upper valley leaving the settlements lightly defended and the garrison troops incapable of any offensive operations.

Ironically, the fact that the Native communities at Great Falls felt secure “and not fearing any assault from our soldiers” may have been a direct result of the information they received from Reed.¹⁰⁹ After his capture Reed was taken to Great Falls area and during the time he spent there he passed back and forth between Peskeompskut and the village on the opposite side of the Connecticut River. After remaining there for several weeks, Reed escaped and made his way back to Hadley on May 15.

Reed provided information to Turner on the whereabouts and organization of the Native communities on the north and south banks of the Connecticut at Wissatinnewag-Peskeompskut, including their activities and the number of fighting men. He also reported that the Natives felt

¹⁰⁵ CSL, Connecticut Archives, Colonial War, Series 1.Doc. 71.

¹⁰⁶ CSL, Connecticut Archives, Colonial War, Series 1.Doc. 71.

¹⁰⁷ Mary Rowlandson, *A Narrative of the Captivity, Sufferings, and Removes, of Mrs. Mary Rowlandson, who was taken prisoner by the Indians; with several others, and treated in the most barbarous and cruel Manner by those vile Savages: with many other remarkable Events during her Travels* (Boston, MA: Thomas and John Fleet, 1791). P. 21.

¹⁰⁸ Rowlandson. *Narrative of the Captivity*. P. 21.

¹⁰⁹ Hubbard. *A Narrative*. P. 204.

secure and had not posted any guards. Turner did not entirely trust Reed's estimates and mentioned "Altho this man speakes of their numbers as he judath yet: Thay may be many more for we perceive their number varies and thay are going and coming so that there is no trust to his guess."¹¹⁰ Armed with the information provided by Reed, the militia committees from the various settlements gathered garrison soldiers under Turner's command and volunteers from the towns of Northampton, Hadley, Hatfield, Springfield and Westfield. The combined force of 150 or so soldiers prepared for an immediate attack on the Native encampments at Peskeompskut.

English forces began to assemble from the various towns at Hatfield and prepared to march to Great Falls before the Connecticut Council even received the March 15 letter from Reverend Russel and Captain Turner. Turner's force of between 120 and 150 men prepared to march to Great Falls on the evening of May 18. Turner's largely inexperienced force, drawn in equal parts from militia and garrison troops, the latter presumably with more combat experience, counted on the element of surprise and presumably a larger force. The latter consideration was based on Reeds assessment that there were only 60-70 fighting men between the two Native communities at Great Falls. Benjamin Wait of Hatfield and Experience Hinsdale of Hadley were selected to serve as guides presumably because of their knowledge of the region.¹¹¹

Disposition of Native Forces – Battle of Great Falls/Peskeompskut

By late March Native tribes from throughout southern New England began to gather along the Connecticut River near the Great Falls and eight miles further upriver at Squakeag (Northfield) (Figures 38 & 39). Mary Rowlandson was at Squakeag in early March and mentioned that King Philip and the Pocasset Squaw Sachem Weetamoo were there along with hundreds, if not thousands of men, women, and children.¹¹² Northampton was attacked on March 14 by men Rowlandson saw gathered at Squakeag. The communities at Great Falls and further north at Squakheag began to gather along the Connecticut River in March when the anadromous fish began to run. Around the time of the battle English sources provide descriptions of where the villages were located – six in the immediate vicinity of Great Falls and at least six further north near Squakheag (Figures 39 & 40).

¹¹⁰ CSL, Connecticut Archives, Colonial War, Series 1.Doc. 71.

¹¹¹ Sylvester Judd, *History of Hadley* (Springfield, MA: H.R. Hunting & Company, 1905). P. 171; Bodge. *King Philip's War*. P. 245.

¹¹² Rowlandson. *Narrative of the Captivity*. Pp. 13-16.

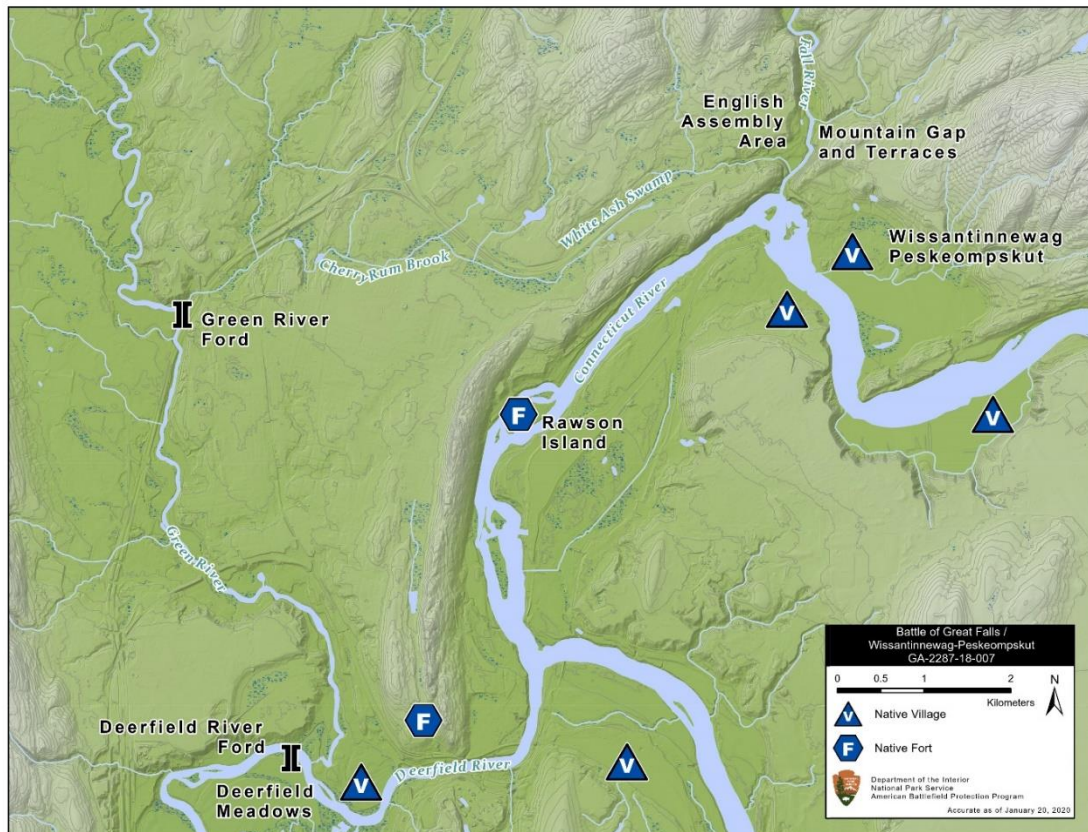


Figure 40. Coalition Villages in the Vicinity of Great Falls.

To a large extent the distribution of Native communities in March mirrored their locations on the eve of the Battle of Great Falls in mid-May. The Nipmuc, Nashaway, and Quabaug continued to occupy their homelands, and with the help of the Narragansett and Wampanoag conducted several major attacks in central Massachusetts during the spring. Wampanoag, Quabaug, and Narragansett men may have returned to the Great Falls area around the time of the battle as many participated in the Battle of Great Falls. English sources identified Narragansett, Pocumtuck, Norwottuck, and Nonotuck communities gathered at Squakeag by early May if not before. In late March and early April, a force of 1,000-1,500 Narragansett, Nipmuc, Wampanoag and Connecticut valley Indians conducted several attacks in Rhode Island and Plymouth Colonies. It is not certain, but the River Indians and Narragansett were probably based in the Turner's Falls area at that time and further north near Squakeag. Many of these men had likely returned to the Connecticut Valley around the time of the Battle of Great Falls.

On May 1 the Connecticut War Council addressed a letter to Pessicus (Narragansett), Wequaquet (Pocumtuck), Wanchequit (Norwottuck), Sunggumacho (Nonotuck) “and the rest of the Indians sachems up the river at Suckquackheage [Squakeag] proposing peace talks.”¹¹³ As the letter is dated just two weeks before the battle it is likely these sachems (and others) were still residing in the Squakeag area at the time of the battle (Pessicus was still there a few weeks after the battle). It’s always been a little unclear if the communities at Squakeag contributed any men to the battle given the distance (8 miles). A half Narragansett / Mohegan man named Menownieth was captured in Rhode Island in August of 1676 and was court martialed and executed. Based on his testimony Menownieth was at the Battle of Great Falls and testified that “In y^e Fall fight were slayne 40 Norwottog, Quabaog 10 Narragansetts and [illegible]” illustrating the diversity of Coalition forces engaged in the battle.¹¹⁴

Jonathan Wells identified five villages in addition to Peskeompskut in the immediate vicinity of Great Falls that contributed men to the battle. In his narrative:

& capt: Wells Says yt the difficulties were exposed to in yr retreat was probably owing to ye long stay yy made in ye place of ye victory Sd yt ye [that this] gave time to ye indians yt were at Deerfd cheapside & ye Island& up above & on ye east side of ye River to get together. & wn yy did make head agst or men.¹¹⁵

The village of Peskeompskut was located at Riverside and a second village was located directly across the river adjacent to the falls. Cheapside was located just east of the confluence of the Deerfield and Green Rivers on the north bank of the Deerfield River, and the village “upon the island” was located at Rawson Island. The village on Rawson’s Island appears to have been an important logistical, supply, and defensive location. A month after the battle, on June 21 a group of Connecticut soldiers under the command of Major Talcott went upriver to the falls to determine if any Natives were still in the area. The area was deserted but on Rawson Island they:

...found an hundred *Wigwams*, and some English plundered goods, which they took, and burnt the *Wigwams*. Also they marched up to a Fort which the Indians had built there, and destroyed it. Digging here and there they found several Indian Barns, where was an abundance of Fish, which they took and spoiled, as also thirty of their Canoos.”¹¹⁶

¹¹³ Trumbull. *Colonial Records of the Colony of Connecticut*. P. II:439. Attribution of tribal affiliation is based on other primary sources.

¹¹⁴ Trumbull. *Colonial Records of the Colony of Connecticut*. P.II: 471.

¹¹⁵ Thomas. “Rev. Stephen Williams’s Notebook.” Pp. 13, 15.

¹¹⁶ Mather. *Brief History*. P. 57.

There may have been a second fort at Cheapside as a few days after the battle Russell mentions “their fort close by Deerfield River.”¹¹⁷ The fort “close by Deerfield River” is not the fort at Rawson Island as Cheapside is located 3.3 miles from Rawson Island along the Deerfield River. It is not precisely clear where the village “up y^e river further” was located but a reasonable guess suggests it may be located near Millers River three miles upriver from Peskeompskut as it would have been an ideal place to capture anadromous fish. The precise location of the Deerfield community is not known but as Turner’s men did not encounter it as they passed through Deerfield Meadows it was likely located on high ground further to the east. It is difficult to estimate how many Native men, women, and children were in the Peskeompskut village and the one on the opposite bank, but an estimate of 400-500 is not unreasonable. Based on casualties reported during the attack on Peskeompskut there were at least 200 people there.

Reed reported that Native communities were “planting at Deerfield and have been so these three or four days or more.”¹¹⁸ Reed also mentioned that the Natives around the Great Falls felt secure because most of the English army had withdrawn from the valley leaving only a few garrison troops. He also reported that two days earlier Coalition forces raided Hatfield upper meadows and drove away 80 horses and cattle and brought them to Deerfield meadow where they were fenced in.

Reed probably passed back and forth between the two villages at the falls several times and was familiar with the layout of both villages. He was also brought to Deerfield meadows (perhaps to assist in planting) several times as he observed Natives planting corn over a few days, and he also saw where the animals were penned. Interestingly he does not seem to have been aware of the other four villages, which turned out to be an unfortunate lapse in intelligence when Turner planned the attack, although Turner seems to have been informed of coalition forces at Rawson’s Island but chose to ignore the intelligence. It was likely Reed’s information that led to the decision to attack Peskeompskut. The village on the opposite bank from Peskeompskut was not targeted as logistically it would be difficult for Turner’s mounted force to cross to the east bank of the Connecticut River from where the English gathered at Hadley.

The number of Coalition fighting men in the six villages probably exceeded several hundred, far more than the 60 to 70 soldiers estimated by Reed. By this time of the war, these

¹¹⁷ CSL. Colonial Wars Series I, Doc. 74.

¹¹⁸ CSL. Colonial Wars Series I, Doc. 74.

men were battle hardened, well-armed, and led by experienced sachems, captains, and councilors. Most of the men had probably participated in attacks on English settlements and forces. During Menowniett's interrogation he not only confessed that he fought in the Battle of Great Falls, but that he participated in a number of engagements including the attacks on the English settlements at Deerfield, Hadley (where he was wounded in the leg), and Northampton. He also said he participated in several attacks on Connecticut colonists. His experiences were probably not unique among coalition forces as he also named eleven other Native men (Munch, Cohas [Narragansett], Tosocum, Cawcohehoage, Wewawoas, Johnnot, Mashinott, Wequash [Squakeag or Sakonnet?], Whowassamoh [?], Pawwawwoise [Agawam], Mawcahat [Agawam], Sanchamoise [Abenaki?], and Wesoncketiachen [Norwottuck] who made up raiding parties of four, seven, or nine men to attack Connecticut settlers at Middletown, Wethersfield, and Podunk (South Windsor), and in the burning of Simsbury.¹¹⁹

English Forces – Battle of Great Falls/Peskeompskut

The number of men reported to have been under Turner's command varies. Hubbard mentioned 150, Mather 160, and Stephen Williams stated "ye standing forces with about 60 and about 60 volunteers."¹²⁰ For the purposes of this narrative the figure of 150 is used as Mather's and Hubbard's information was probably obtained shortly after the battle. Turner's "standing forces" were garrison troops, many of whom had served under Turner or other commanders as dragoons. The volunteers were militia drawn from the various settlements in the middle valley. Some of Turner's standing forces had limited combat experience but the volunteers had little or none (Appendix IV: English Soldiers in the Battle of Great Falls). Some, such as Jonathan Wells were only boys who had never ventured outside the boundaries of their towns.

Captain Turner and his company of dragoons were placed under the command of Major Savage when he left Boston on February 21, 1676 to relieve the Town of Medfield that had been attacked that morning. As Turner's company passed through Dedham they were attacked and one man was seriously wounded. Turner's company accompanied Savage as the army pursued retreating Coalition forces through Brookfield, Wenimasset, and Paquayag (Athol) until they reached the Banquaug (Millers) River around March 3-5. Hundreds of Natives crossed the river

¹¹⁹ Trumbull. *Records of the Colony of Connecticut*. P.II:472.

¹²⁰ Thomas. "Rev. Stephen Williams's Notebook." P. 9.

on rafts trying to escape from the English and built wigwams on the north side of the river. For some inexplicable reason Savage elected not to cross the river and pursue the Natives on the other side. Mary Rowlandson, captured at Lancaster on February 10 lamented “On that very day came the English army after them to this river, and saw the smoke of their wigwams [which the Natives set on fire as they retreated], and yet this river put a stop to them. God did not give them courage or activity to go after us.”¹²¹ Nonetheless Turner and his men may have seen some action during the pursuit as Rowlandson also reported:

The occasion (as I thought) of their moving at this time was the English army [under Major Savage], it being near and following them. For they went as if they had gone with their lives, for some considerable way, and then they made a stop, and chose some of their stoutest men, and sent them back to hold the English army in play whilst the rest escaped.¹²²

Turner and some of his men also saw action on March 14 when over 500 Nipmuc, Narragansett, Quabaug, Wampanoag, and Connecticut Valley Indians attacked the garrison and settlement at Northampton. Unknown to coalition forces the garrison had been reinforced the day before by Connecticut troops and Coalition forces suffered heavy casualties. The only two reported English casualties were in Turner’s company perhaps indicating that he and his men were in the thick of the battle.

Turner’s Company was disadvantaged from the start in terms of veteran soldiers (Appendix IV), necessary supplies, poor intelligence, and a poorly conceived battle plan. Another factor may have been the overall health of the soldiers in the company, including Captain Turner. On May 15, 1676 Reverend John Russel of Hadley wrote to the Connecticut War Council and reported a “general visitation by sickness which you wrote of hath passed unto us also.” Whatever the sickness was it seriously impacted Turner’s ability to command. As noted by Hubbard, Turner’s Company:

...who in their retreat were a little disordered for want of the help of the eldest captain that was so enfeebled by sickness before he set out that he was no way able for want of bodily strength (not any way defective for want of skill or courage) to assist or direct in making the retreat...the loss that befell our men in the retreat was occasioned principally by the bodily weakness of Captain Turner, unable to manage his charge any longer.”¹²³

¹²¹ Rowlandson. *Narrative*, P. 8.

¹²² Rowlandson. *Narrative*, P. 8.

¹²³ Hubbard. *Narrative*, Pp. 206-207.

Turner's failure of command was also attested to by Jonathan Wells who states that when he tried to persuade Turner to "turn and take care of y^e men in the rear" during the retreat, Turner refused and responded "better lose some than lose all."¹²⁴ Nonetheless, the Massachusetts Bay Council recognized something in Turner to appoint him field commander of the garrisons in the middle valley.

After Turner left Boston in early 1676 his company was reorganized several times over the next few months giving Turner and his officers and non-commissioned officers little opportunity to get to know their men or their capabilities. John Wilson estimates that only 20 of the new transfers were veterans who had served in two or more campaigns.¹²⁵ Wilson also estimates that only 17 percent of the soldiers whom Captain Turner commanded during the March 14 defense of Northampton continued to serve with him at the Hadley garrison and were available for the expedition to Great Falls. The remaining 83 percent of his command were soldiers he never served with and barely knew. Turner's newly organized command suffered from a lack of experienced officers and non-commissioned officers while many of the Corporals and Sergeants were recently promoted from the rank of private.¹²⁶ When Turner was left in charge of the garrison troops in the middle valley, his original company was stripped of all its officers and reduced to 29 men. Those left in the garrisons were soldiers from other companies who were left behind and probably consisted of men whose company commanders thought least suited to fight.¹²⁷ The volunteers from the settlements had little or no combat experience nor did most of their officers. Despite Lieutenant Holyoke's lack of combat experience, he is later credited with getting the company reorganized during the retreat and saving most of the remaining men. Hubbard noted that "if Captain [Lieutenant] Holyoke had not played the man at a more than ordinary rate, sometimes in the front, sometimes in the flank and rear, at a fatal business to the assailants...and so carried off the soldiers without any further loss."¹²⁸

Isaiah Toy (or Toye/Tay) was one of the original privates in Turner's company who quickly rose through the company ranks to Sergeant, and just before the Battle of Great Falls

¹²⁴ Thomas. "Rev. Stephen Williams's Notebook." P. 24.

¹²⁵ John Wilson. "The Probable Composition of Captain William Turner's Forces: February 20 – May 19, 1676" (Unpublished Manuscript, 2016). P. 10.

¹²⁶ Wilson. "Probable Composition of Captain William Turner's Forces: February 20 – May 19, 1676." Pp 10-11.

¹²⁷ Peter Thomas, Personal Communication January, 2018.

¹²⁸ Hubbard. *Narrative*. P. 207.

Turner promoted him to Ensign making him second in command in the company and third in command overall behind Lieutenant Holyoke. Although Toy does not appear to have had much combat experience John Wilson suggests he may have been promoted as result of exceptional ability and/or some act of bravery during the defense of Northampton. Most of the remaining men in Turner's company, particularly the colonists drawn from the river towns, had little or no combat experience which in addition to failed leadership on Turner's part was likely a major factor that contributed to the panic that spread throughout the company during the Native counterattacks following the English attack on Peskeompskut.

Another challenge facing Turner in addition to few experienced soldiers may have been a lack of adequate supplies, particularly ammunition. Turner had hoped for material support in the form of men, powder and shot from Connecticut but no reinforcements or supplies arrived in time and Turner's company may have gone into battle short on ammunition. William Hubbard stated that if the attack had "been done with a little deliberation, waiting for the coming of supplies, expected from Hartford, [it] might have proved a fatal business to all the said Indians."¹²⁹ Hubbard also states that the lack of ammunition contributed to the disorganized retreat "yet some say they wanted powder, which forced them to retire, as fast as they could, by Captain Turners order."¹³⁰

The criticism by Hubbard regarding the lack of planning was certainly legitimate. The plan of attack was probably developed in just a few days either following the raid on the cattle and horses in Hatfield meadow on May 13, or certainly after the arrival of Thomas Reed at Hatfield on the morning of May 15. In that short period (3-5 days) Turner had to gather men, horses, equipment, supplies and ammunition, and plan the attack. A breakdown in overall intelligence gathering and a failure to properly act on what little information Turner had on the disposition of Coalition forces was probably the most serious oversight in the English battle plan which directly contributed to the English defeat during the retreat. It does not appear that Turner sent out any scouts in the days before the attack, nor does it appear he sent out any scouts or flankers along the avenue of approach on the day of the battle. Turner also failed to respond to intelligence that there was a Native force at Rawson Island:

In the meanwhile, a party of Indians from an Island (whose coming on shore might easily have been prevented, and the Souldiers before they set out from

¹²⁹ Hubbard. *Narrative*. P. 204.

¹³⁰ Hubbard. *Narrative*. P. 205.

Hadley were earnestly admonished to take care about that matter) assaulted our men.”¹³¹

This force probably came up the Fall River and attacked the English in the English Assembly Area, splitting the English forces and then pursued the main body as they retreated west toward the White Ash Swamp and perhaps were part of the contingent that ambushed the English at White Ash Swamp. The statement by Mather suggests that the English had intelligence of the Native presence on the island and could have prevented them from entering the battle if Turner had positioned a blocking force at the narrow gorge at the confluence of the Connecticut and Fall Rivers.

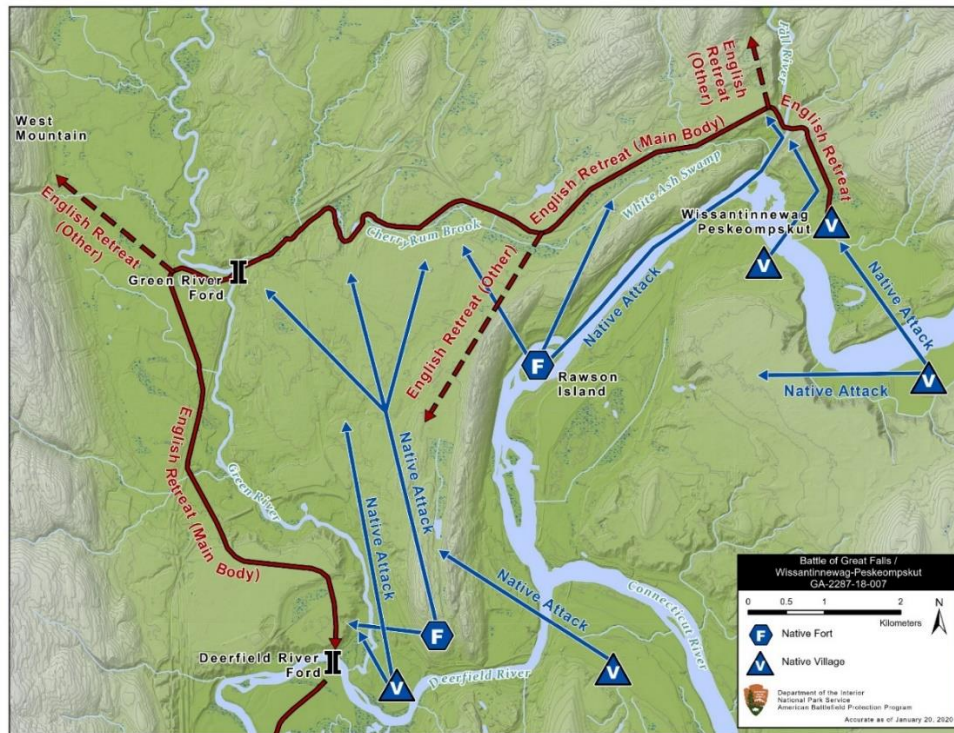


Figure 40. Battle of Great Falls and the English Retreat.

¹³¹ Mather, *Brief History*. P. 49.

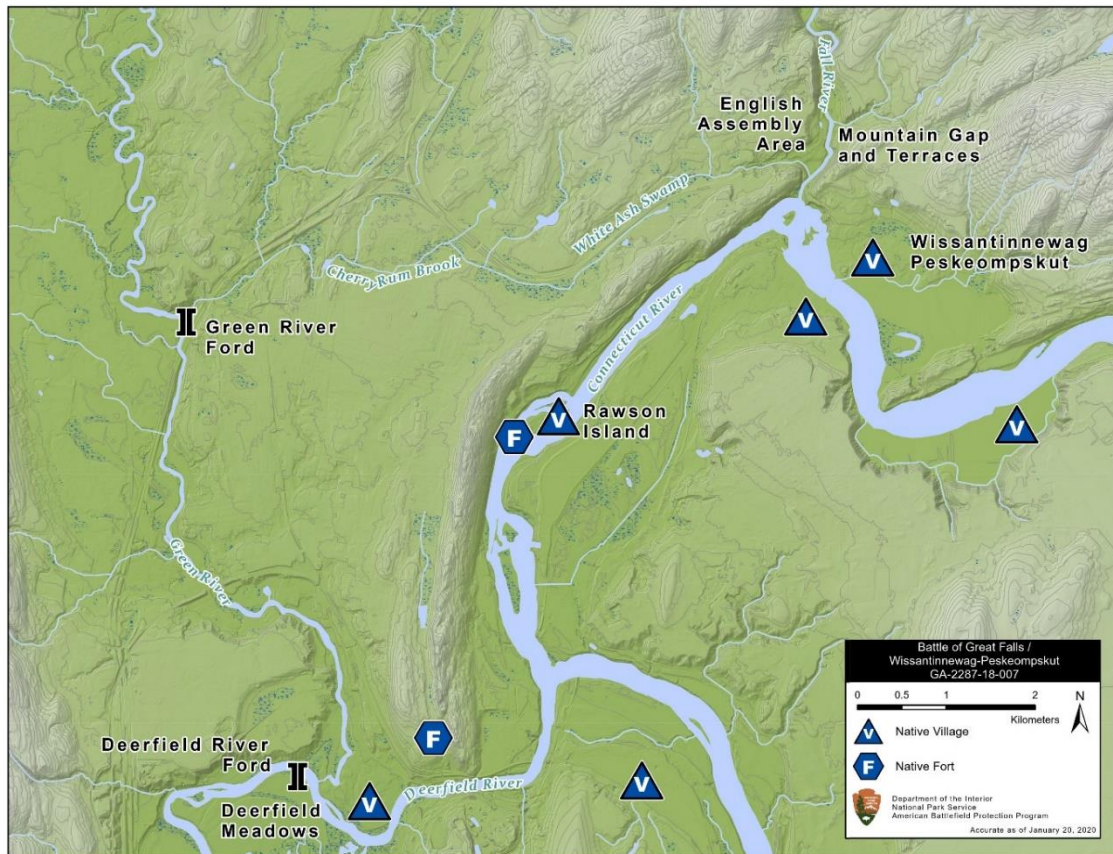


Figure 41. Battle of Great Falls Battlefield Terrain and Cultural Features.

Battlefield Landscape and Route of English Retreat

The Key Terrain features associated with the Battle of Great Falls battlefield landscape fall into three categories: 1) Terrain features identified from historical records and have yet to be confirmed by direct association with battle-related objects; 2) Terrain features identified in the historical record and directly associated with battle-related objects; and 3) Terrain features not mentioned in the historical record but identified as such based on their direct association with battle-related objects. Figure 41 identifies the locations of Key Terrain features from all three categories. Figures 42-82 represent visual and topographic references to the Key Terrain features. For information regarding both Order of Battle of the Native Coalition and Massachusetts Bay troops see Appendix II and IV.



Figure 42. Connecticut River, Deerfield MA. View North to South.

1. Connecticut River. The river served as an important resource for Native people in the region who gathered along the river in the spring to fish. The river was also an obstacle to the English, particularly if they were on horseback, as it prevented them from easily crossing from one side to the other (Figure 42). The Connecticut River also served as an important means of communication and transportation for Native people in the region.

2. Village of Peskeompskut (Figures 43-46). No solid physical evidence has been recovered to identify the precise location of the village that is believed to be in the Riverside area of Gill. Three musket balls have been recovered from Riverside; a dropped .66” diameter musket ball from a known location on Walnut Street, and impacted .58 and .70” diameter musket balls from unknown location(s) in Riverside. The village is identified as a Key Terrain cultural feature based on historical narratives and was the objective of the English attack.

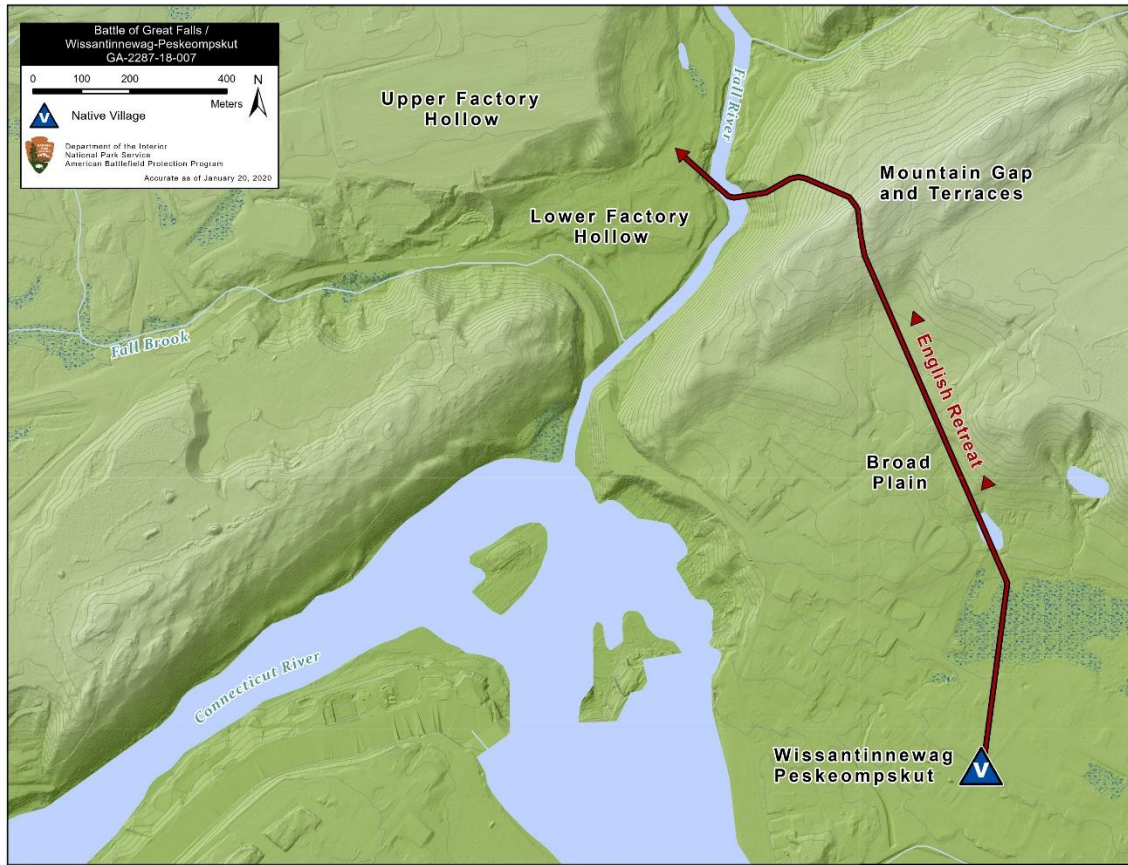


Figure 43. English Retreat, Peskeompskut to Fall River.

The 20 English left behind in the village to cover the retreat of the main body were attacked by Coalition forces from a village across the river. The English fought their way from the village area (Battlefield Locus A; Figure 44 & 45) across a broad plain (Battlefield Locus B; Figures 44 & 46) and the slopes leading to the Mountain Gap (Battlefield Locus C). English movements and options were increasingly restricted as they approached the Mountain Gap as evidenced by the distribution of musket balls.

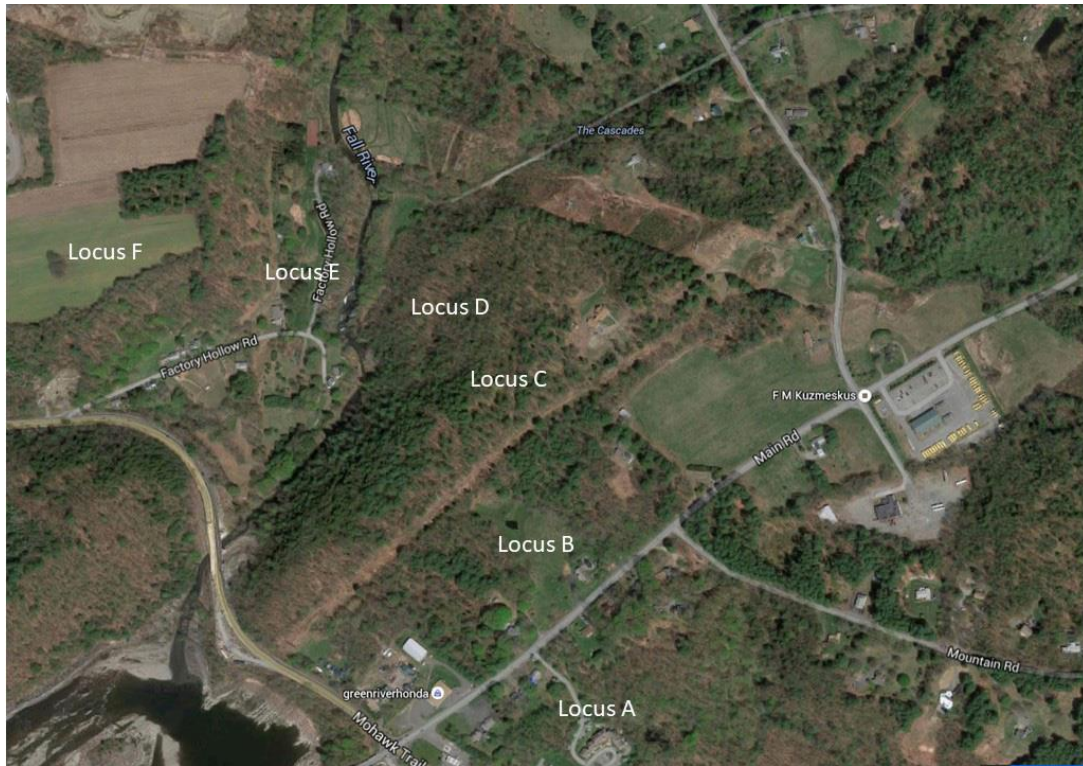


Figure 44. Aerial View Loci A-F.



Figure 45. Riverside/Peskeompskut. View South to North from East Bank of Connecticut River.



Figure 46. Battlefield Locus B, Broad Plain leading to Mountain Gap.
View Southeast to Northwest.

3. The “Mountain Gap” (Battlefield Locus C; Figures 47 & 48). As the English retreated to the west side of the Fall River where their horses were tied they had to pass through a narrow northwest – southeast trending gap 30 yards long and 20 yards wide through a bedrock ridge. The Mountain Gap exits onto a series of terraces overlooking the Fall River (Figure 49). The bedrock ridge is extremely steep and would have prevented anyone on foot from descending the ridge to the terrace below without going through the Mountain Gap. The Mountain Gap provided the only means of access to the terraces which the English had to traverse to recover their horses on the west side of the Fall River. There is no mention in the historical narratives of this topographic feature, and its identification as a Key Terrain Feature is based on the recovery of over 50 small diameter musket balls that were fired as buckshot from southwest to northeast at a group 20 English as they retreated through the Mountain Gap.

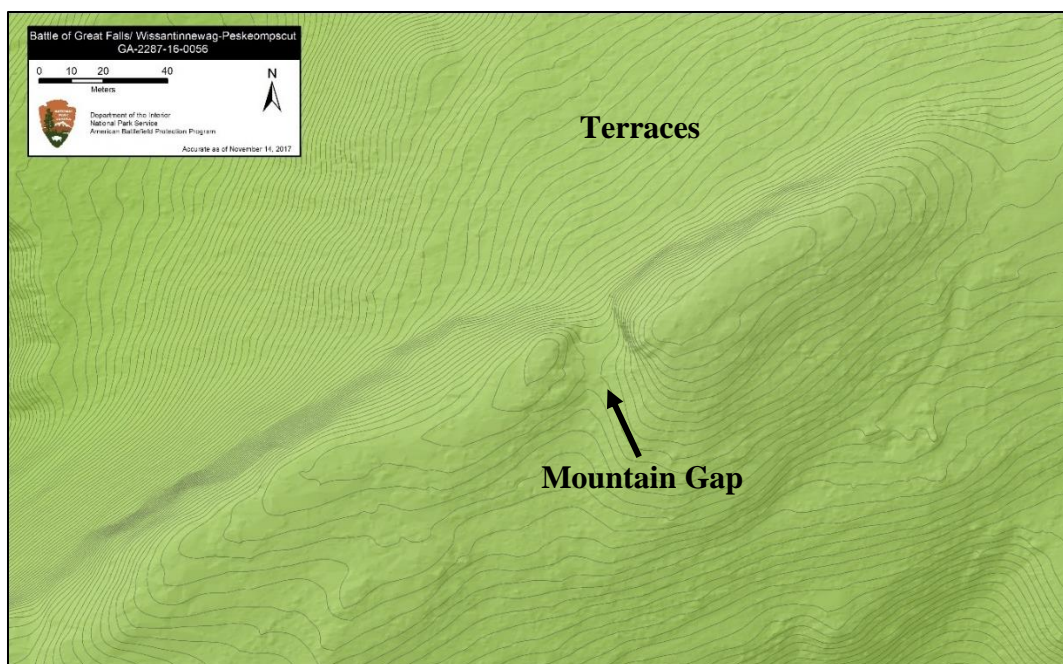


Figure 47. Mountain Gap and Terraces.



Figure 48. The Mountain Gap. View Northwest to Southeast from Terraces.

4. The Terraces (Battlefield Locus D; Figures 49-51). The terraces are not mentioned in any of the accounts of the battle but are a defining topographic feature based on the distribution of

musket balls. The northwest side of the Mountain Gap exits into an area characterized by relatively flat upper and lower terraces separated by an area of moderate topographic relief extending over an area of approximately eight acres. The western edge/boundary of the terraces overlooks the Fall River 40' – 60' below the terrace edge (Figure 51). The slopes leading down to the river are extremely steep, and would have been a serious impediment to anyone attempting to descend (or ascend) to or from the Fall River even on foot. Based on the distribution of musket balls the English used two routes to cross the terraces as they exited the gap and crossed the terraces, and descended to the Fall River in two areas along the terrace edge where the topographic relief is not as severe (Figure 49).

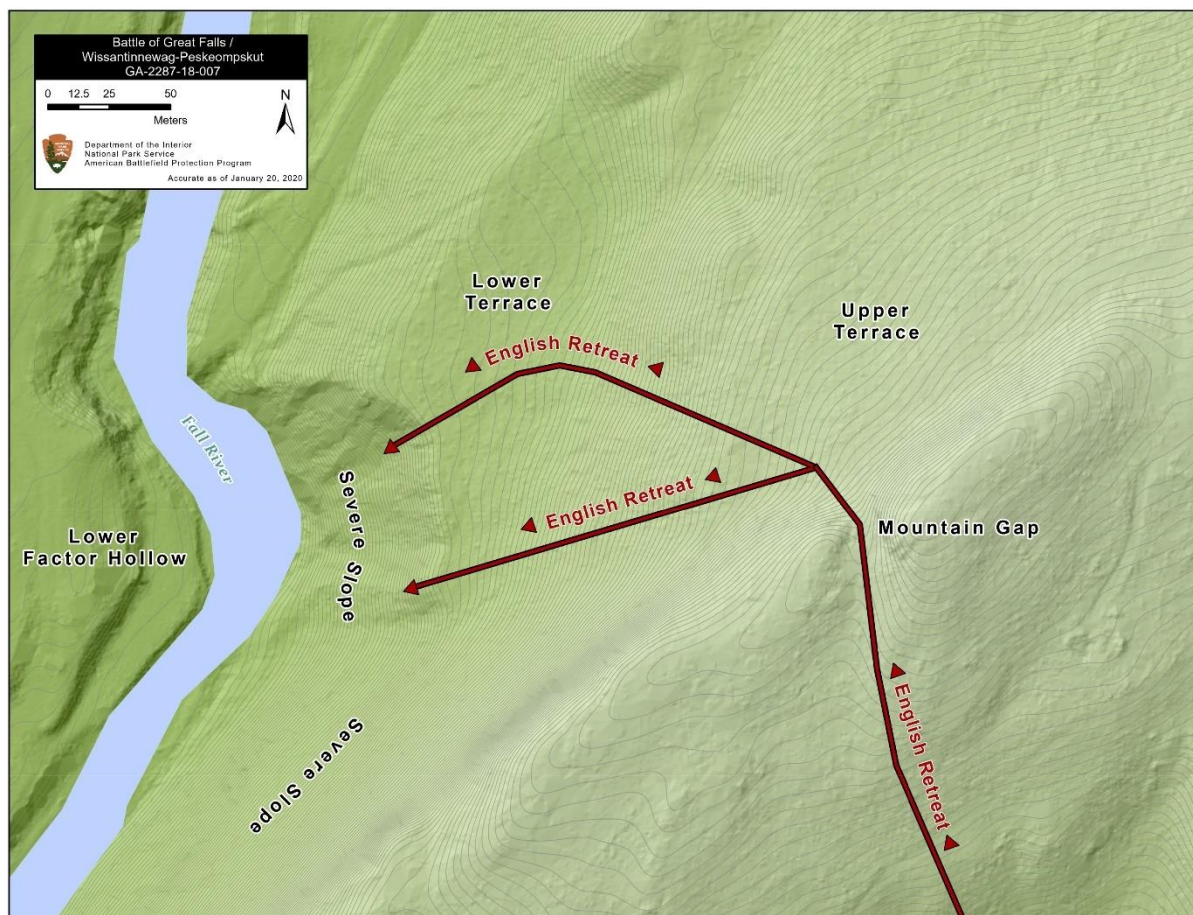


Figure 49. English Retreat, Mountain Gap and Terraces.



Figure 50. Upper Terrace immediately West of Mountain Gap (uphill to right).



Figure 51. Terrace Edge and Severe Slope Overlooking Fall River. View East to West.

5. Fall River (Figures 49, 52-54). The Fall River is considered a key terrain feature as it was used by Native forces from Rawson Island 1.7 miles (2.8 kilometers) down the Connecticut River from the mouth of the Fall River as an avenue to attack the English at the assembly area where their horses were tied (Figure 40). There is a reference in the battlefield narratives to Natives from an island in the Connecticut River using the Fall River to counterattack the English as they reached the Assembly Area to recover their horses:

a party of Indians from an Island (whose coming on shore might easily have been prevented, and the Souldiers before they set out from *Hadly* were earnestly admonished to take care about that matter) assaulted our men.¹³²

The Fall River is very shallow and would not offer any impediment for Coalition forces to travel the .2 miles (3.3 kilometers) north from the mouth of the river to the English Assembly Area in Lower Factory Hollow Area. The reference that the English could easily have prevented the Natives from “an island” from coming ashore suggests a choke point at the confluence of the Fall and Connecticut Rivers where the mouth of the Fall River is flanked on the east and west sides by extremely steep topography (Figure 52).

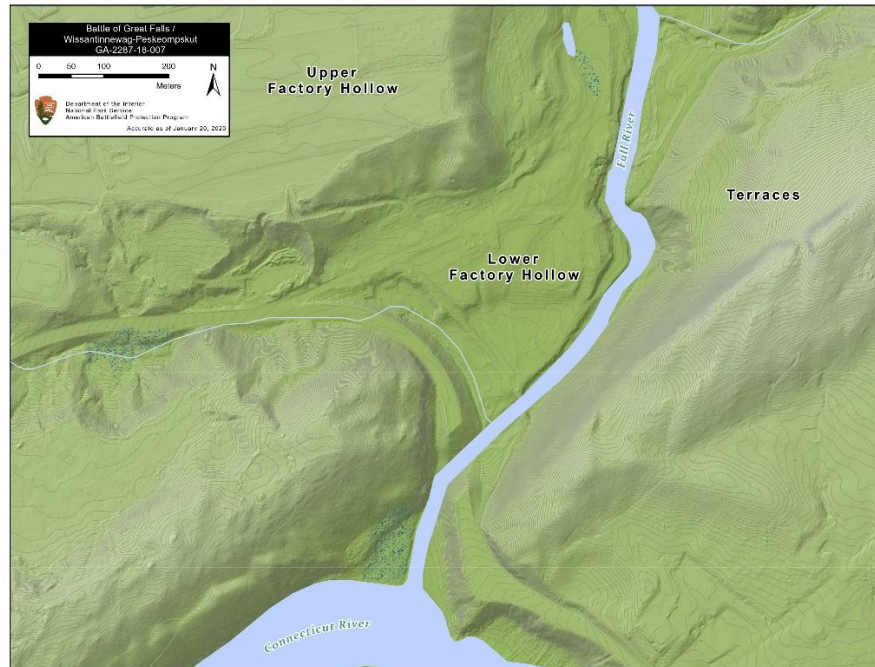


Figure 52. Fall River.

¹³² Mather, *A Brief History*. P. 49.



Figure 53. Fall River. Steep Slope between the Terrace edge and the Fall River to Left.
View North to South.



Figure 54. Fall River. Note Shallowness of the River.

6. English Assembly Area - Lower Factory Hollow (Battlefield Locus E; Figures 54-56). The Factory Hollow area is located on the west side of the Fall River is divided into lower and upper sections (Figure 54). The Lower Factory Hollow area (English Assembly Area) is believed to be where the English tied their horses before making their way east on foot across the Fall River and ascending the steep slope leading to the Terraces and through the Mountain Gap. The English Assembly Area is a Key Terrain feature as it was a focal point of the initial Native attacks on the English in order to prevent them from recovering their horses. From an English perspective control of the assembly area and recovering their horses was critical to facilitating their retreat.

Lower Factory Hollow is a 10-acre terrace with a slight incline trending west to a steep slope that abruptly rises 40' to Upper Factory Hollow (Figure 54). The steep slope would be difficult for horses to ascend or descend but is interspersed with several swales or erosional gullies (low area or depression of lesser topographic relief) leading from Lower to the Upper Factory Hollow Area (Figures 54 & 56). A brief reference by Hubbard is the only primary source that mentions the horse hitching area:

When they [English] came near the Indians rendezvous, they alighted off their horses, and tied to them to some young trees at a quarter of a mile distance, so marching up, they fired briskly into their wigwams.¹³³

Hubbard clearly states that the English tied their horses a quarter of a mile distance from where they dismounted, not a quarter mile from the village as Stephen Williams' narrative states. Presumably the English dismounted in Lower Factory Hollow and tied their horses a quarter of a mile away likely because the young trees (saplings) offered a convenient way to tie their horses. It is estimated that 15-20 soldiers were left to tend the horses (7-9 horses per man). Assuming 150 soldiers, the attacking force would have been reduced to 130-135 soldiers.

¹³³ Hubbard. *A Narrative of the Indian Wars*. P. 85.

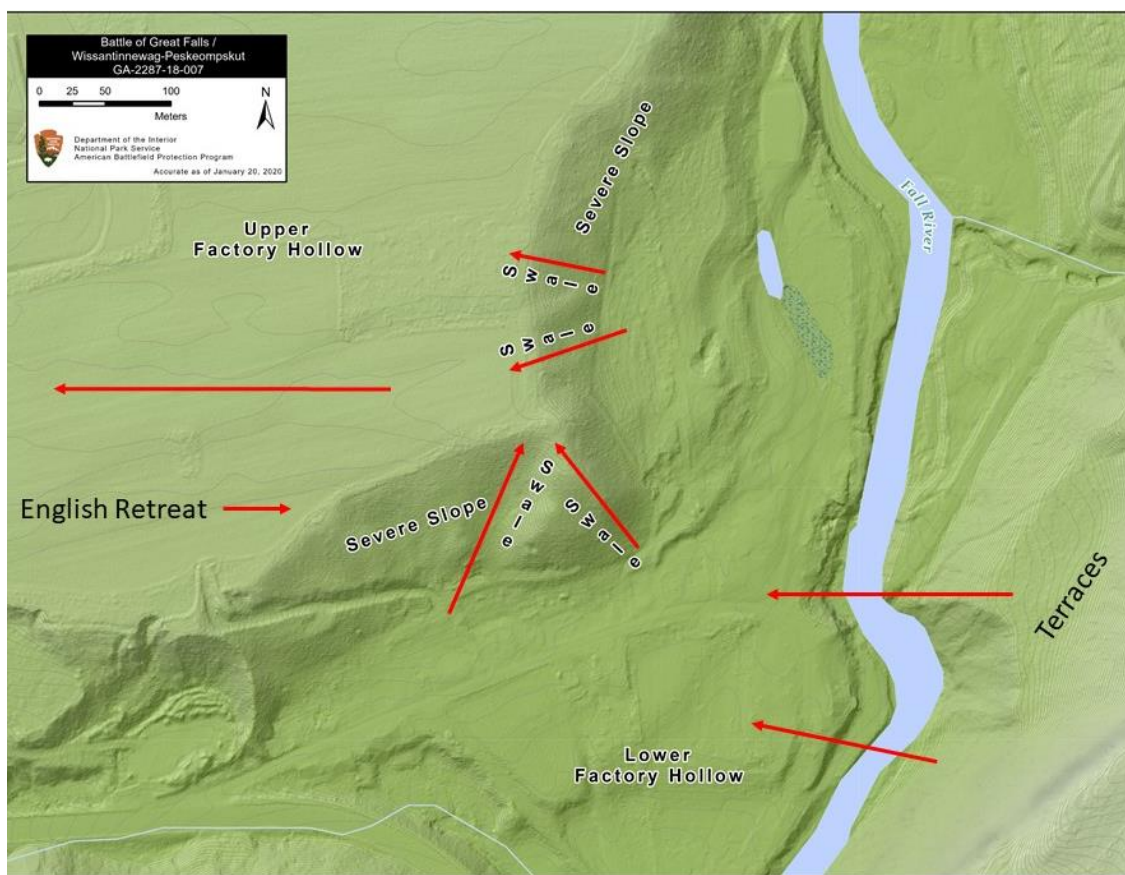


Figure 55. English Retreat Lower Factory Hollow and English Assembly Area.

Unfortunately Hubbard’s brief reference does not provide any information regarding the precise location where the English tied their horses, but the location should have a recognizable archaeological signature as the group of 20 English who had stayed behind at Peskeompskut to fire upon Natives crossing the Connecticut River in canoes “were forced to dispute y^e point with the enemy a considerable time to recover their horses¹³⁴ The soldiers guarding the horses also came under attack presumably from Coalition forces coming up the Fall River “For some of the enemy fell upon the Guards that kept the horses.”¹³⁵ The argument that the Lower Factory Hollow Area is the location of the English Assembly Area is based on the following inferences:

1. The very steep terrain on the east side of the Fall River would have been nearly impossible to ascend (or descend) on horseback suggesting the horse tie down area was on the west side of the river.

¹³⁴ Thomas. “Rev. Stephen Williams’s Notebook.” P. 15.

¹³⁵ Hubbard. *Narrative of the Indian Wars*. P. 206

2. The further the English moved east of the Fall River if they were on horseback increased the likelihood they would be discovered if they approached within only one quarter mile from the village.
3. The swales leading up the severe slope from Lower to Upper Factory Hollow are riddled with musket balls indicating they were used by the retreating English after they recovered their horses from Lower Factory Hollow. Additionally, only the swales contained musket balls and any other areas of the slope which would have been extremely difficult to traverse on horseback.
4. There is evidence of horse tack in several areas of Lower and Upper Factory Hollow. In Upper Factory Hollow the horse tack is surrounded by musket balls suggesting the English used downed horses as cover, and were being fired upon as they exited the swales to Upper Factory Hollow.
5. There is an abrupt end to the distribution of musket balls in the Upper Factory Hollow Area suggesting the retreating English were mounted and were able to outdistance their attackers once they reached the level ground in Upper Factory Hollow. From that point the English retreated west to the north side of the White Ash Swamp.



Figure 56. Lower Factory Hollow.



Figure 57. Swale Leading Upslope from Lower to Upper Factory Hollow. View East to West.
Pink Flags Mark Musket Balls.

7. Upper Factory Hollow (Battlefield Locus F; Figures 54 & 57). Upper Factory Hollow is a level plain 50 acres in extent rising 40 feet above Lower Factory Hollow. The landform begins at the top of the severe slope leading from Lower Factory Hollow and extends west to Factory Hollow Brook and eventually White Ash Swamp (Figure 57). Upper Factory Hollow is defining terrain as it provided the mounted English with an opportunity to out distance Coalition forces for a short time until they were ambushed at the White Ash Swamp 0.5 miles to the west.



Figure 58. Upper Factory Hollow. Swales to Left. View East to West.

8. White Ash Swamp (Battlefield Locus G; Figures 58-60). The White Ash Swamp is considered a key terrain feature as the swamp (as well as Cherry Rum Brook) was used by at least the main body of English to orient themselves during the retreat. The swamp also provided cover and concealment for Coalition forces who ambushed the English them as they rode along the northern edge of the swamp (based on the distribution of musket balls). By the time the English reached White Ash Swamp after exiting Upper Factory Hollow .5 miles to the east, Coalition forces (perhaps from Rawson Island) had taken up positions in the swamp to ambush the English, splitting them into several groups in their panic to escape. According to William Harris the English suffered most of their casualties in the swamp ambush:

On their route the Indians had laid ambush in a swamp, but as the English were not all together, only part of them went that way. The ambushing Indians slew many of that group, in fact, about thirty-eight¹³⁶

A Small company y^t Separatd from others – y^t ran upon a parsell of indians near a Swamp & were most of y^e killd.¹³⁷

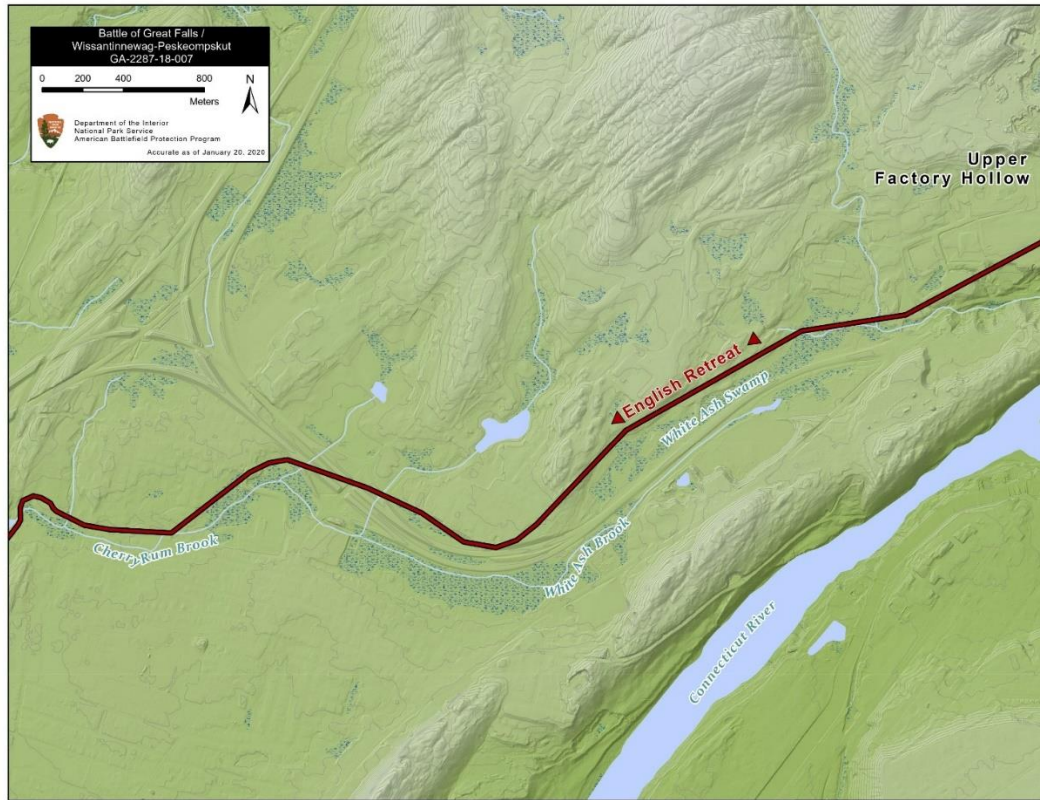


Figure 59. White Ash Swamp.

White Ash Swamp begins approximately .5 miles (.8 kilometers) west of Upper Factory Hollow and extends westerly for .6 miles (1 kilometer) to within .2 miles (.3 kilometers) of Cherry Rum Brook (Figure 58). Much of the center of White Ash Swamp has been filled to construct Routes 2 and 2A but the northern and southern margins of the swamp are relatively intact.

Based on the distribution of musket balls the English retreated along the northern edge of the swamp where the terrain was dry and fairly level, keeping the swamp in view on their left as a way to orient themselves. The direction of fire could be determined for some of the musket

¹³⁶ Douglas Leach, Ed. *A Rhode Islander Reports on King Philip's War: The Second William Harris Letter of August, 1676*, P. 77, Providence, RI: Rhode Island Historical Society, 1963.

¹³⁷ Thomas. "Rev. Stephen Williams's Notebook." P. 15.

balls, indicating they were fired by Coalition forces north from the swamp toward the English retreating along the slightly higher ground along the northern border of the swamp. The Coalition forces, surmising the English would retreat along the swamp and brook, were able to lay ambushes along the way and also appear to have continuously attacked the English for 3 miles (4.8 kilometers) to the Green River Ford.



Figure 60. White Ash Swamp and Firm Ground and Route English Traversed North of White Ash Swamp. Swamp in Background. View West to East. Pink Flags Mark Musket Balls.



Figure 61. White Ash Swamp in Background. View North to South.
Pink Flags Mark Musket Balls.

10. Cherry Rum Brook. (Battlefield Loci H and I; Figures 61). When the English exited White Ash Swamp they followed the Cherry Rum Brook for approximately 2-miles to the confluence with the Green River and the Green River Ford (Figure 61). In spite of the meandering brook with many twists and turns, the English never veered from the brook although they could have shortened the distance by cutting across some of the meanders. This pattern indicates the English were in unfamiliar territory and needed the brook to orient themselves, choosing the dangers of ambushes rather than cutting across country. The distribution of musket balls along the brook is

almost continuous indicating Coalition forces kept up with mounted English forces in difficult terrain and could also easily predict the route of the English retreat and set ambushes along the way. It is unlikely the English were following a Native trail or path that paralleled the brook given the difficulty of the terrain and the many meanders.

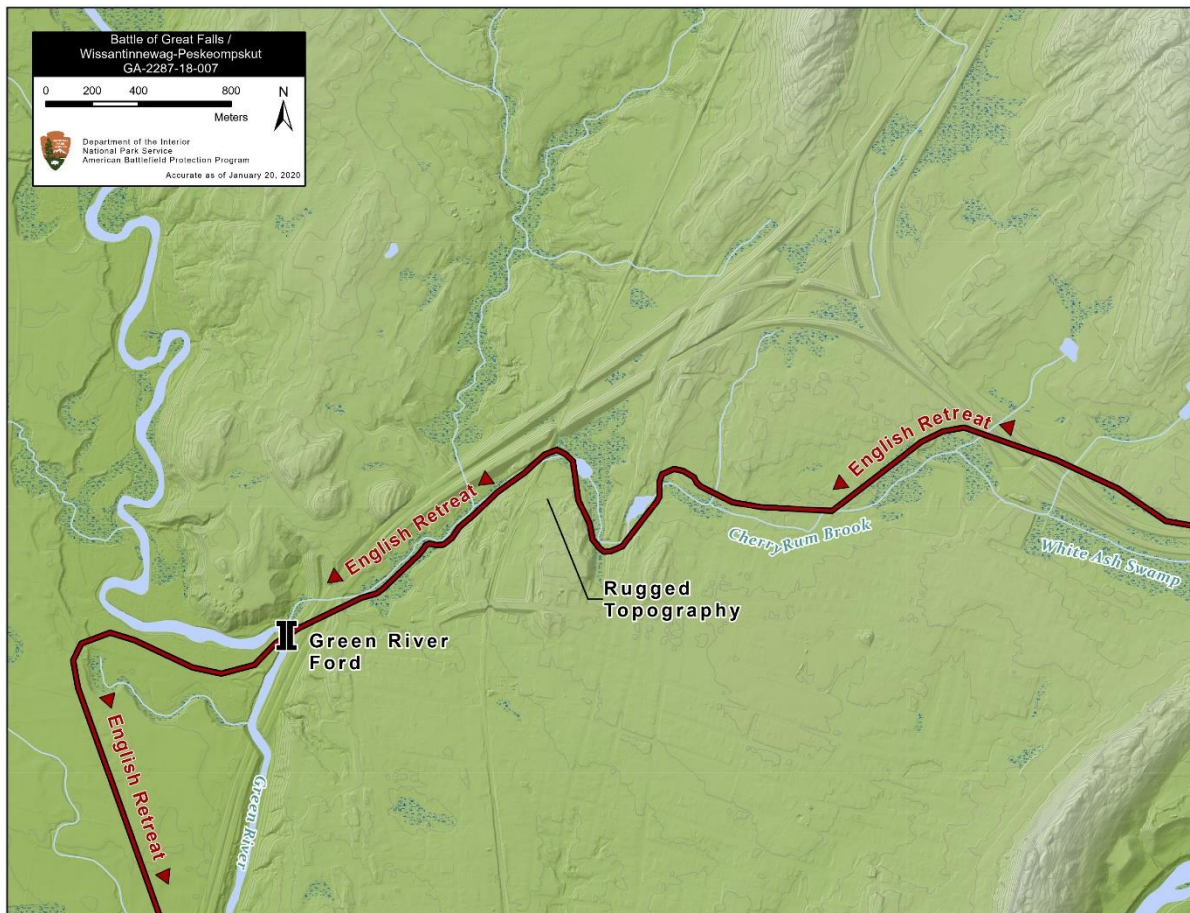


Figure 62. English Retreat Along Cherry Rum Brook. Battlefield Loci H and I.

In Jonathan Wells' narrative of his experiences in the battle he mentioned that he followed a "track of ye company (main body) but he may have been referring to hoof prints, not an established trail or path:

...abt 2 miles [approximately one mile west of Factory Hollow] from y^e place where y^y did y^e Exploit &c & when y^y had left y^e track of y^e company & were unacquainted wth y^e woods.¹³⁸

¹³⁸ Thomas. "Rev. Stephen Williams's Notebook." P. 24.

The Cherry Rum Brook flows through highly variable terrain ranging from relatively flat and level topography to topography that rises steeply 50-60 feet above the brook. The rugged topography in some areas would have restricted the movements of the mounted English to a very narrow area between the brook and the toe of the slope. In some sections of the brook the topography is so severe it would have been very difficult for horses to negotiate (Figure 62).

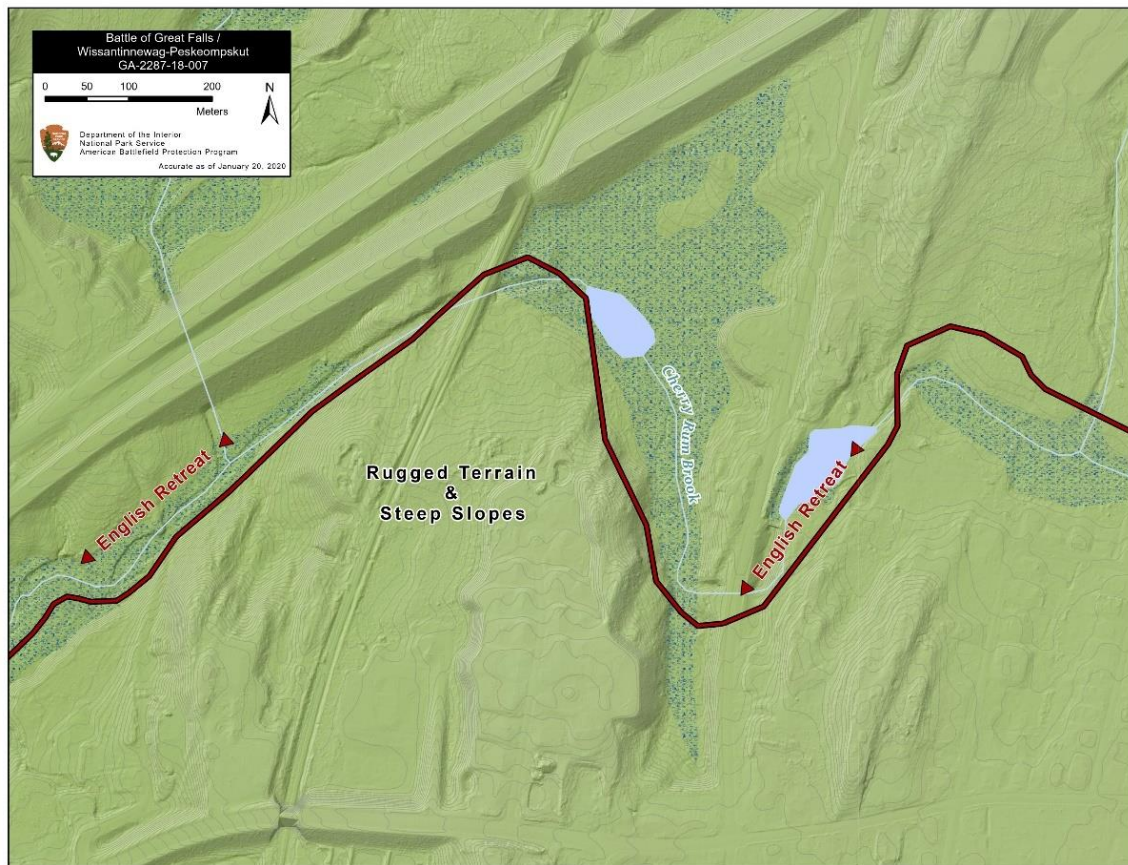


Figure 63. Battlefield Locus I, Cherry Rum Brook Steep Terrain.



Figure 64. Cherry Rum Brook Area of Steep Terrain. View North to South.
Cherry Rum Brook to Left (East).



Figure 65. Cherry Rum Brook Area of Steep Terrain. View North to South.
Cherry Rum Brook to Left (East). Pink Flags Mark Musket Balls.

The stream bed of the brook is packed gravel and very solid, sufficient to support horses along almost the entire distance to the Green River Ford. The stream bed is generally only 30 feet wide so the English could ride two abreast for most of the way. If that was the case, and assuming the main body at that time was 60 soldiers riding abreast, the column would have stretched between 320- and 350-yards along the brook. In some areas along the brook the terrain on either side of the stream was level with little topographic relief that would have allowed the English to leave the stream bed and fan out along both sides (Locus H; Figures 87-88).

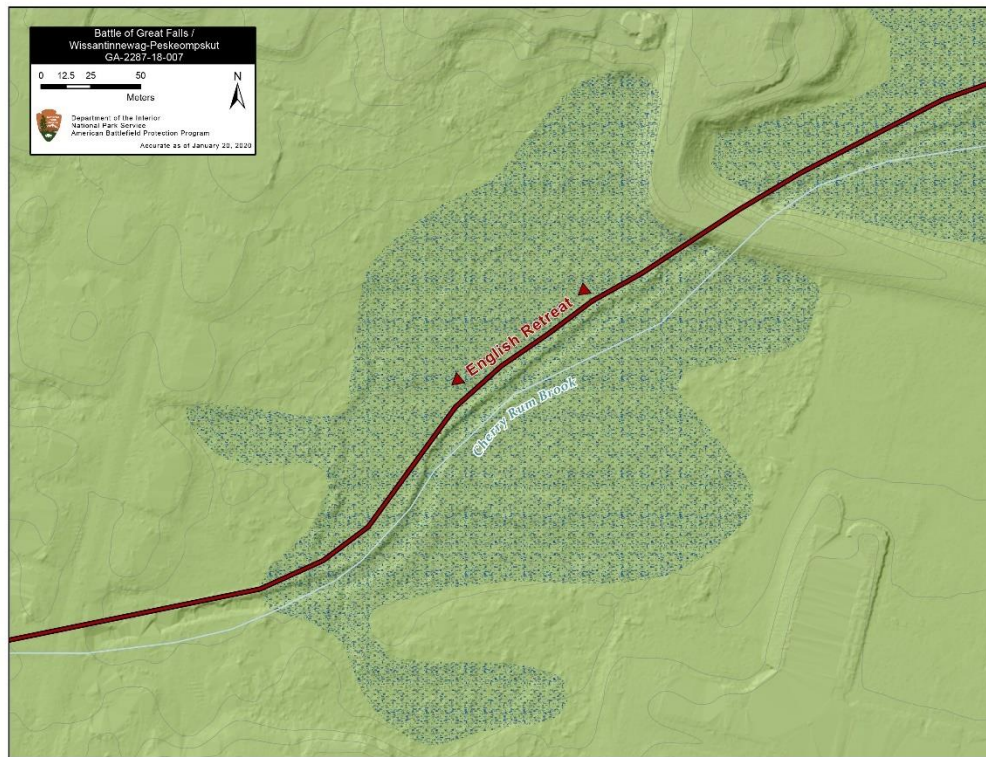


Figure 66. Locus H, Cherry Rum Brook and Wetland.

Locus H is an area of very flat and level terrain, essentially a small floodplain associated with the Cherry Rum Brook. It is currently classified as a wetland and may have supported dense vegetation at the time of the battle, what the English would have described as a thicket (Figures 65-67). The area is approximately 6-acres and extends for 85 yards on either side of the brook. More than 150 musket balls were recovered from the area, the vast majority believed to be English fire. If the wetland vegetation provided sufficient cover to potentially conceal Coalition forces waiting in ambush, the English may have preemptively fired volleys of musket balls into the thicket on either side of the brook.



Figure 67. Cherry Rum Brook, Battlefield Locus H.
Area of Low Topographic Relief to North and South. View East to West.

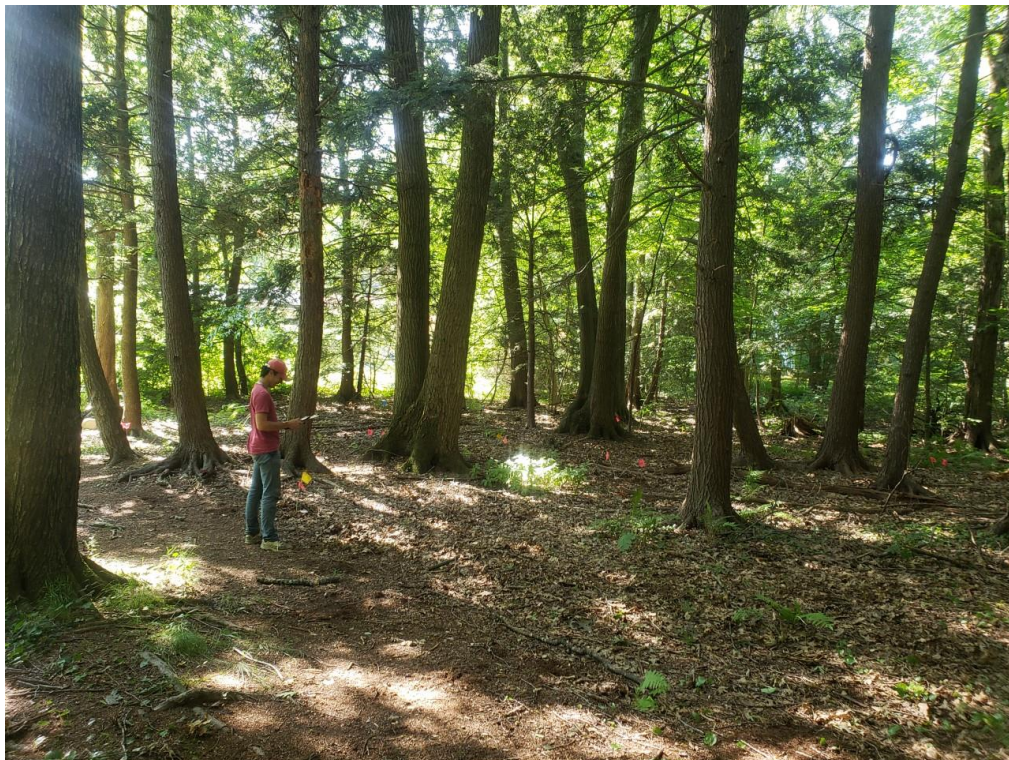


Figure 68. Cherry Rum Brook Battlefield Locus H. Area of Low Topographic Relief.
View from Cherry Rum Brook to North. Pink and Yellow Flags Mark Musket Balls.

11. Green River Ford (Battlefield Locus J; Figures 68-71). The Green River Ford is Located at the Confluence of the Green River and Cherry Rum Brook. The Green River Ford is considered a Key Terrain Feature as it was used by the English to cross the Green River when they exited the Cherry Rum Brook and was controlled by Coalition forces who positioned themselves on a terrace and slope 40 feet above the ford to ambush the English (Figure 69). The ford served as a chokepoint as steep terrain on both sides of the Cherry Rum Brook funneled the English into a narrow defile making it easy for Coalition forces to predict where the English would cross the river. More than a dozen musket balls were recovered from the terrace slope as a result of English fire at Native forces positioned along the terrace. The landscape in the general area of the ford has been extensively disturbed from various construction projects over the years, particularly on the west side of the ford.

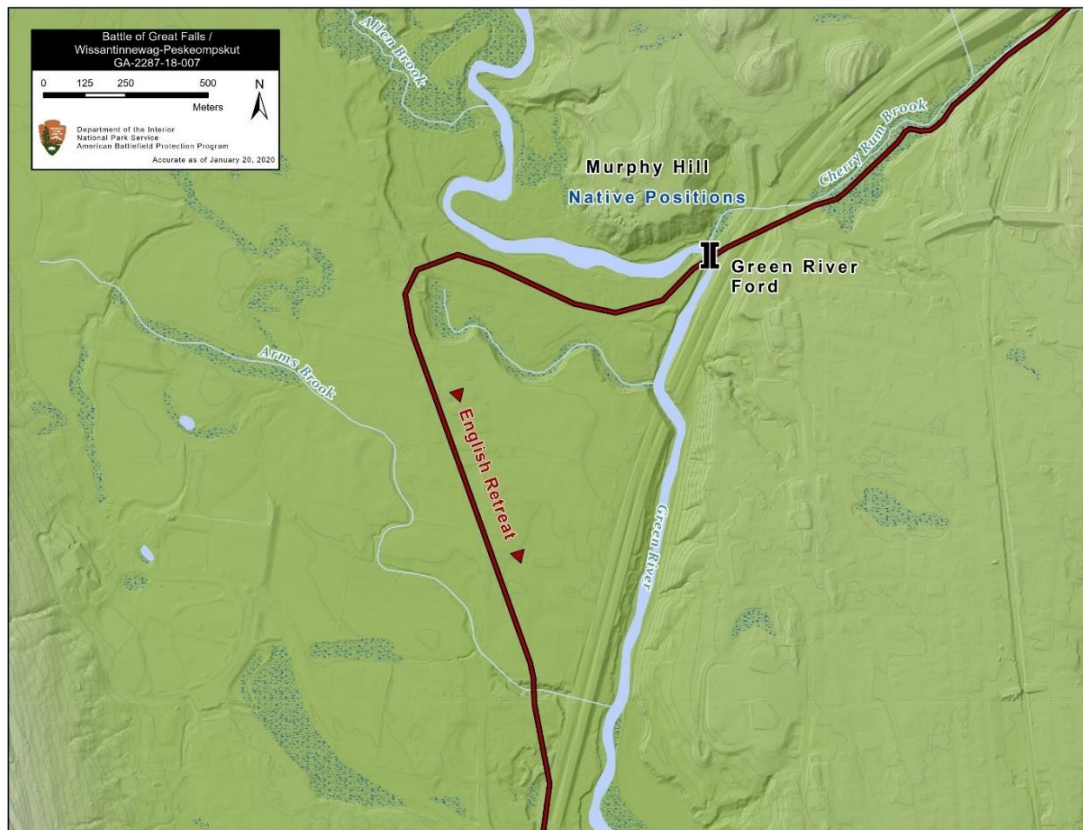


Figure 69. Green River Ford and Route of English Retreat from Cherry Rum Brook.

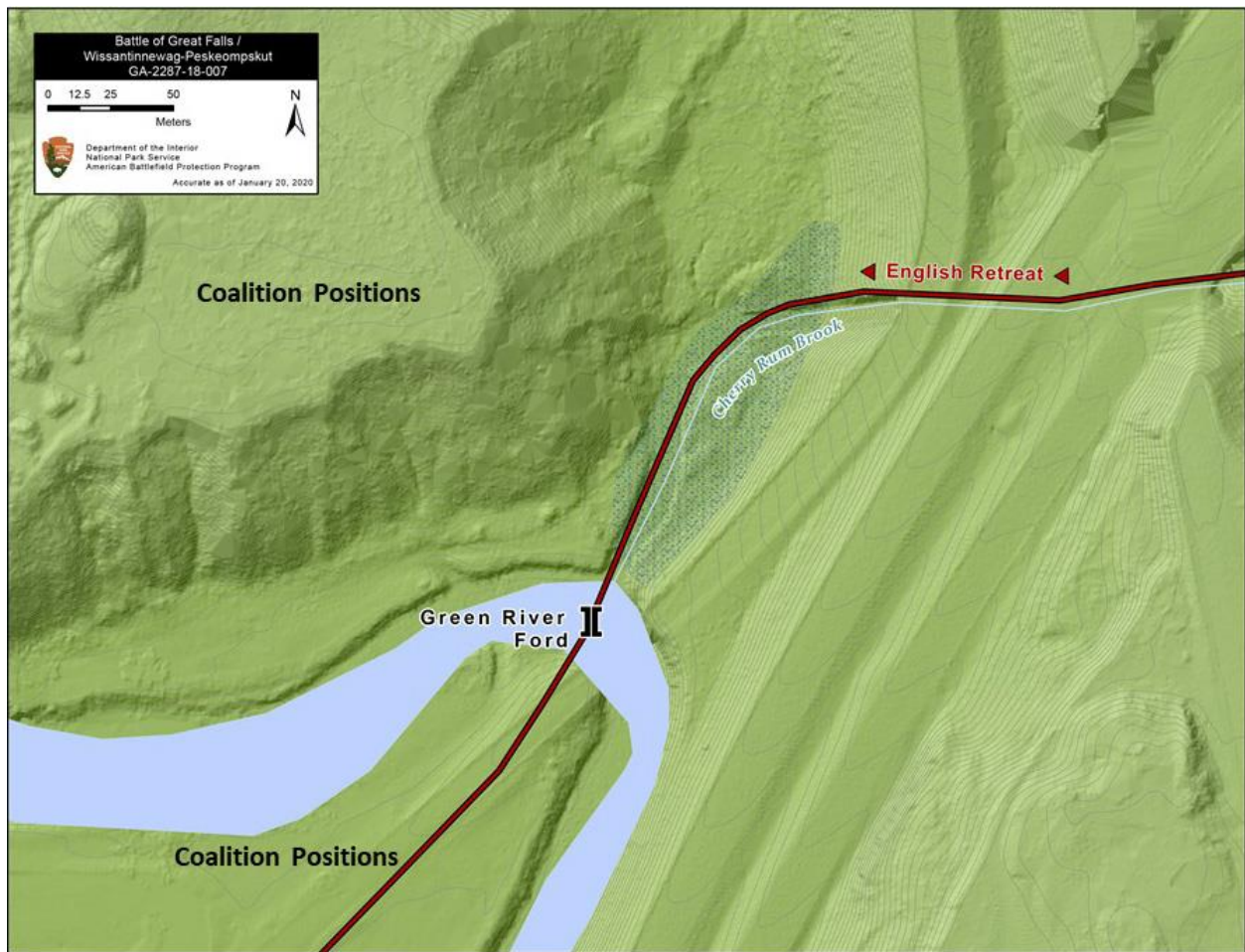


Figure 70. Battlefield Locus J, Green River Ford and Coalition Positions.

Captain Turner was killed on the west side of the ford just as he crossed the Green River. Both Native combatants and English burial parties reported the location of Turner's body on the west side of the Green River Ford:

Within a few days after this, Capt. *Turners* dead Corps was found a small distance from the River.¹³⁹

John Wecopeak, on his Examination saith... that he saw Capt. Turner, and that he was shott in the Thigh, and that he knew it was him, for the said Turner said that was his name.¹⁴⁰

¹³⁹ Mather. *A Brief History*, P. 50.

¹⁴⁰ Easton. *A Narrative Of the Causes*. P. 179.



Figure 71. Green River Ford. Cherry Rum Brook at Left. View West to East.



Figure 72. High Terrace and Coalition Positions Overlooking Green River Ford.
View West to East.

12. Green River Terraces (Battlefield Locus K; Figures 72-75). The route of the English retreat from the Green River Ford to the Deerfield River Ford was largely dictated by a series of deep gullies or ravines that extended west from the Green River at fairly regular intervals, cutting into

the flat terraces along the Green River. The gullies were impassible on horseback and the closest distance to the Green River where they could be crossed ranged between 200 and 800 yards (Figure 72). Based on the limited distribution of musket balls and terrain features, the terraces provided a significant advantage to the mounted English as they could easily outdistance their Native pursuers. In a 20-acre, 700 yard stretch of the terraces that was surveyed only three musket balls were recovered indicating very little action between English and Coalition forces. Whether that pattern continues for another two miles south to the Deerfield River Ford is unclear as that stretch of the retreat has not been surveyed.

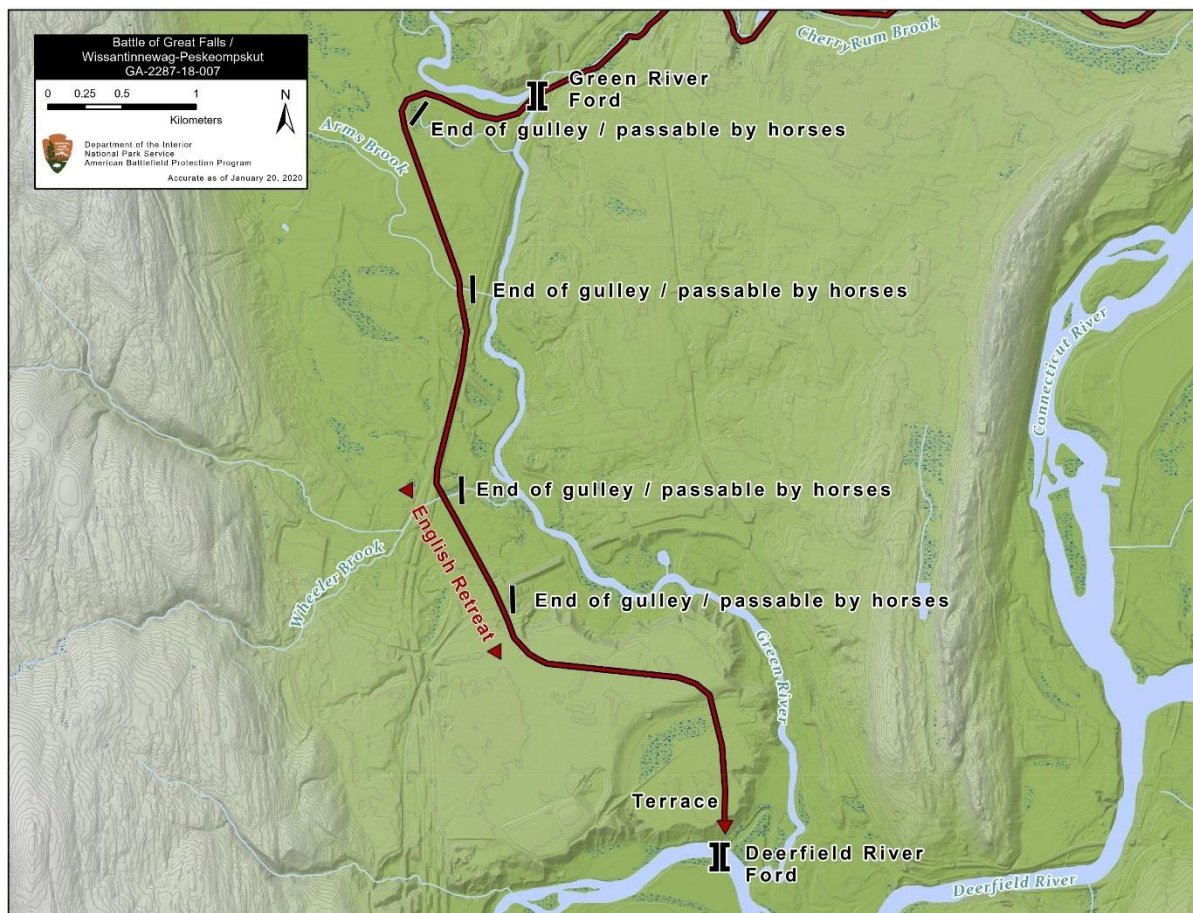


Figure 73. English Route of Retreat, Green River Terraces.
Green River Ford to Deerfield River Ford.



Figure 74. Green River.

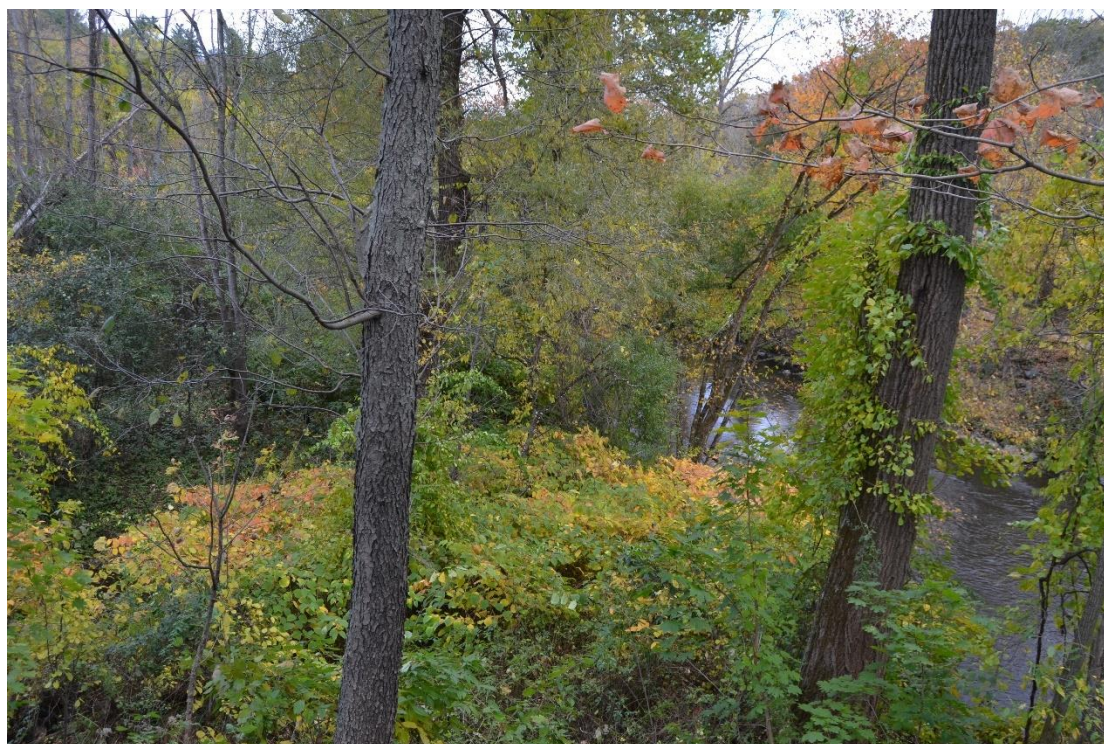


Figure 75. Terrace Edge Overlooking Green River 40' Below.
View South to North. Gulley to North.



Figure 76. Terrace Edge, Steep Slope, and Gulley. View North to South



Figure 77. Green River Terraces. View South to North. Tree line in Background Marks Gulley.
13. Deerfield River Ford (Battlefield Locus L; Figures 76-81). The primary Deerfield River ford

is located east of the confluence of the Green and Deerfield Rivers. The English mistakenly used a secondary ford west of the confluence of the Green and Deerfield Rivers “30 rods” (170 yard; 155 meters) upstream from the main ford and used the same ford during their retreat (Figure 76). Perhaps anticipating an English attack, the primary ford was guarded by Coalition forces from a nearby village and/or fort located in an area historically known as Cheapside (Figure 76).

This company went from Hatfield May 17, 1676 being Thursday near night, marched y^e dead of y^e night, by Deerfield and passd by y^e indians y^t dwelt at cheapside & y^e noise was heard by the indian watchman, who infromd y^e Indians y^t he heard horses pass along, upon which y^e indians went (wth a lightd torch) to ...y^e usuall path y^t crossd Green River (but the army had missd y^e usuall path & crossd y^e river abt 30 rods [500 ft] higher) & not observing any tracks concluded y^e watchman was mistaken and y^t it was moose y^t he heard & so continud quiet & did not send to infrom y^e indians above wc^h they could easily have done.¹⁴¹

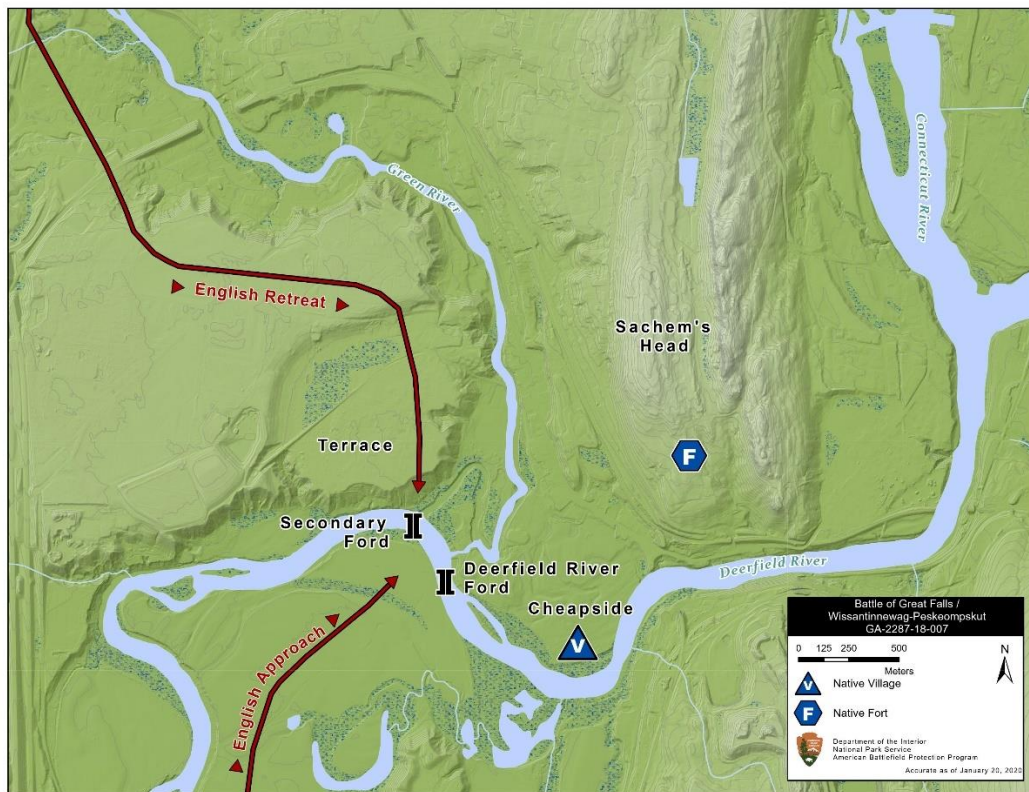


Figure 78. English Retreat to Deerfield River Ford.

The terrace overlooking the Deerfield River Ford rises 40-50 feet above the Green and Deerfield Rivers with a very steep slope that would have prevented horses from easily ascending

¹⁴¹ Thomas. “Rev. Stephen Williams’s Notebook.” P. 13.

or descending the slope except for a narrow swale leading from the ford to the terrace above (Figures 80 & 81). The approach to descend the swale to the ford was along a very narrow section of the terrace that was only wide enough for one horse at a time. The English were probably bottlenecked on the edge of the terrace waiting their turn to descend to the ford. It appears Coalition forces knew the route the English intended to take during the retreat and set an ambush at the ford, and/or perhaps attacked the English as they waited to descend to the ford. The musket ball data is not clear on the precise scenario.

The battlefield survey confirmed the location of the secondary ford below the terrace based on the recovery of 41 dropped and impacted musket balls along the terrace edge above the secondary ford, and two musket balls that were recovered on the slope/swale leading to the secondary ford from the terrace (Figures 77 & 78). Native forces (perhaps from Cheapside) appear to have controlled the terrace overlooking the secondary ford for a period of time forcing the English to fight for control of the terrace and egress to the secondary ford.



Figure 79. Battlefield Locus L, Terrace overlooking Deerfield River Ford. View North to South. Green River to Left, Deerfield River to Front.



Figure 80. Battlefield Locus L Terrace. Pink Flags Mark Musket Ball Finds.



Figure 81. Confluence of Deerfield and Green Rivers. View from Locus L Terrace Edge. Cheapside to Left.



Figure 82. Battlefield Locus L, Terrace Slope Leading to Deerfield River Ford.

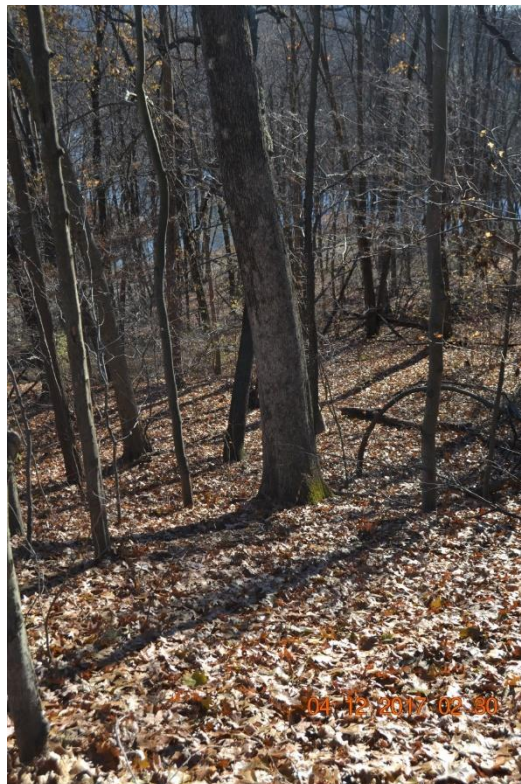


Figure 83. Swale leading to Deerfield Ford. View North to South.

15. Deerfield River (Figure 82). The Deerfield River served as a transportation and communication corridor for the Native people in the middle Connecticut Valley and extends more than 25 miles north and west into the Berkshire Mountains from its confluence with the Connecticut River. The river was a minor obstacle for the English along their avenue of approach to Peskeompskut as it could only be crossed at a few river fords. Based on English accounts Coalition forces continued to pursue the English for a short time after they forded the Deerfield River. No surveys were conducted in Deerfield Meadows.

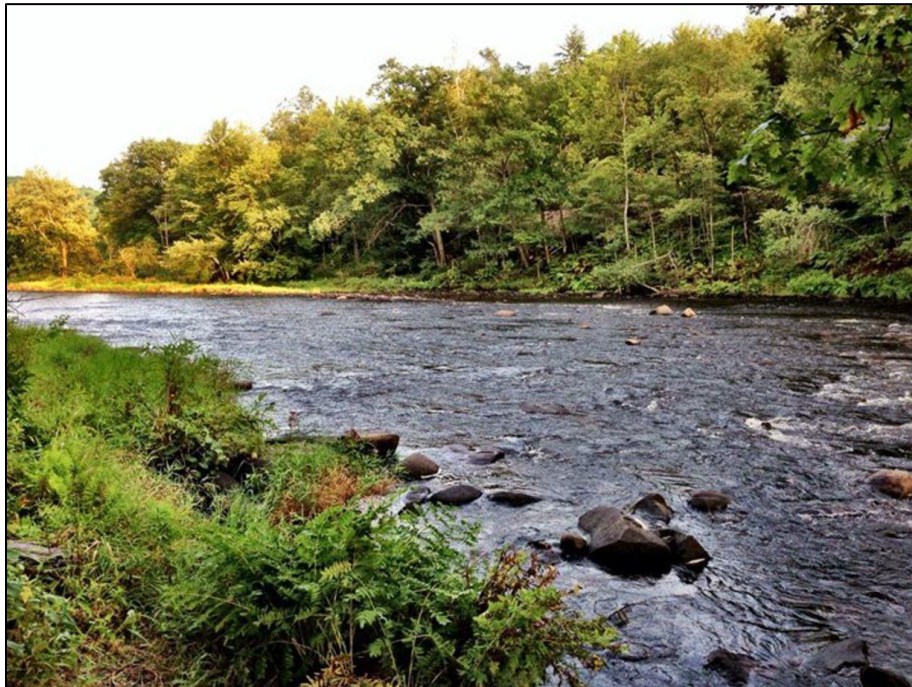


Figure 84. Deerfield River.

Battle of Great Falls/Peskeompskut

The narrative of the Battle of Great Falls/ Wissantinnewag-Peskeompskut that follows was drawn primarily from three sources; William Hubbard's *Narrative of the Indian Wars*, Increase Mather's *An Brief History of the Indian Wars in New England*, and the "Reverend Stephen Williams Notebook."¹⁴² These sources, and others, were discussed above, but it is worth reiterating some of their historic contexts to better understand how they were used to reconstruct the battle events. While it is not known from whom Hubbard or Mather obtained their

¹⁴² Thomas. "Rev. Stephen Williams's Notebook."

information, their narratives are generally considered correct and factual (although not without cultural bias), as they can often be substantiated by other sources. They would have received their information either directly from individuals who were present at the battle or received letters from knowledgeable individuals about the events (perhaps Reverend John Russell of Hadley). Their information was recorded soon after the battle events, perhaps within a few days or weeks. Stephen Williams obtained much of his information from Jonathan Wells and a few other soldiers who were in the battle. Wells was a 16-year-old settler from Hadley at the time of the battle and had never traveled beyond the settlement's boundaries. When Williams recorded Wells' narrative around 1731/32, Wells was in his 70s and had achieved the rank of Captain for his service in King William's (1688-1697) and Queen Anne's (1702-1713) Wars. As Wells' narrative was obtained more than 50 years after the battle event, the veracity of the information recorded so many years after the battle should be considered, although there is no reason to doubt the accuracy of Wells' account. The other sources Williams may have relied on were "Several very valuable persons in this engagement" possibly Japhet Chapin, Captain Fuller, and Captain Hitchcock."¹⁴³

Williams also drew upon William Hubbard's Narrative for some information that is sprinkled throughout his narrative to which Williams does attribute to Hubbard (e.g. Mr. H or H). As discussed above Williams did make one serious error in transcribing a portion of Hubbard's narrative. Williams states "y^e English allightd from y^r horses at a quarter of a mile distance from the Enemy, & tyd y^r horses to Some young trees" indicating Turner's company rode to within one quarter of a mile of the village before they dismounted.¹⁴⁴ In fact, what Hubbard said was "When they came near the Indians rendezvous, they alighted off their horses, and tied them to some young trees at a quarter of a mile distance."¹⁴⁵ Hubbard's mention of one quarter of a mile distance is in reference to the small trees, not the distance to the village. While seemingly minor, the error has major implications for trying to determine the location of the English Assembly / Horse Tie Down Area and the nature of the fighting that took place there. One of the more interesting aspects of Wells' narrative is that some of the information was obtained from Native men who participated in the battle and is one of the few times Native

¹⁴³ Thomas. "Rev. Stephen Williams's Notebook." P. 15. Only one of these men were living in the valley when Williams was compiling his information.

¹⁴⁴ Thomas. "Rev. Stephen Williams's Notebook." P. 13.

¹⁴⁵ Hubbard. *Narrative*. P. 204.

voices come through in the narratives of King Philip's War. Wells must have known these men and spoke with them sometime after the battle. The information is such that Wells could not have observed or known about certain actions that took place on the battlefield unless it was told to them by a Native combatant who was present at the battle:

There happening a short flash of thunder & lightening just before Y^d got there...Some Indians Y^{et} were out fishing were beat in.¹⁴⁶

...and passed by y^e Indians y^{et} dwelt at Cheapside & y^e noise was heard by the Indian watchman, who informed y^e Indians y^{et} he heard horses pass along, upon which y^e Indians went (with a light torch) to y^e usual path y^{et} cross Green River (but the army had missed y^e usual path & cross y^e river at 30 rods [500 ft] higher) & not observing any tracks concluded y^e watchman was mistaken and y^{et} it was moose y^{et} he heard & so continued quiet & did not send to inform y^e Indians above why they cd easily have done.¹⁴⁷

...y^{et} y^e Monday after y^e fight 8 men y^{et} were lost came to them & offered to Submit themselves to y^e, if they would not putt them to death; but whether they promised them quarter yea or not they took them, and burnt y^e. The method of burning them was covering them with thatch & put fire to it & set them running & when one coat of thatch was burnt up they would putt on another &c the barbarous creatures that have given this account of their inhumanity & barbarity have in a Scoffing man: add y^{et} the English men wd cry out as they were Burning &c Oh dear Oh dear.¹⁴⁸

...an Indian was coming over y^e River in a Cano to him [Jonathan Wells] coming ashore to him near. He presented his Gun & y^e Indian frightened jump out of y^e canoe & left his Cano & went & told y^e Indians y^e English army were come again for he had seen one of ye Scouts himself (y^e Indians gave this acct afterwards & ds b^y went to look but b^y saw nothing but y^e Indian being a Narragansett b^y concluded he was fright groundlessly so b^y hold y^e No better than Squaws &c)¹⁴⁹

On May 18 Captain Turner and approximately 150 soldiers and militia/colonists drawn from Springfield/Westfield, Hatfield, Hadley, and Northampton "came from Hatfield a little before night...y^e most with horses & a few footman."¹⁵⁰ Half of the men were garrison troops under the command of Turner and the other half militia from the Hampshire County militia or settlers. The company left Hatfield at dusk and travelled north 15 miles along the west side of the

¹⁴⁶ Thomas. "Rev. Stephen Williams's Notebook." P. 9.

¹⁴⁷ Thomas. "Rev. Stephen Williams's Notebook." P. 9.

¹⁴⁸ Thomas. "Rev. Stephen Williams's Notebook." P. 15.

¹⁴⁹ Thomas. "Rev. Stephen Williams's Notebook." P. 26, 28.

¹⁵⁰ Hubbard. *Narrative*. P. 9.

Connecticut River through Deerfield Meadow to the Deerfield River. Two local men, Experience Hinsdale of Hadley and Benjamin Waite from Hatfield, served as guides for Turner's Company.¹⁵¹ The English originally intended to cross the Deerfield River at the main ford across from Cheapside just east of the confluence with the Green River "but the army had missed ye usual path & crossed ye river about 30 rods higher."¹⁵² The secondary ford was located 500' upriver (west) from the main ford at Cheapside and just west of the confluence with the Green River. As the English crossed the river:

...y^e noise was heard by the Indian watchman [near the main ford], who informed y^e Indians [at Cheapside] y^t he heard horses pass along, upon which y^e Indians went (with a lighted torch) to y^e usual path y^t crossed y^e Green [Deerfield] River...& not observing any tracks concluded y^e watchman was mistaken and y^t it was a moose y^t he heard & so continued quiet & did not send to inform y^e Indians above which they could easily have done.¹⁵³

Depending on which ford they used would place the English on either the west or east side of the Green River and thereby they would have taken very different routes of approach (and retreat) to Peskeompskut. It is interesting to speculate what route the English would have taken to Peskeompskut if they were on the east side of the Green Rivers and conversely which route they would have taken during the retreat. It is assumed that the English avenue of retreat closely paralleled their avenue of approach. Although the precise route of approach is uncertain the route of retreat is known based on musket ball distributions.

After Turner's force forded the Deerfield River they proceeded north for approximately 2.5 miles along the west side of the Green River until they reached the Green River Ford at the confluence with Cherry Run Brook. From there the English travelled east 3.25 miles closely paralleling the Cherry Run Brook, along the north side of White Ash Swamp to the Fall Brook leading to Lower Factory Hollow, arriving just before dawn. The English forces travelled the 21 or so miles from Hadley to the Fall River under a full moon in approximately 8 to 9 hours, at a speed of 2.5 to 3.0 miles an hour. William Hubbard states that "When they came near the Indians rendezvous, they alighted off their horses, and tied them to some young trees at a quarter of a mile distance" and then marched to the village.¹⁵⁴ The area where the English tied their horses in

¹⁵¹ Experience Hinsdale resettled at Deerfield. His father and three brothers were killed at Bloody Brook.

¹⁵² Thomas. "Rev. Stephen Williams's Notebook." P. 13.

¹⁵³ Thomas. "Rev. Stephen Williams's Notebook." P. 13.

¹⁵⁴ Hubbard. *Narrative*. P. 205.

Lower Factory Hollow is approximately one-half mile from the village at Riverside. As discussed earlier, the English Assembly, or Horse Tie Down Area, is believed to be on the west side of the Fall River in Lower Factory Hollow partly because the terrain on the east side of the Fall River is difficult if not impossible for horses to ascend even if the English dismounted and led their horses. Assuming 140 horses, as some of the English were on foot, Turner would have probably left 15 to 20 men behind (one man per 7-9 horses) to adequately care for and guard the horses, thereby reducing the attacking force to 120-125 soldiers.

The distance from the Fall River to the Peskeompskut village is about .5 miles, which is a typical distance for dragoons (mounted infantry) to dismount from the intended locus of attack in order not to be detected. Stephen Williams described the approach and the attack on the village based on interviews with Wells and perhaps other veterans of the battle as well as some information he obtained from William Hubbard.

The army came up to the Indians (at the falls) a little before break of day whom y^e found very Secure without any watchman. Some y^t had been at the river fishing y^t cd have been like to have discovered y^e, having been driven from y^r fishing by a little storm of thunder and lightning, y^t happened a little before ye sun came up, y^e English allighted from y^r horses at a quarter of a mile distance from the enemy, & tied their horses to some young trees; and when it grew so light as y^t they were able to distinguish between y^r friend & enemies they marched up to y^e wigwams...¹⁵⁵

The number and arrangement of the wigwams in the main part of the village dictated, or at least greatly influenced, the English plan of attack. As Thomas Reed had spent time in the village he knew something about the distribution of wigwams and Turner would have planned accordingly.

The total number of people in the village is difficult to determine as the sources vary widely and are based primarily on casualty estimates. Assuming 250 people and approximately 8 to 15 people per wigwam, there may have been 15 to 30 wigwams in the village. One ambiguous reference by an English soldier described “a wigwam or two [a] little higher than the rest” of the village, which is interpreted to mean they were located further upslope and otherwise slightly removed from the main village.¹⁵⁶ It probably would have been difficult, if not impossible, for

¹⁵⁵ Williams obtained the information in italics from Hubbard, but Williams incorrectly transcribed the information. What Hubbard said was “When they came near the Indians rendezvous, they alighted off their horses, and tied them to some young trees at a quarter of a mile distance”. The Hubbard’s reference to one quarter of a mile is in reference to the distance to the young trees from where the English dismounted, not the distance to the village. See: Thomas. “Rev. Stephen Williams’s Notebook.” P. 13.

¹⁵⁶ CSL. Colonial Wars, Series I. Doc. 74.

the English to completely surround the village given its size and the potential they would be discovered. Another issue was certainly the danger of friendly fire, which did occur once during the assault. As no battle-related objects were recovered from the highly disturbed Riverside area, and none of the sources describe the English battle formation or plan of attack, no firm conclusions can be drawn regarding English attack formations and the evolution of the battle

One scenario proposed by John Wilson is that Captain Turner and Lieutenant Holyoke commanded their respective companies of garrison soldiers and militia on the east and west wing of the formation. If the company was organized in a single file the formation would have extended for approximately 1200 feet, and if the company was organized in two files the line would have extended for 600 feet.¹⁵⁷ The formation would likely have attacked the village with the center attacking the ‘top’ or northern portion of the village while the wings moved simultaneously to envelope the upstream and downstream sides of the village driving the villagers to the river. By all accounts the English forces advanced to within point-blank range of the village without being detected, to the extent that some soldier “put their guns even into their Wigwams” as the signal was given to fire.¹⁵⁸ If that is the case, English forces may have advanced right up to the village perimeter as a loose line of single file skirmishers, allowing them to approach individual wigwams, and fire directly into them.

On a given signal English forces would have opened fire upon the unsuspecting inhabitants of the village indiscriminately killing any Native people they encountered. A number of sources report that when the first shots were fired the villagers thought it was the Mohawk attacking them. After the initial attack English soldiers took up positions along the shoreline and opened fired on anyone trying to escape into the river including swimmers, people in canoes, and those hiding under the bank of the river:

...others of them creeping for shelter under the banks of the great river, were espied by our men and killed with their swords; Captain Holyoke killing five, young and old, with his own hands, from under a bank.”¹⁵⁹

Roger L’Estrange provides the most graphic and disturbing account of the massacre:

Our soldiers got thither after a hard march just after break of day, and took most of the Indians fast asleep, and put their gums even into their wigwams and poured in their shot among them, whereupon the Indians that durst and were able to get

¹⁵⁷ John Wilson, Personal Communication. 2017.

¹⁵⁸ L’Estrange. *A True Account*. P. 3.

¹⁵⁹ Hubbard. *Narrative*, P. 206.

out of their wigwams and did fight a little (in which fight one Englishman only was slaine) others of the Indians did enter the river to swim over from the English, but many of them were shot dead in the waters, others wounded were therein drowned, many got into canoes to paddle away, but the paddlers being shot, the canoes over-set with all therein, and the stream of the river being very violent and swift in the place near the great falls, most that fell overboard were born by the strong current of the river, and carried upon the falls of water from those exceeding high and steep rocks, and from thence tumbling down were broken in pieces and cast ashore, above two hundred.¹⁶⁰

As old men, women, and children ran from English soldiers towards the banks of the Connecticut River, Native men in the village probably engaged the English taking heavy casualties to slow the assault so that the women and children could escape. The only Native descriptions of the battle is from the testimony of several Native men who were captured a few months after the battle and were courts martialed and executed. It is not clear if the testimony of these men described events at the Peskeompskut village fight or the retreat battle (or both). A Narragansett man named John Wecopeak testified:

that he was at the fight with Captain Turner, and run away by reason the shot came as thick as rain, but said that he was at a great distance but said alsoe, that he was at a great Distance. Butt John Godfree and William Heifferman saith, that he the said Wecopeak told them, that he saw Capt. Turner, and that he was shott in the Thigh, and that he knew it was him, for the said Turner said that was his name.¹⁶¹

A Pawtuxet Indian named Wenanaquabin “also confessed that he was at the fight with Captain Turner, and there lost his gun, and swam over a river to save his life.”¹⁶² Wenanaquaban’s statement that he “swam over a river” is probably not a reference to the Connecticut River given the current and the number of people who were swept over the falls. It is more likely he was referring to the Green or Deerfield River. The sense one gets from Wecopeak’s testimony is that he was at the Peskeompskut fight and then presumably made his way to the confluence of the Green River and Cherry Run Brook to assist in the ambush that killed Turner. That would be a distance of several miles, but given that the English delayed along the river after the battle counting the dead and taking plunder it is entirely possible. Alternatively, he may be referring to a location somewhere along the retreat where heavy fighting took place and then made his way

¹⁶⁰ L’Estrange. *A True Account of the Most Considerable Occurrences*. Pp. 3-4

¹⁶¹ Easton. *A Narrative of the causes*. P. 180.

¹⁶² Easton. *A Narrative of the causes*. P. 179.

to the Green River. Wecopeak's testimony suggests Coalition leaders re-deployed their men to various locations during the battle as they could anticipate the route of the English retreat.

Two English soldiers were wounded during the attack and one was killed by friendly fire: "Of our men, one was killed in the action, by his friends, who takeing him for an indian as he came out of a wigwam shot him dead."¹⁶³ Following the battle the English destroyed large amounts of food supplies, ammunition, and blacksmith forges:

We there destroyed all their Ammunition and Provision, which we think they can hardly be so soon and easily recruited with, as possibly they may be with Men. We likewise here demolished Two Forges they had to mend their Armes; took away all their Materials and Tools, and drove many of them into the River, where they were drowned, and threw two great Piggs of Lead of theirs (intended for making of Bullets) into the said River.¹⁶⁴

Estimates of Native casualties vary considerably between 200 and 300. A few days after the battle Reverend John Russell wrote a letter to the Connecticut War Council enumerating Native casualties from the battle he obtained from men in Turner's company who took time after the battle to carefully count the dead around the village and those that were swept over the falls:

As to the number of the enemy slain; many of the soldiers say they guessed them to be about fourscore [80] y^t lay upon the ground. But Serjeant Richard Smith saith he had time and took it to run them over by going from wigwam to wigwam to do it & and also what was between y^t bank and the water and found them about an hundred he hath sometimes said six score [120] but stands to y^e y^t they were about 100. Seventeen being in a wigwam or a two little higher up than the rest.

Likewise William Draw [from Hadley] a soldier y^t terms of good behavior & credit being two or three soldiers to stand in a secure place below the bank, more quiet than he thought was [illegible] for the time; He asked them why they had stood there saith they answered that they had seen many goe down the falls and they would endeavor to tell how many. Here upon he observed with them: until he told fifty; and they said to him that those make up six score and ten [70]. Some of them were also slaine in their pursuit of ours where so many of [illegible] fall. Hence we cannot judge but there were above 200 of them slaine.¹⁶⁵

Based on these figures it appears that there were about 170 Native casualties in the battle. Mather states that:

...yet it be as some Indians have since related, the victory was not so great as at first apprehended: For sundry of them who were at several times taken after this

¹⁶³ Thomas. "Rev. Stephen Williams's Notebook." P. 18.

¹⁶⁴ L'Estrange. *A True Account of the Most Considerable Occurrences*. P. 4.

¹⁶⁵ CSL. Colonial Wars, Series I. Doc. 74.

slaughter, affirm that many of the Indians that were driven down the falls got safe on shore again, and that they lost not above three score men in the fight...I am informed that diverse Indians who were in that battle, but since come in to the English at Norwich, say that there were three hundred killed at that time, which is also confirmed by an Indian called Ponham, who saith that of the three hundred there were an hundred and seventy fighting men.¹⁶⁶

The wide disparity in casualty figures is impossible to reconcile. The reference that “Some of them also were slaine in their pursuit...We cannot but judge but there were above 200 of them slaine” is significant because it is the only reference to the possible number of Native casualties (30+?) in the retreat battle assuming 170 were killed at Peskeompskut. Some Native sources provide specific figures on the number and tribal affiliation of Native men killed at Peskeompskut. Menowniett, a Narragansett and Mohegan man who fought in the battle, reported that “in ye Fall Fight were slayne 40 Norwottog [Norwottuck], Quaboag 10 Narragansett.”¹⁶⁷ It is likely these figures reflect casualties from both the attack on the village as well as the English retreat. The figure of 50 Coalition casualties is consistent with the Native informants Mather refers to who stated there were 60 Native men who died in the battle. The high number of Norwottuck casualties is interesting and it raises the possibility that the Native population in the Peskeompskut village may have been primarily Norwottuck. One source state that 70 Wampanoag men were killed in the battle.¹⁶⁸ Hubbard claims that prisoners taken after the battle “owned that they lost 300 in that camisado [surprise attack], some whereof were principal sachems, and some of their best fighting men that were left, which made the victory more considerable than else it would have been.”¹⁶⁹

If the casualty figure of 50 men given by Menowniett refers only to the attack on Peskeompskut it would seem to be a very high number given that Thomas Reed estimated a total of 60-70 men between the two villages on both sides of the Great Falls. However, as mentioned previously there are many examples during the war where Native men were willing to sustain extraordinarily high casualties to protect women and children to give them time to escape, and to defend wounded comrades and recover their dead. It may also be that some of the casualties occurred as men from the village on the opposite bank canoed across the river to engage the

¹⁶⁶ Mather. *A Brief History*. P. 50.

¹⁶⁷ Trumbull. *Records of the Colony of Connecticut*. P. II:471.

¹⁶⁸ L'Estrange. *A Brief and True Narration*, P. 4.

¹⁶⁹ Hubbard. *A Narrative*, P. 206.

English. Most likely, the estimate includes Coalition casualties from Peskeompskut as well as the retreat.

Battle of the English Retreat

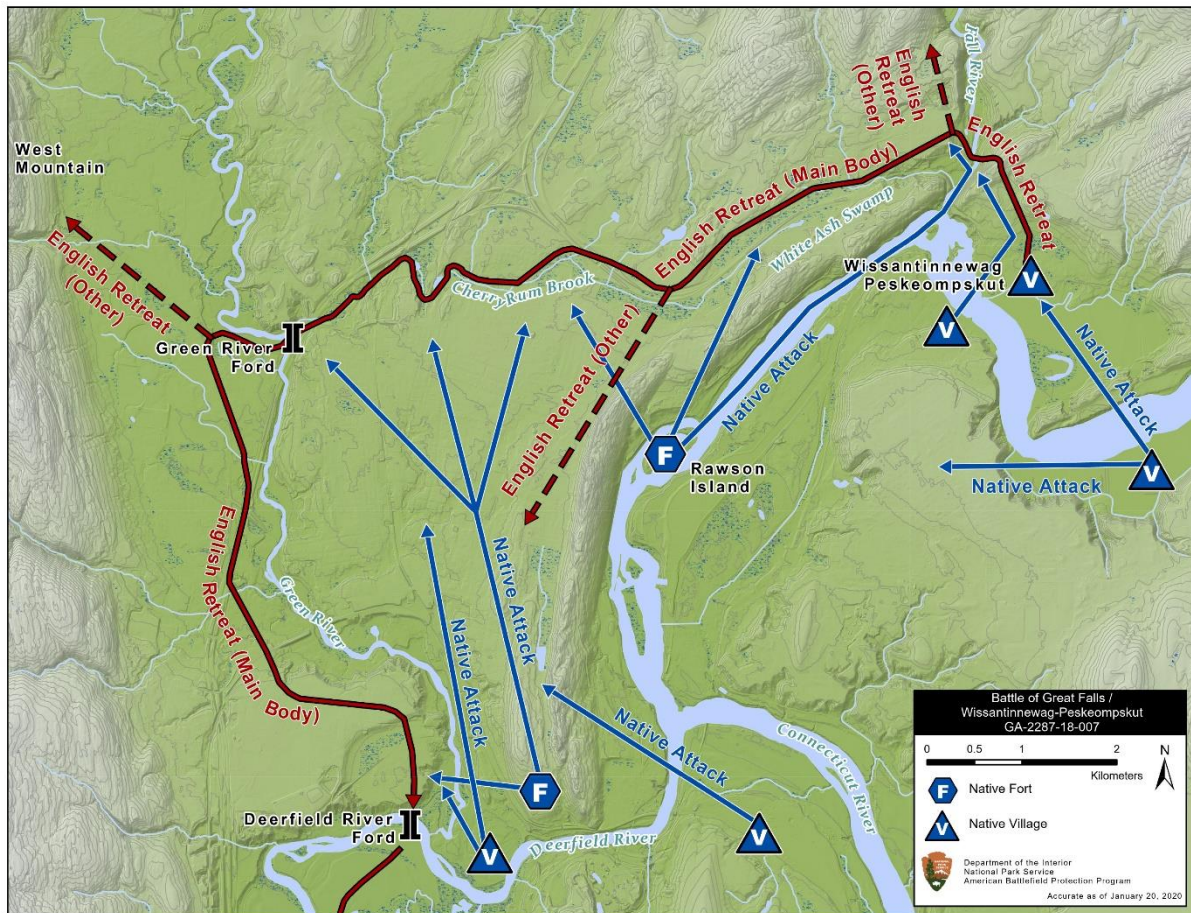


Figure 85. Battle of the English Retreat.

Confident in their victory, and apparently unaware of the other Native villages mobilizing for a counterattack, the English delayed their retreat to count the dead, burn wigwams, destroy supplies, and loot the village for trade goods. In the meantime, Native men from the other villages began to organize to counterattack the English. During the attack on the village the English rescued an English boy:

...who was found in the wigwams, spake as if Philip were coming with a thousand Indians; which false report being famed among the soldiers, a pannick terror fell upon many of them, and they hastened homeward in a confused rout.¹⁷⁰

The report quickly spread among the English soldiers and almost at the same moment the information was received the English were attacked by Native men coming across the river in canoes. The congruence of the rumor about Philip and the attack coming from across the river spread panic and fear through the English ranks, and the retreat quickly turned into a rout. Wells relates the events that took place soon after the attack on Peskeompskut as Native soldiers from the remaining five villages began to mobilize:

...& capt: Wells Says y^t the difficulties y^y were exposed to in y^r retreat was probably owing to y^e long stay y^y made in y^e place of y^e victory S^d y^t y^e [that this] gave time to y^e indians y^t were at Deerf^d cheapside & y^e Island & up above & on y^e east side of y^e River to get together _ & wn y^y did make head agst or men y^e army drew off in great disorder & confusion yea abt 20 men, y^t tarrid behind to fire at some indians y^t were comeing over ye River and were left by y^e company, and were forced to dispute y^e point wth y^e Enemy a considerable time before y^y cd recover y^t horses in y^r retreat Some Indians followd y^e Some were before y^e _ & Some attackd ye on one side &c.¹⁷¹

The number of Native men involved in the counterattacks is difficult to determine. L'Estrange stated "they were six times superior to us in number" indicating a figure of 900 men, presumably including those that were killed during the attack on Peskeompskut.¹⁷² The figure seems a bit high as it suggests there were 150 to 175 men in each of the remaining villages. If the figure is accurate it likely includes men from the upriver villages at Squakheag. Mather contradicts L'Estrange and states "to the great dishonor of the English, a few Indians pursued our soldiers four or five miles, who [i.e. English] were in number near twice as many as the enemy" indicating only 75 Native men were involved in the counterattacks – a number that seems much too low.¹⁷³ There may have been hundreds of Native men involved in the attacks but the English only saw a "few" at a time as contingents of Native men from different locations may have entered the battle at various points and were sometimes outdistanced by the English when they reached terrain more suitable for horses.

¹⁷⁰ Thomas. "Rev. Stephen Williams's Notebook." P. 18.

¹⁷¹ Thomas. "Rev. Stephen Williams's Notebook." Pp. 13-15.

¹⁷² L'Estrange. *A New and Further Narrative*, P. 12.

¹⁷³ Mather. *A Brief History*. P. 49.

The initial counter attack came from Native men coming across the river in canoes from the village across the Connecticut River from Peskeompskut, and perhaps from the village “up above” near Millers River. Jonathan Wells was with the group of 20 men that “tarried behind” to fire at the Indians coming across the river. It is not clear if the 20 men were purposely left behind as a rear guard or were simply left behind by the main group in their rush to retreat. At this point Turner’s command was split between the main body of approximately 110 soldiers who had begun a panicked and disorganized retreat to where their horses were tied a half mile or so away on the west side of the Fall River, and the group of 20 men who tarried by the River. It is not clear from the narratives when the main body of men under Turner was initially attacked, but it appears to have been after they crossed the Fall River and reached the assembly area where their horses were tied as suggested by Mather:

A panicked terror fell upon many of them, and they hastened homeward in a confused rout...In the meanwhile, a party of Indians from an island (whose coming on shore might easily have been prevented, and the soldiers before they set out from Hadley were earnestly admonished to take care of that matter) assaulted our men.¹⁷⁴

¹⁷⁴ Mather. *A Brief History*. P. 49.

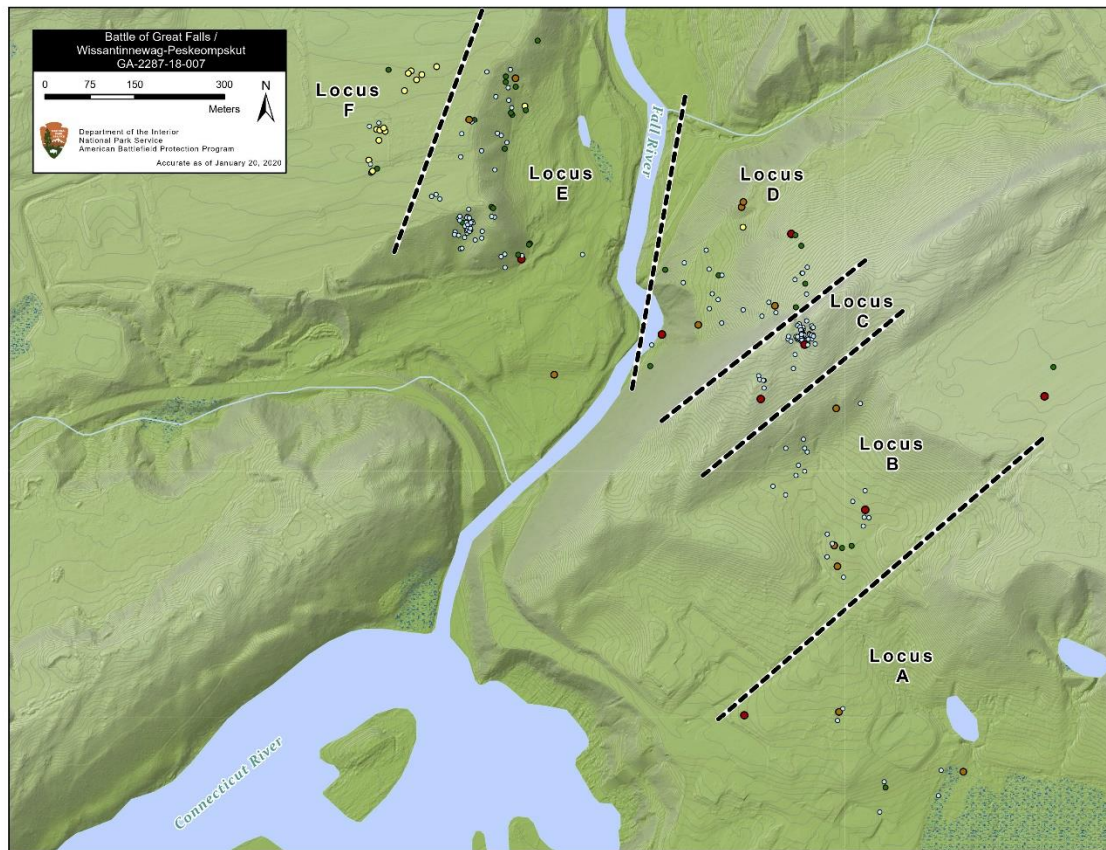


Figure 86. Musket Ball Distributions Battlefield Loci A-F.

In the meantime, Wells' group was beaten back from the river's edge by the Native counterattack coming across the river and "were forced to dispute y^e point wth y^e Enemy a considerable time before y^y could recover y^t horses."¹⁷⁵ A 'considerable time' suggests that Wells' group was under attack for the entire distance of 0.5-miles from Riverside to the English Assembly/Horse Hitching Area, as indicated by the continuous distribution of musket balls from Peskeompskut to the Fall River. Figure 84 depicts the distribution of musket balls recovered from Battlefield Loci A-F. It is believed the distributions of musket balls in Loci A-D reflect the engagements between Wells' group of twenty men and Coalition forces.

By the time the main body under Turner group arrived at the English Assembly/Horse Tie Down Area there was complete chaos among the English as a result of Coalition forces attacking from a number of different directions. Native forces were converging on the assembly area from Peskeompskut to the east and from Rawson Island to the south and up the Fall River as

¹⁷⁵ Thomas. "Rev. Stephen Williams's Notebook." P. 15.

Wells states “some of the enemy fell upon the guards that kept the horses, others pursued them in the rear”.¹⁷⁶ The main body under Turner was most likely under attack as well at this time. Based on the distribution of musket balls closely associated with several ‘swales’ leading from Lower to Upper Factory Hollow, once mounted the retreating English used the swales to ascend the steep incline leading to Upper Factory Hollow to escape from Coalition forces.

As Well’s group tried to catch up to the main body after they retrieved their horses they were under constant attack. Wells relates he:

...was wounded ab^t a quarter of a mile where they took y^r horses [somewhere in Upper Factory Hollow] being in y^e rear shot by 3 indians. One bullet struck his thigh bone & one bullet brushd his hair, and y^e other struck his horse behind, & broke part of y^e bone which before had been broken by a cart wheel...& kept y^e indians back by presenting his gun once or twice & when y^y stopped to charge he got [away] from y^e & came up to y^e capt [Turner]: & persuaded him to turn & take care of y^e men in y^e rear but he s^d he had better lose some than lose all & then he fell into the rear again & took with a Small company y^t Separatd from others y^t ran upon a parsell of indians near a Swamp & were most of y^e killd & then y^y was Separat^d again & had ab^t ten men left with him & his horse failing & himself Spent wth bleeding.¹⁷⁷

This passage reflects hard fighting and utter chaos that resulted from the multipronged Indian attack as well as a breakdown in leadership. It also indicates that Turner and the main body of soldiers were not too far ahead as Wells caught up with him even in the midst of the fighting.

The English forces were now under attack from all directions and their command and cohesion began to break down turning the retreat into an unorganized rout. These circumstances were in part the result of the lack of training and inexperience of most of the men who had never been in battle as well as the command failure of Captain Turner. The superior tactics, coordination, and planning by Coalition forces was also an important factor as they managed to get ahead of the English to set several ambushes. The various narratives and descriptions of the retreat battle underscore the utter chaos and confusion the English soldiers experienced during the retreat. These sources are confusing, incomplete, inconsistent and sometimes contradictory, but nonetheless provide the only information available to reconstruct the battle and help interpret the distribution of battle related objects along the retreat. Some of the inconsistencies and contradictions are due to the fact that many different individuals who were in the battle

¹⁷⁶ Thomas. “Rev. Stephen Williams’s Notebook.” P. 24.

¹⁷⁷ Thomas. “Rev. Stephen Williams’s Notebook.” P. 24.

contributed to these accounts, and there were several different authors who recorded their experiences. These unnamed soldiers had different perspectives and experiences as they may have been on different parts of the battlefield:

It appears that the English had already splintered into several groups before they reached the White Ash Swamp with perhaps one large group and some smaller ones passed by the White Ash Swamp and were ambushed resulting in most of the English casualties. Wells indicates that he was with one of the groups that was ambushed at the swamp, but says it was only a small company. The ambush further splintered the English:

On their route the Indians had laid ambush in a swamp, but as the English were not all together, only part of them went that way. The ambushing Indians slew many of that group, in fact, about thirty-eight. Four of five men (some say more) the Indians caught alive, and tortured them...¹⁷⁸

...& [Wells] came up to y^e capt: & psuadd him to turn & take care of y^e men in y^e rear but he s^d he had better lose some than lose all & then he fell into the rear again & took wth a *Small company y^t Separatd from others y^t ran upon a parsell of indians near a Swamp & were most of y^e killd* & then y^y was Separatd again & had ab^t ten men left with him.¹⁷⁹

...y^e indians & y^y [Wells' group] fought for y^r horses & and recovered y^y mounted & went after y^r company, but y^e indians followed & some came across way & some between y^e & so y^y fought upon a retreat being divided into several companies or parties being separated by y^e Indians.¹⁸⁰

Some sources hint that Turner and Holyoke may have become separated fairly early in the battle, perhaps prior to the ambush at the White Ash Swamp. It also appears that at least two main groups of English followed different routes during the retreat. One group followed guide Benjamin Wait and the other Experience Hinsdale, who did not survive. Wells states one guide was “acquainted with the woods” perhaps indicating he led a group of men along a different route than the White Ash Swamp. It also appears that many of the English horses were killed or wounded leaving some English on foot and others forced to ride double which would have affected the speed of the retreat:

Capt. Turner, to whom he represented y^e difficulties of y^e men in ye rear & urgd y^t he either turn back to y^r relief, or tarry a little till they all come up & so go off

¹⁷⁸ Douglas Edward Leach, Ed. *A Rhode Islander Reports on King Philip's War: The Second William Harris Letter of August, 1676*. Providence, RI: Rhode Island Historical Society, 1963. P. 81.

¹⁷⁹ Thomas. *Rev. Stephen Williams's Notebook*. P.24.

¹⁸⁰ Thomas. *Rev. Stephen Williams's Notebook*. P.9.

in a body; but y^e Capt. replid he had ‘better save some, than lose all,’ and quickly y^e army were divided into several parties, one pilot crying out ‘if you love your lives follow me’; another y^t was acquainted wth ye woods cry^d ‘if you love your lives follow me.’¹⁸¹

a fear possessed some part of the English, whereby they fell into a disorder, and thereby Captain *Turner* and several of his Souldiers were slain and others to the number of two and thirty. But Captain *Holyoke* exhorted them not to be terrifiyed, saying God hath wrought hitherto for us wonderfully, let us trust in him still: and reducing his men into close order made a safe and a valiant retreat, and preserved the Souldiers under him; that there were but few of them slain.¹⁸²

Based on the distribution of musket balls along the route of retreat that was surveyed, one group (and perhaps both) retreated along the north side of White Ash Swamp and the Cherry Rum Brook to the Green River Ford. At least Turner’s group followed this route as he was killed at the Green River Ford. The question is, did Holyoke take a different route, perhaps following the other guide, or did he take the White Ash Swamp-Cherry Rum Brook route and was ahead of Turner? Without conducting additional battlefield surveys along other prospective routes of retreat this question will remain unanswered.

The eastern end of the White Ash Swamp is located approximately one-half mile west of Factory Hollow and extends for approximately .75-miles west to Cherry Rum Brook. The battle narratives point to this location where Coalition forces converged at the White Ash Swamp from several directions resulting in the further splintering of the English force. At least one party of English were ambushed when they reached the White Ash Swamp by Coalition forces from Cheapside, Deerfield, Rawson Island and perhaps elsewhere, catching the English completely by surprise. Several sources indicate that the ambush at the White Ash Swamp is where the English suffered most of their casualties and further splintered the group. William Harris reported that several men were captured during the swamp ambush and were tortured:

Four or five men (some say more) the Indians caught alive, and tortured them as follows: They tied their hands up spreading upon the one and the other upon another, and likewise set two stakes at a distance, to which they tied their feet. Then they made a fire under each of them, gashing their thighs and legs with knives, and casting into the gashes hot embers to torment them. This also

¹⁸¹ Thomas. *Rev. Stephen Williams’s Notebook*. P.24.

¹⁸² L’Estrange. *A True Account*. P. 4.

somewhat stanches the blood so that they do not bleed to death so soon, but remains to torment longer.¹⁸³

Three days after the battle another group of English were caught and tortured based on testimony given to Jonathan Wells by Natives who fought in the battle:

Y^t Y^e Monday after the fight 8 men y^t were lost came to them & offerd to Submit themselves to y^e, if they would not putt them to death; but whether they promised them quarter yea or not they took them, and burnt y^e. The method of burning them was covering them with thatch & put fire to it & set them running & when one coat of thatch was burnt up they would putt on another &c. The barbarous creatures that have given this account of their inhumanity & barbarity have in a Scoffing manr: added y^t the English men would cry out as they were Burning &c Oh dear Oh dear. y^e Indians acct it very unmanly to moan & make ado under y^e torments & cruelties from y^r enemies who put y^e to death.¹⁸⁴

Multiple torture victims are rarely recorded in any of the primary sources associated with King Philips War. A likely explanation is the Native men were so enraged by the Peskeompskut massacre that they exacted immediate revenge on any English soldier they captured.

Native forces continued to attack the groups of English as they emerged from the vicinity of White Ash Swamp along their retreat to the Green River Ford. Some of the English may have been following a path as Wells mentioned “abt 2 miles from y^e place where y^y did y^e Exploit & c & wn y^y had left y^e track of y^e company & were unacquainted wth y^e woods.¹⁸⁵ Wells also mentioned that while he was lost for two days after the battle and when he was wandering around West Mountain and the Green River Plain “he travelled upon y^t plain till he came to a foot path y^t led him to y^e road he went out in.”¹⁸⁶

Perhaps because of the ‘road’ and the fact that none of the English were familiar with the area other than the two guides, they retreated along the same route they travelled to Peskeompskut making it easy for the Native forces to anticipate their route and set up ambushes along the way. There is not much information in the narratives regarding the remainder of the retreat from the White Ash Swamp to the Green River other than a vague reference by Wells that “In their retreat they were surrounded by the Enemy, Some were before them, some were behind them, and some on Each side so y^t it is wonderful that so many of them recovr^d their Home

¹⁸³ Leach, Ed. *Second William Harris Letter*, P. 80-81.

¹⁸⁴ Thomas. “Rev. Stephen Williams’s Notebook.” P. 15.

¹⁸⁵ Thomas. “Rev. Stephen Williams’s Notebook.” P. 24.

¹⁸⁶ Thomas. “Rev. Stephen Williams’s Notebook.” P. 26.

&c.”¹⁸⁷ The fighting was chaotic and the English had to fight hard to escape from the Native attackers who beset them from all sides:

The said Captain Holyoke’s horse was shot down under him, and himself ready to be assaulted by many of the Indians, just coming upon him, but discharging his pistols upon one or two of them, whom he presently dispatched, and a friend coming to his rescue, he was saved.¹⁸⁸

One bullet struck his [Jonathan Wells] thigh bone & one bullet brushd his hair, and ye other struck his horse behind, & broke part of ye bone which before had been broken by a cart wheel & never set but lapd & shatter part of ye bone & ye other part stuck where it lapd. J fond he had likd to have fallen but catchd hold of ye horse’s main & kept ye indians back by presenting his gun once or twice & when they stopd to charge he got [away] from ye.¹⁸⁹

There is good evidence from the battlefield survey that confirm Wells’ statement that the English were under constant attack during the retreat. Mather states “a few Indians pursued our soldiers four or five miles” suggesting attacks from the rear.¹⁹⁰ Large and small distribution of musket balls was recovered almost continuously along the route of retreat – any area that was surveyed and undisturbed yielded musket balls (Figure 85). The exception is the area between the Green and River Fords which was not adequately surveyed.

Evidence also indicates that Native Coalition forces anticipated the English route of retreat at various choke points along the route of retreat such as the along the White Ash Swamp and at the Green and Deerfield River fords. Turner was killed just west of the Green River Ford based on the testimony from Native combatants and English forces who later found his body near the ford days after the battle. Narragansett Indian John Wecopeak told his interrogators at his Court Marshall “that he saw Capt. Turner, and that he was shot in the thigh, and that he knew it was him, for the said Turner said that was his name.”¹⁹¹ Mather reported that:

...the chief Captain, whose name was Turner, lost his life, he was pursued through a river, received his fatal stroke as he passed through that which is called Green River, & as he came out of the water he fell into the hands of the uncircumscribed, who stripped him, (as some say who say they saw it affirm it) and rode away on his horse...within a few days, Capt. Turner’s dead corpse was found a small distance from the river, it appeared that he had been shot though his

¹⁸⁷ Thomas. “Rev. Stephen Williams’s Notebook.” P. 20.

¹⁸⁸ Hubbard. *Narrative of the Indian Wars*. P. 207.

¹⁸⁹ Thomas. “Rev. Stephen Williams’s Notebook.” P. 24.

¹⁹⁰ Mather. *A Brief History*. P. 50.

¹⁹¹ Easton. *A Narrative of the causes*. Pp. 179-180.

thigh and back, of which its judged he dyed speedily, without any great torture from the enemy.¹⁹²

It is interesting that John Wecopeak observed that Turner had been shot in the thigh but did not mention that he had been shot in the back. Whenever Wecopeak saw Turner he was still alive but was probably killed shortly after. Whether the shot that killed him was in the heat of battle or a *coup de gras* cannot be determined, but as Mather points out if he was still alive he would likely have been tortured. Stripping the clothes off dead Englishmen (and women) was a common practice in King Philip' War intended to humiliate the person and 'stripping' them of the cultural values and beliefs that made them English. An account describing a Sachem's actions to humiliate an enemy best conveys this concept:

After he had wronged a sachem and robbed him tooke away his breeches and left him naked, which is accounted amongst them the greatest disgrace that may be and deserves death amongst them and the sachem told them he had rather die than have such a disgrace putt upon himself.¹⁹³

The distance from the Green River to the Deerfield River Ford is approximately 2.5 miles. Although there is no mention in the battle narratives of any fighting along that portion of the retreat a small number of musket balls along the Green River terraces south of the Green River Ford (Locus K) and a concentration of musket balls at the Deerfield River Ford (Locus L) indicates the English were still under attack after they forded the Green River. Mather says, "a few Indians pursued our Souldiers four or five miles" which would fall a mile or so short of the Deerfield River as measured from Factory Hollow. Mather's estimate a bit short as indicated by the musket ball distribution of musket balls in the vicinity of the Deerfield River ford. The English may have been pursued by Native Coalition forces beyond the Deerfield River.

English soldiers (including Jonathan Wells) continued to make their way back to Hatfield over the next few days and one group was reported to be wandering on West Mountain west of Green River a few days after the battle. One of the more interesting accounts was provided by the Reverend Atherton who served as Chaplain to Turner's company on the expedition. He, like many others, became separated from the main body during the retreat and spent several days lost and wandering around the battlefield. He related:

¹⁹² Mather. *A Brief History*. P. 50.

¹⁹³ John Winthrop. *Winthrop Papers*, Volume 3 (Boston, MA: Massachusetts Historical Society, 1943). P. 44

In the hurry and confusion of the retreat, I was separated from the army; the night following, I Wandered up and down among the dwelling places of the enemy, but none of them discovered me. The next day, I tendered myself to them a prisoner, for no way of escape appeared, and I had been a long time without food; but notwithstanding I offered myself to them, yet, they accepted not the offer; when I spake they answered not; and when I moved toward them they fled.¹⁹⁴

Several English sources (corroborated by Native sources) agree that 39 English soldiers died in the battle. Jonathan Wells states that “29 with their wounds came home swiftly on ye same day” and “two died of their wounds.”¹⁹⁵ A total of 41 dead and 29 wounded is a casualty rate of just over 45 percent, which is extremely high by any standard. It is likely the casualty rate would have been far higher if not for the actions of Lieutenant Holyoke who “exhorted them not to be terrified...and reduced his men into close order made a safe and valiant retreat, and preserved the soldiers under him; that there were but few slain.”¹⁹⁶

The War Ends: May 1676 – 1677

The English considered the Battle of Great Falls/Wissantinnewag-Peskeompskut a victory but remained concerned that there were still hundreds of enemy combatants in the upper valley. Within a day after the battle the upriver settlements sent a request to Connecticut for assistance. In response, Connecticut ordered eighty men under Captain Benjamin Newberry to proceed to Northampton for the defense of the upriver settlements. A few days after the battle English scouts reported that “the enemy abide still in the place where they were on both sides of ye river and in the island; and fires in the same place [Peskeompskut] our men had burnt the wigwams.”¹⁹⁷ The settlers in the upper valley remained fearful of renewed attacks and that the enemy still had ample supplies of fish and corn and were well protected by their forts on the island and Cheapside “y^t we count them likely to abide a while.”¹⁹⁸ The settlers were so concerned about the prospect of renewed attacks from the Indians along the river they proposed that a large boat be fastened with planks as a protection against musket fire, and be sent up the river to keep the enemy from passing back and forth.¹⁹⁹

¹⁹⁴ Wells & Wells. *History of Hatfield*. Pp. 86-87.

¹⁹⁵ Thomas. “Rev. Stephen Williams’s Notebook.” P. 9.

¹⁹⁶ L’Estrange. *A Brief and True Narration*. P. 4.

¹⁹⁷ CSL, Colonial Wars, Series I. Doc. 74.

¹⁹⁸ CSL, Colonial Wars, Series I. Doc. 74.

¹⁹⁹ CSL, Colonial Wars, Series I. Doc. 74.

In the meantime, Connecticut and Massachusetts were planning major offensives in the Central and Western theaters and in Narragansett Country. Connecticut had already ended all efforts at peace negotiations with the tribes in the valley and Massachusetts soon followed suit with their negotiations with the Nipmuc and Narragansett. On May 23 Massachusetts informed Connecticut that they had ended all efforts at a treaty with the Indians as they had received no response to their overtures “and therefore thought it meete to prosecute the war in all places.” Massachusetts requested that Connecticut send a force of soldiers and Mohegan and Pequot Indians to Hadley to join with 500 Massachusetts Bay soldiers “to go out against y^e enemy to destroy them at Squakeag, Deerfield or anywhere thereabouts.”²⁰⁰ In response, on May 24 Connecticut ordered Major Talcott “to goe forth against the Indians at Pocumtuc and those parts.”²⁰¹

At this point the war, the weary Native Coalition began to dissolve. The rapid dissolution of their alliance following the Battle of Great Falls was due to several factors. There were significant disagreements between the tribes regarding the future course of the war, and particularly about peace negotiations with the English. Metacom and a few other sachems were vehemently against any peace overtures and ransoming captives. Shortly before Mary Rowlandson was ransomed she related “On Tuesday morning they called their general court (as they call it) to consult and determine, whether I should go home or no. And they all as one man did seemingly consent to it, that I should go home except Philip, who would not come among them.”²⁰² The rift between the tribes may also have been the result of different strategic goals and interests. For a time, most of the tribes saw the middle Connecticut Valley as their best hope to reestablish their communities in a safe, protected, and defensible landscape with plenty of fish and arable land to grow corn. Shortly after the battle Connecticut and Massachusetts Bay renewed their offensives in the upper valley making it untenable for the tribes to continue there. For the Narragansett, Wampanoag, Nipmuc and Quabaug they made the decision to return to their homelands and try to reestablish their communities. For the Native communities of the middle valley their only option was to continue the war against the English in the valley and hope they could establish a defensive perimeter. Those hopes ended with renewed English offensives designed to sweep the remaining tribes from the valley.

²⁰⁰ CSL, Colonial Wars, Series I. Doc. 75.

²⁰¹ CSL, Colonial Wars, Series I. Doc. 77.

²⁰² Rowlandson 20th remove Rowlandson. *Narrative of the Captivity*. P. 33.

Widespread disease and sickness undoubtedly played a role in the decision to seek peace with the English as the high death rate must have significantly undermined the morale of the tribes. Many of their leaders and fighting men had been killed during the war and increasingly the remaining communities were comprised by growing numbers of women and children making it harder to continue the war effort. The recent battlefield successes of the English armies and their unrelenting pursuit of Native communities kept them constantly on the move and unable to gather food and particularly to plant corn. Unless they surrendered Native people had few options; death in battle, starvation, or being sold into slavery. The Mohawk likely played a significant role in the decision to abandon the middle Connecticut Valley. Mohawk attacks on Native communities in the valley occurred regularly toward the end of the war, and with fewer men to defend them these communities had to seek refuge elsewhere, such as Mahican territory.

Shortly after the Battle of Great Falls, the Narragansett and Wampanoag began to abandon the valley and seek refuge at Watchusett and eventually began to return home. On May 30 Major Talcott reported intelligence he had received from Wabbaquasset and Pequot allies that:

...its the generall reportef all that the chief place of their women & children is at Watchoosuck, not far off from Quabaug; that they have planted at Quabaug & at Nipsachook, nigh Coweesit; that Philip's men & the Narragansetts are generally come into those abovementioned places, only Pessicus, one of the chief of the Narragansett sachems, did abide up at Pocomtuck with some few of his men.²⁰³

In an effort to push the English settlements southward, a force of 500 Native men (presumably from the middle valley) attacked Hatfield on May 30. The Natives suffered heavy losses in the attack, and five English settlers were killed and three wounded with several houses burned.²⁰⁴ Connecticut's forces had not yet arrived and Talcott wrote on May 31 that they would be unable to assist the upriver settlements until they could gather supplies and men.²⁰⁵ Connecticut troops eventually arrived in Northampton on June 8 with an army of 450 men, including 100 Mohegan and Pequot Indians.

On June 12 a reported force of 250 Indians attacked Hadley, unaware that hundreds of English and Native allies were in the town. As described by Increase Mather, the attack was

²⁰³ Trumbull, *Colony of Connecticut*. P. 2:447.

²⁰⁴ Trumbull, *Colony of Connecticut*. P. 2:450.

²⁰⁵ Trumbull, *Colony of Connecticut*. P. 2:450.

sophisticated and well planned and may well have succeeded if the Connecticut forces had not been there:

The common enemy who was quickly driven off at the *South end* of the Town whilst our men were pursuing of them there, on a sudden a great Swarm of Indians issued out of the bushes, and made their main assault at the *North end* of the Town, they fired a Barn which was without the Fortifications, and went into an house, where the inhabitants discharged a great Gun upon them, whereupon about fifty Indians were seen running out of the house in great haste, being terribly frightened with the Report and slaughter made amongst them by the great Gun.²⁰⁶

The attackers retreated and were pursued two miles when inexplicitly the English gave up the chase “because they had no order to do so. Some in those parts think, that as great an opportunity and advantage as hath been since the war began, was lost at this time.”²⁰⁷ It was reported that while the enemy was assaulting Hadley the “Mohawks came upon their Head-Quarters, and smote their women and Children with a great Slaughter, and then returned with much plunder.”²⁰⁸ The defeat at Hadley combined with the loss of their women and children at the hands of the Mohawk so soon after the Battle of Great Falls must have completely disheartened the communities that still remained in the valley. Shortly after, the River Indian communities that still resided in the Great Falls area began to abandon the valley.

On June 16, 500 Massachusetts Bay soldiers under Captain HENCHMAN arrived at Hadley to conduct joint operations with the Connecticut forces and seek out and destroy the enemy in the middle Connecticut Valley. The combined Connecticut and Massachusetts Bay expedition was the largest English force sent to the middle Connecticut River Valley in the entire war. The Connecticut forces swept up the west side of the Connecticut River and Massachusetts Bay searched the east side. Connecticut went as far north as SQUAKEAG and Massachusetts as far north as the Great Falls but did not find any evidence of the enemy. TALCOTT returned to Norwich on June 22 and reported to the Council that his forces had scouted both sides of the river above Pocumtuck with no sign of enemy forces. TALCOTT reported that his men had been to the:

Falls above Pocumtuck, and scouts being sent up the River on both sides and on the east side as high as SUCQUACKHEAG; and not discovering the enemy to be in those parts, but rather they were retired back towards

²⁰⁶ Mather. *A Narrative*. P. 53.

²⁰⁷ Mather. *A Narrative*. P. 53.

²⁰⁸ Mather. *A Narrative*. P. 54.

Watchosuck or into the Nipmuc country; and that they were under no engagement of farther conjunction with the Massachusetts forces...²⁰⁹

On June 28 it was reported:

About thirty of ours adventured to go up the River towards the Falls at Deerfield, to see what Indians they could espy thereabouts, but coming they found none. They went to an Island where they found an hundred Wigwams, and some English plundered Goods, which they took, and burnt the Wigwams. Also they marched up to a Fort which the Indians had built there, and destroyed it. Digging here and there they found several Indian Barns, where was an abundance of Fish, which they took and spoiled, as also thirty of their Canoos; so that it appears that the Heathen are distressed and scattered, being no more able to continue together in such great Bodyes as formerly.²¹⁰

Many of the Native communities from the middle Connecticut Valley appear to have gone west to Paquiag (open or clear place) in Mahican territory on the west side of the Hudson River 40 miles south of Albany. Hubbard reported that “the River Indians, who have many of them withdrawn themselves and are gone far westward, and whilst they and others that have been in hostility against us, remain unconquered, we cannot enjoy such perfect peace as in the years which are past.”²¹¹ It is not at all clear what the connection was between the Natives of the Connecticut Valley and the Mahicans of Paquiag, but there were several references during the war that the Connecticut Valley Indians acquired their powder from the Dutch with the Mahicans acting as middlemen. In his testimony in August of 1676 Menownienn stated:

...that the Norwottock Springfield Indians and others are gone to a place about Hudson's River called Paquayag, and were encouraged to come there by a great man of those parts, whoe hath allso encouraged them to engage against the English and that they should not be weary of it. He did not Bee the man nor doth not know who it was. He was askt where they had ye ammunition to carry on the warr: he said the Powquiag Indians bought it of y^e Dutch and sold it them. He was asked how many of the North Indians are gone that way. He saith about 90 men of them and Sucquance [Pessacus] is with them; he was very sick and as like to die as live...What Indians be at Housetanuck? None. They are all gone to Paquiag on ye West side of Hudson's River.²¹²

²⁰⁹ Trumbull. *Colony of Connecticut*. Pp. II:455.

²¹⁰ Mather. *A Narrative*. P. 57.

²¹¹ Samuel Drake, Ed. *The History of King Philip's War*, P. 204.

²¹² Trumbull. *Colony of Connecticut*. Pp. II:471-472.

In late July a “great party of those North Indians [Connecticut Valley]” were reported near Westfield travelling to the Hudson River on a southerly track to avoid the Mohawk.²¹³ On August 11 John Pynchon reported a group of “200 Indians including 50-60 fighting men, 100 women, and the rest children were seen three or four miles from Westfield heading toward Housatonic. He also reported “their tracks come from Nipmuc country.”²¹⁴ On August 19 the Connecticut War Council reported to Governor Andros of New York:

Hon^d Sir. Your fromerly neighbourly professions to secure such of the common barbarous enemies as haue or may fly or retire themselves into your parts, concerning whome o' neighbours of Boston doe say that they haue wrote to your Hon^d desiring that they may be sent thither at their charge; this gives us encouragement to giue you farther acco' & inteligence even now come to hand, viz. that upon the persuit of a considerable number of the enemy, about 150, who are now makeing that way but were overtaken & fought by a party of our neare unto Ousatunick [Housatonic near Great Barrington] ; whereof ours slue 40 & took 15 captives; some others allso were taken neare the same road, who infrome that the enemies designe was to goe over Hudson's River to a place called Paquiage where its sayd there is a tbrte [meaning unclear], & complices ready to receiue and shelter them, and there they intend refreshment & recruits...²¹⁵

Major Talcott was immediately ordered to Westfield to pursue the group expecting to catch up with them at Housatonic (Great Barrington). He found them at dusk three days later halfway between Westfield and Albany on the west side of the Housatonic River “entirely secure.” In the morning Talcott’s dragoons were split into two divisions:

One was ordered to pass the river below the enemy, and to advance and compass [surround] them in on that side. The other party, creeping silently up to the east bank of the river, were to lie prepared instantly to fire, when they should receive the signal from the other division...[and] discharged upon the enemy, as they were rising in surprise, or lay upon the ground, and killed and wounded a great number of them.²¹⁶

William Hubbard reported that the English:

...pursued after them as far as Ausotunnoog [Housatonic] River (in the middle way betwixt Westfield and the Dutch [Hudson] River, and Fort Albany) where he overtook them, and fought with them; killing and taking 45 prisoners, 25 whereof

²¹³ Trumbull, *Colony of Connecticut*. Vol. 2:466.

²¹⁴ Carl Bridenbaugh, Ed. *Pynchon Papers: Volume I Letters of John Pynchon, 1654-1700* (Boston, MA: Colonial Society of Massachusetts, 1982). P. I:163.

²¹⁵ Trumbull, *Colony of Connecticut*. P. II:469.

²¹⁶ Benjamin Trumbull. *A Complete History of Connecticut*. (Hartford, CT: Hudson and Goodwin. 1797). P. I:365-366.

were fighting men. Without the loss of any one of his company save a Mohegan Indian: Many of the rest were badly wounded, as appeared by the bushes being so much besmeared with blood, as was observed by those that followed them further. It is written since from Albany, that there were sundry lost besides the 45 aforementioned, to the number of threescore in all; and also than an hundred and twenty of them are since dead of sickness.²¹⁷

A Narragansett Indian from Connecticut named Choos was at the Housatonic Fight and was captured in September at Stratford, Connecticut. After the battle he hid in Farmington until he was almost starved, and then went to the Stratford coast to collect oysters to eat:

He affirmed that there were above 250 fighting men amongst those Indians that fled westward, besides women, and children; and that near 200 of them passed the great river below Albany, and were sheltered by the Indians of that place, called Moheganders [Mahicans]; but about 80 of them tarried on the hither side of that river, near a Dutch village.”²¹⁸

John Pynchon confirmed the Choos testimony and reported in late August of 1676 that “gathered together at Paquoag on Hudson River about 200 men and having there their wives and children in a safe and secure place; the men may with freedom and without any clog make inroads upon these towns, doing what they do at a push, and suddenly return again to their headquarters.”²¹⁹ The Connecticut War Council was so concerned about the threat the Natives at Paquiag posed that in late August of 1676 they wrote Governor Andros of New York requesting permission “to pass up ye Hudson River with our own vessels to pursue them.”²²⁰ The Connecticut Valley communities at Paquiag continued to be perceived as a threat as late as 1677. In April of that year Major Pynchon wrote to Governor Andros:

There being some principle Indians more deeply engaged in the late mischiefs done upon us, whose we understand are upon your River [Hudson], we judged it necessary to demand them to be delivered to justice; yet weighing what your Honor hath presented, together with our own observations, do not apprehend it convenient at this time to insist farther upon it, but shall represent the same with our sense thereof, to the respective Councils of our Colonies; and in case they still persist therein, that then your Honor would be pleased fully to answer their desire. In the meantime let all be in silence. Their names are Wecjuegan [Agawam], Awassamauge, Pummanequin, Negonump, Apequanas alias John Sagamore and Cochapesen [Agawam].²²¹

²¹⁷ Hubbard, *A Narrative*. P. 244.

²¹⁸ Hubbard, *A Narrative*. P. 245-246.

²¹⁹ Bridenbaugh, Ed. *Pynchon Papers*. P. I:163.

²²⁰ Trumbull, *Colony of Connecticut*. P. II:478.

²²¹ Trumbull, *Colony of Connecticut*. P. II:494.

The anticipated attacks from the River Indians at Paquiag never materialized although refugee River Indians out of Canada attacked Hatfield and Deerfield on September 19, 1677. The group consisted of 24 Pocumtuck and a Narragansett under the command of Aspelon who was probably a Pocumtuck Captain or Sachem. Dozens of settlers were killed or captured which proved to be the final attack on the Connecticut River settlements for decades.²²²

The war in southern New England ended when English soldiers and their Native allies killed Metacom at Mount Hope in present-day Bristol, Rhode Island on August 12, 1676. The war continued in northern New England (primarily on the Maine frontier) until a treaty was signed at Casco Bay in April of 1678. King Philip's War has been described as the deadliest in American history based on English and Native civilian and military casualties relative to the population.²²³ By the time the war had ended, Colonial authorities estimated that 600 English had been killed and 1,200 houses burned. It is impossible to accurately calculate Native casualties but it is estimated that a minimum of 3,000-5,000 Native men, women, and children died in battle and disease, starvation, and exposure, and hundreds more were sold into slavery throughout the Atlantic World.²²⁴ The most graphic and horrific description of the impact of the war upon the Native peoples of southern New England was by Puritan minister and historian Cotton Mather:

But God hath consumed them by the Sword, and by Famine and by Sickness, it being no unusual thing for those that traverse the woods to find dead Indians up and down, whom either Famine, or sickness, hath caused to die, and there hath been none to bury them.²²⁵

IV. Battlefield Loci - Battle of Great Falls/Peskeompskut and the English Retreat

This section examines the nature and distribution of recovered battle related and domestic objects recovered from the battlefield discussed within the context of the 12 distinct Loci. This analysis will include data from both the Phase I and Phase II battlefield surveys. A total of 548 musket balls and 49 domestic and military objects were recovered that could confidently be

²²² George Sheldon. *History of Deerfield*, Vol. I, P. 180-181. Deerfield. 1895.

²²³ Jason W. Warren, *Connecticut Unscathed: Victory in the Great Narragansett War 1675-1676* (Norman, OK: University of Oklahoma Press, 2014). P. 4.

²²⁴ John Romeyn Brodhead, Ed. *Documents Relative to the Colonial History of the State of New York* (Albany, NY: Weed, Parsons, and Company, 1855). Pp. 3:243-244.

²²⁵ Drake. *History of King Philip's War*. P. 205.

considered seventeenth century battle related objects (Figures 85 & 86). Domestic or personal objects included brass scrap, lead bar, molten lead, lead and brass beads and amulets, pewter buttons, spoon fragments, pewter buttons, an iron awl, iron axe fragments, and rose head nails). The 17th century Native domestic objects recovered from Locus L (Deerfield River Ford) are not believed to be associated with the battle but date earlier or later than the battle. Military objects included horse tack (buckles, saddle rings), and gun parts (see Appendix I: Artifact Descriptions & Artifacts Inventory). As nearly 3.5 miles of the battlefield remain to be surveyed, it is anticipated that the next phase of the survey will yield hundreds of additional battle related seventeenth century objects.

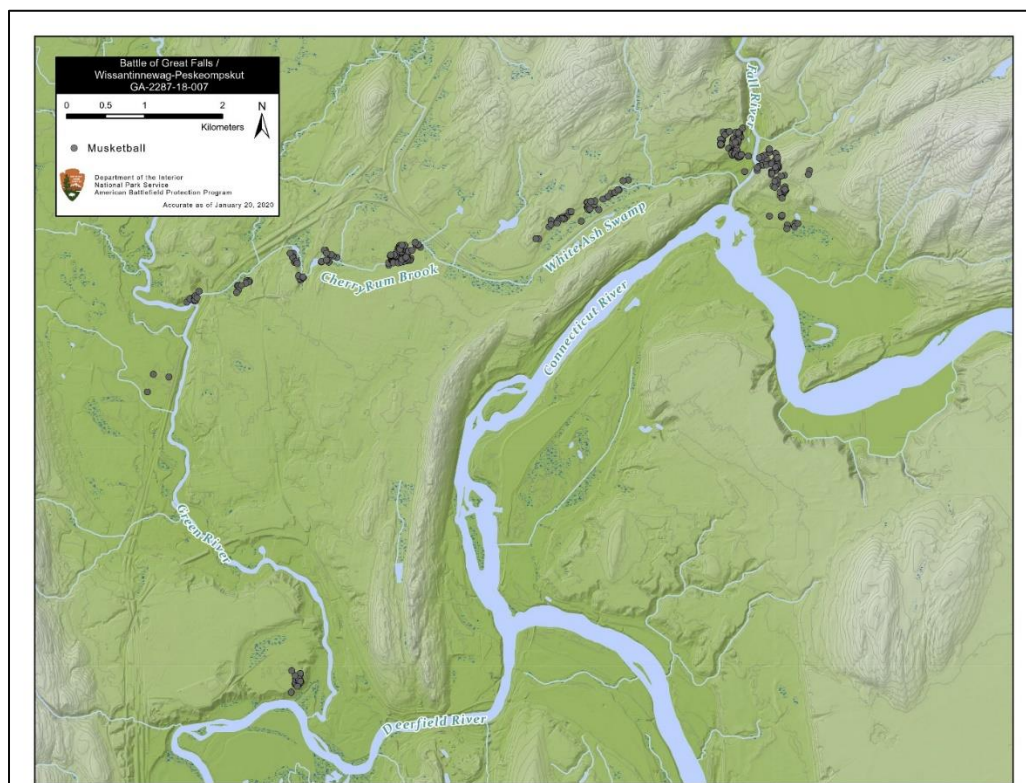


Figure 87. Musket Ball Distributions, Battle of the English Retreat.

As discussed earlier, the diameters of musket ball in increments of tenths of an inch were grouped into several categories; .15-.34, .35-.49, .50-.54, .55-.59, .60+. These categories are considered to reflect the tactical and weapon choices made by the combatants. Musket balls in the .15-.34" diameter range were used as multiple loads of buckshot at close range and were largely used by Coalition forces. Musket balls in the .35-.49" diameter range were loaded into pistols or carbines and seem to be associated with the English. Musket balls in the .50-.54"

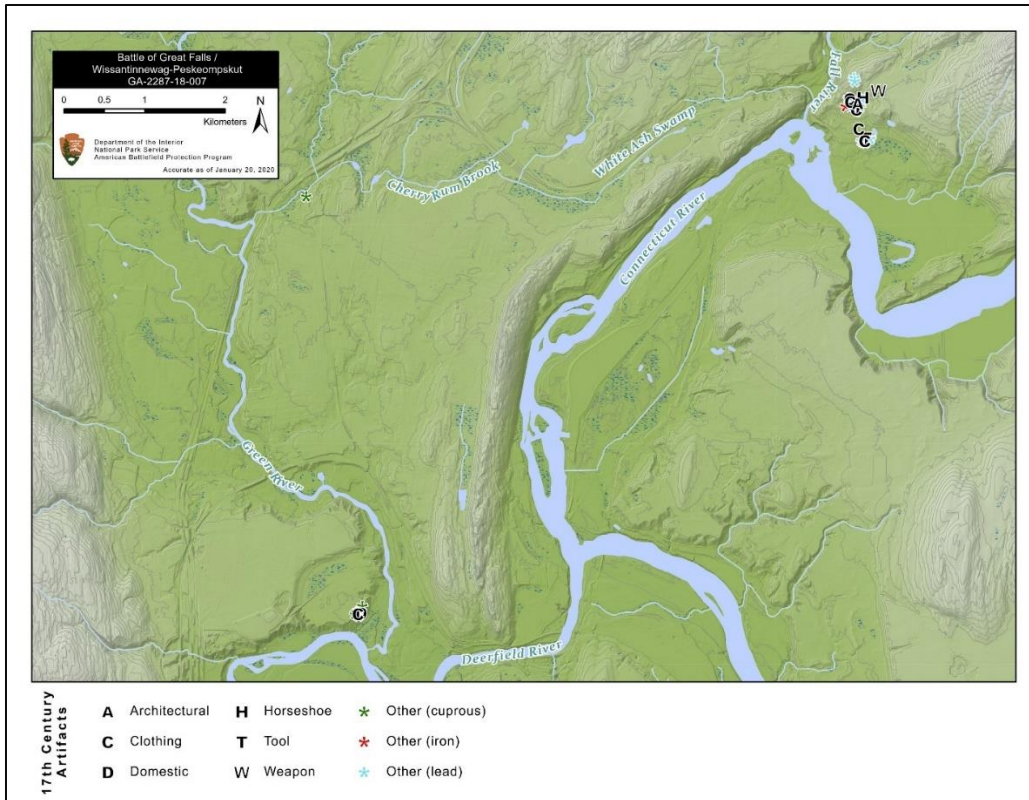


Figure 88. Distribution of Domestic and Military Objects.

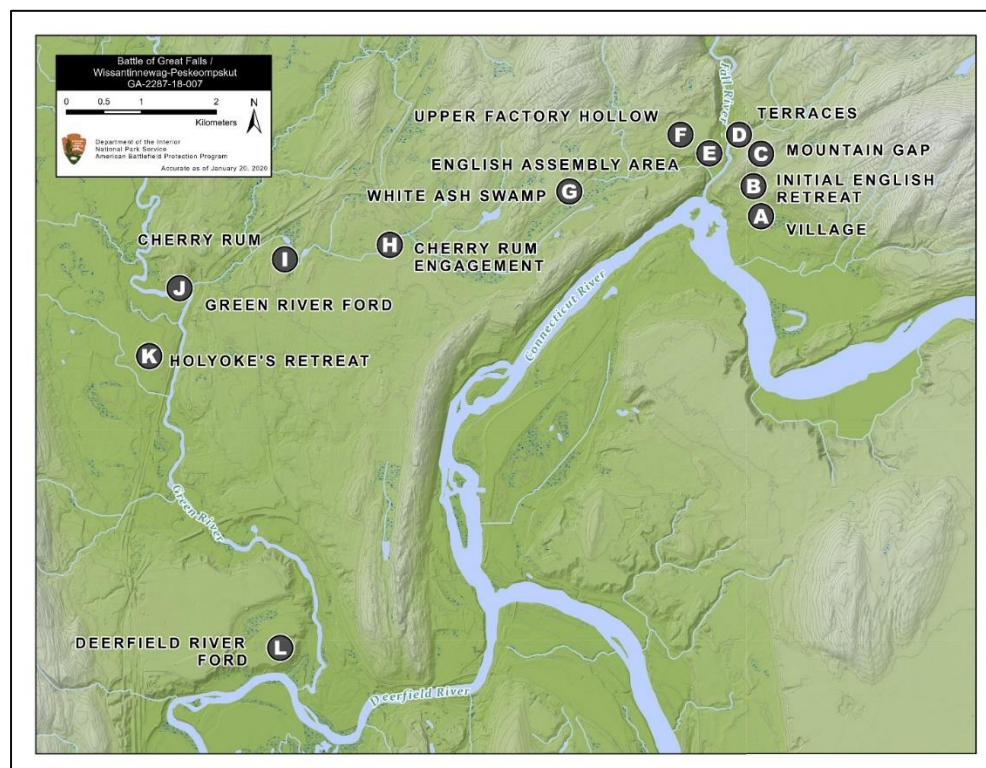


Figure 89. Battlefield Loci.

diameter range were associated with Coalition forces. Musket balls in the .55-.59" diameter range were associated with both Coalition and English forces, and musket balls in the .60"+ diameter range were largely associated with English forces. However, there is some overlap in diameters and associated weapon types and tactics. For example, musket ball diameters in the high .30" or .40" diameter range could be used as small shot (buckshot) and diameters in the .50" range could be used in muskets. This information is useful in interpreting combat actions associated with specific battle events (Figure 87). Overall 77 percent of recovered musket balls are in the small shot range while only 17.7 percent in the carbine/musket range (Figure 88). This pattern strongly indicates that loads of 6 to 8 small diameter musket balls was the preferred load for weapons. There is additional evidence to support the idea of a preference for loading weapons with multiple rounds of small diameter musket balls. Musket balls fired as "buckshot" have characteristic "facets" on several sides or faces of the musket ball that result when the load of small shot is fired which both heats and compresses the balls against each other as they move through the musket barrel (Figure 40).

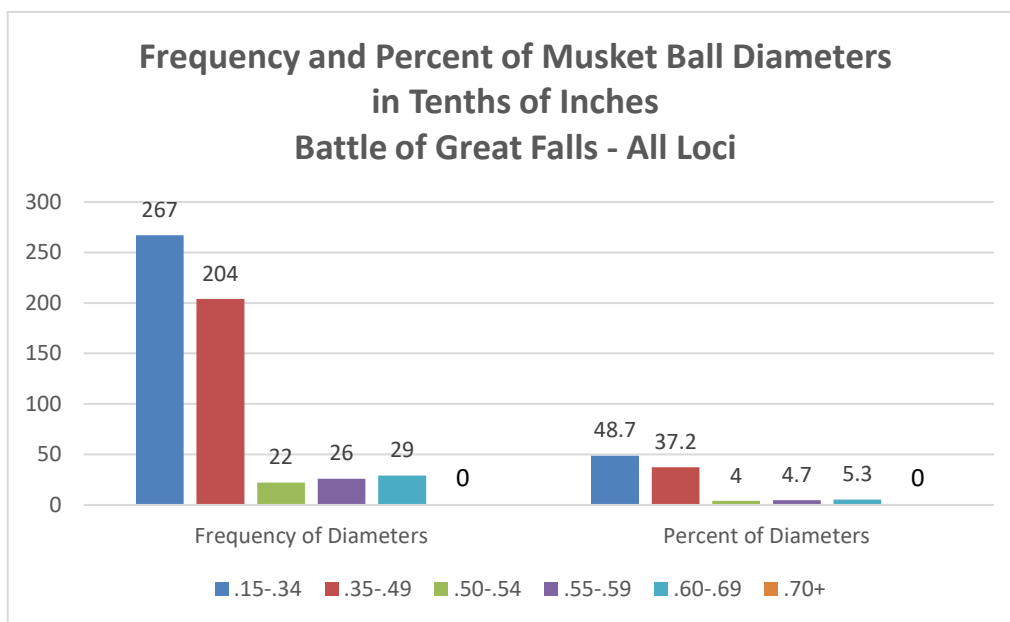


Figure 90. Battle of Great Falls Musket Ball Diameters.

The purpose of the broader musket ball analysis of the Great Falls battlefield was to establish a baseline to compare against the various musket ball distributions recovered from the

12 Battlefield Loci, or battlefield actions, identified within the battlefield. This comparative analysis can help to determine if differences in the frequency and percentage of musket diameters within and between loci were influenced by the tactical decisions of the combatants and perhaps identify which combatants fired certain musket ball diameters based on weapon calibers or tactics. Simply put, can patterns of musket ball diameters be attributed to either Native or English soldiers? For example, does a higher percentage of low diameter musket balls (.25" - .40" diameter; i.e., loading weapons with 6-8 small shot) suggest that Native soldiers were in close proximity to retreating English forces and therefore used small shot loads, or does the higher percentage of small shot along the retreat indicate the English were running low of "bullets" or larger diameter musket balls (i.e., .50" +). Many of these issues and their implications for reconstructing the battlefield were discussed in Section II: Methodology: *Calibers, Musket Ball Diameters, and Combatants Tactics*. As most of the Native attacking force had not been previously engaged in battle it is assumed that the munitions fired by them was based on a tactical decision, not because of a low supply of a specific musket ball diameters.

Figure 89 depicts the frequency and percent of musket balls recovered from the Second Battle at Nipsachuck (July 3, 1676).²²⁶ The assemblage is the most relevant comparison to the Battle of Great Falls as both date to King Philip's War, although the majority of the musket balls at the Battle of Great Falls are believed to be from native fire and the majority of the balls from Nipsachuck are believed to be English fire. The Second Battle at Nipsachuck was one of the final engagements of King Philip's War and consisted of a mounted attack by 300 Connecticut dragoons (the only mounted attack by dragoons in the war) and 100 allied Pequot and Mohegan soldiers on the recently established village of the Narragansett Sunk Squaw Quiapan comprised of 140 women and children and 30 Narragansett men. Ironically Quiapan was returning to her homeland from Watchusett after leaving Squakeag after the Battle of Great Falls carrying letters to present to Massachusetts Bay to negotiate a peace plan.

A total of 101 musket balls were recovered from the Second Battle at Nipsachuck battlefield site, the majority fired by the attacking English-Allied force. At Nipsachuck 48 percent of the musket balls were in the small shot category (.15"-.34" diameter,) and 41 percent in the pistol/carbine range (.35"-.49" diameter). Because of the very rocky terrain at Nipsachuck

²²⁶ Kevin McBride, David Naumec, Ashley Bissonette. Technical Report, Second Battle of Nipsachuck. National Park Service American Battlefield Protection Program. 2013.

it was determined that a number of the small diameter shot were fired at the English by the Narragansett defenders, although many were also fired by the English. Perhaps most significant is the percentage of ball in the pistol/carbine range (41 percent) which is comparable to the Battle of Great Falls where shot in that range is believed to be associated with the English. The similarity of these patterns supports the contention at the Battle of Great Falls that shot in the .35”-.49” diameter range were fired from pistols and/or carbines.

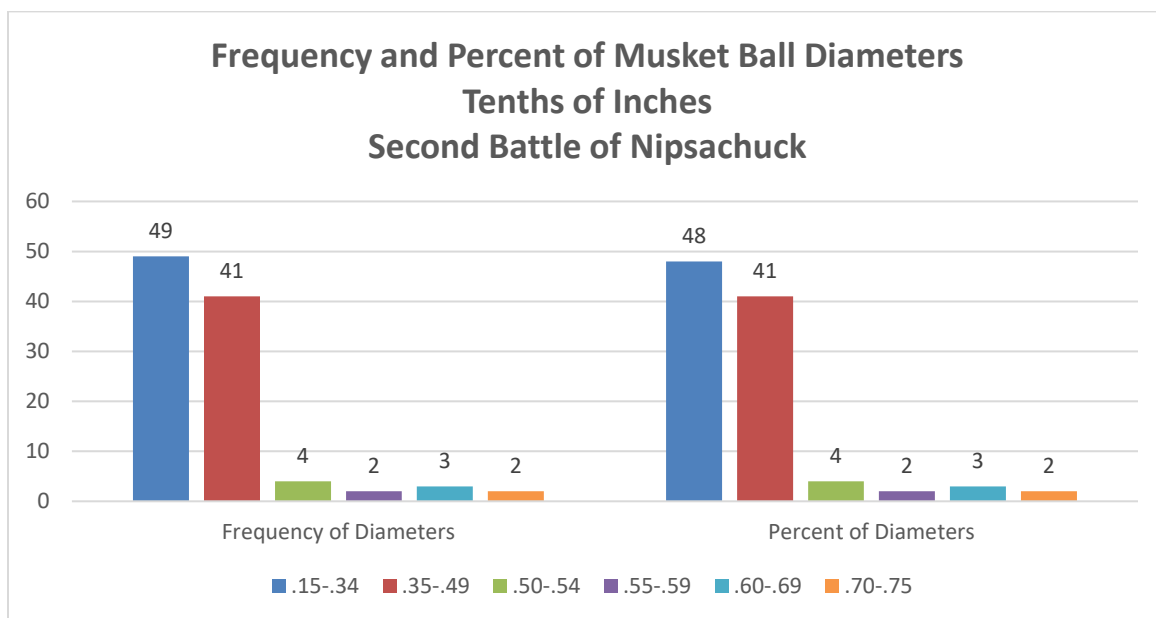


Figure 91. Frequency and Percent of Musket Ball Diameters, Second Battle of Nipsachuck.

Battlefield Loci

Twelve distinct Loci, or discrete battle events, were identified for the Battle of Great Falls based on primary sources, the nature and distribution of musket balls (i.e. diameters, impacted vs. dropped), and their association with terrain features. They include: Locus A - Upper Peskeompskut Village; Locus B - Initial English Retreat; Locus C - The Mountain Gap; Locus D - Terraces; Locus E - English Assembly Area; Locus F - Upper Factory Hollow; Locus G - White Ash Swamp; Locus H - Cherry Rum Brook Engagement; Locus I – Cherry Rum Brook; Locus J – Green River Ford; Locus K – Holyoke’s Retreat; and Locus L – Deerfield River Ford. Loci A through D are in the town of Gill, Massachusetts while Loci E through L are located in the town of Greenfield, Massachusetts (Figure 90).

No seventeenth-century battle-related objects were recovered during the survey in the Riverside area of Gill, the reputed site of the Peskeompskut village. As discussed above, the Riverside landscape was heavily impacted by cut and fill episodes, and a dense layer of iron objects distributed throughout the area which made metal detecting very difficult. In addition, a good portion of the village may now be underwater and inaccessible to survey. Three musket balls and a gunflint were recovered from the Riverside area which may be associated with the battle, one was a dropped .66" diameter and two were impacted (.58" and .70" diameter).

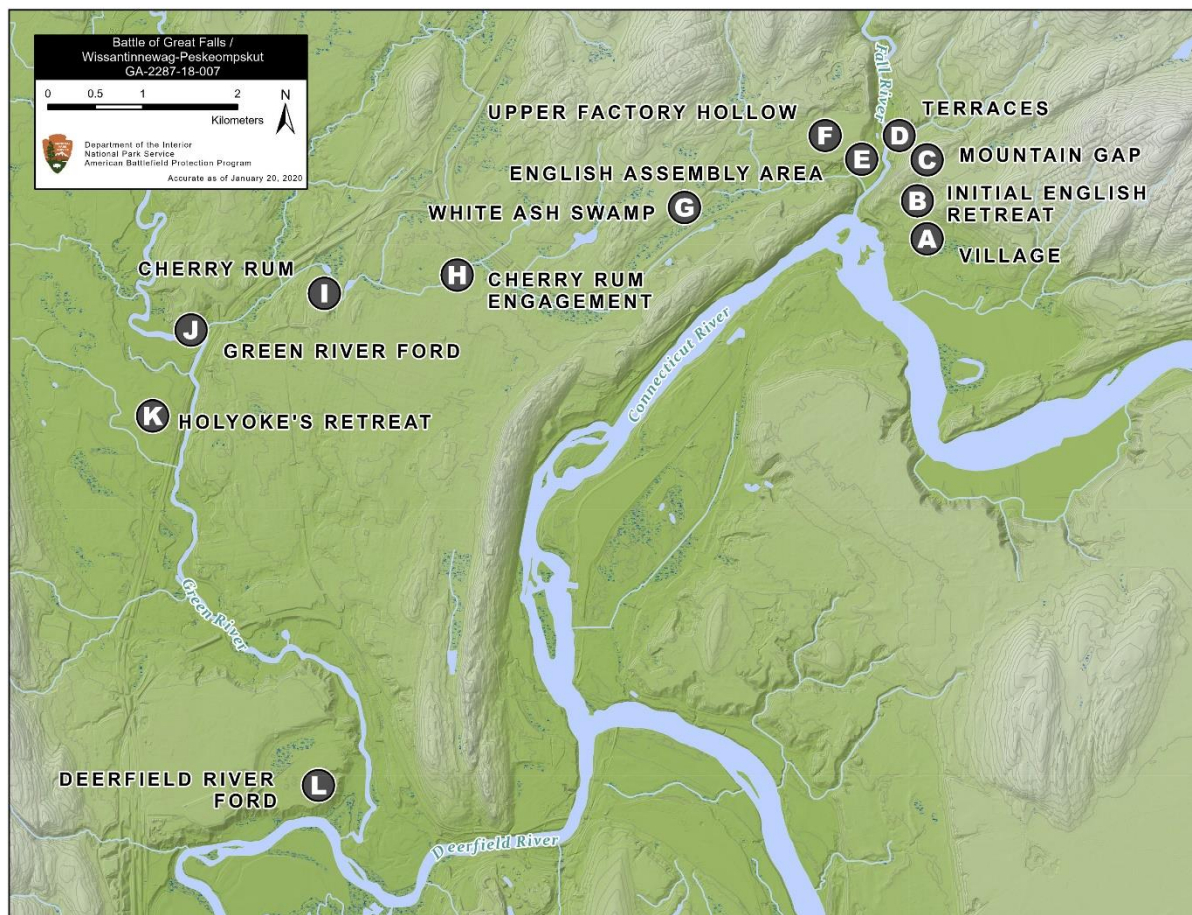


Figure 92. Battlefield Loci A-L.

The gunflint is an English flint blade type likely made in England and shipped to the colonies and could be attributed to either the Native or English combatants. There is no provenience information on the two impacted musket balls or the gunflint other than they were collected in the Riverside area. A landholder in the Riverside neighborhood on Walnut Street found a dropped .66" diameter musket ball in her garden. The musket balls and gunflint are not sufficient

evidence to identify the precise location of the Peskeompskut village, other than Riverside, and who may have fired them, or when.

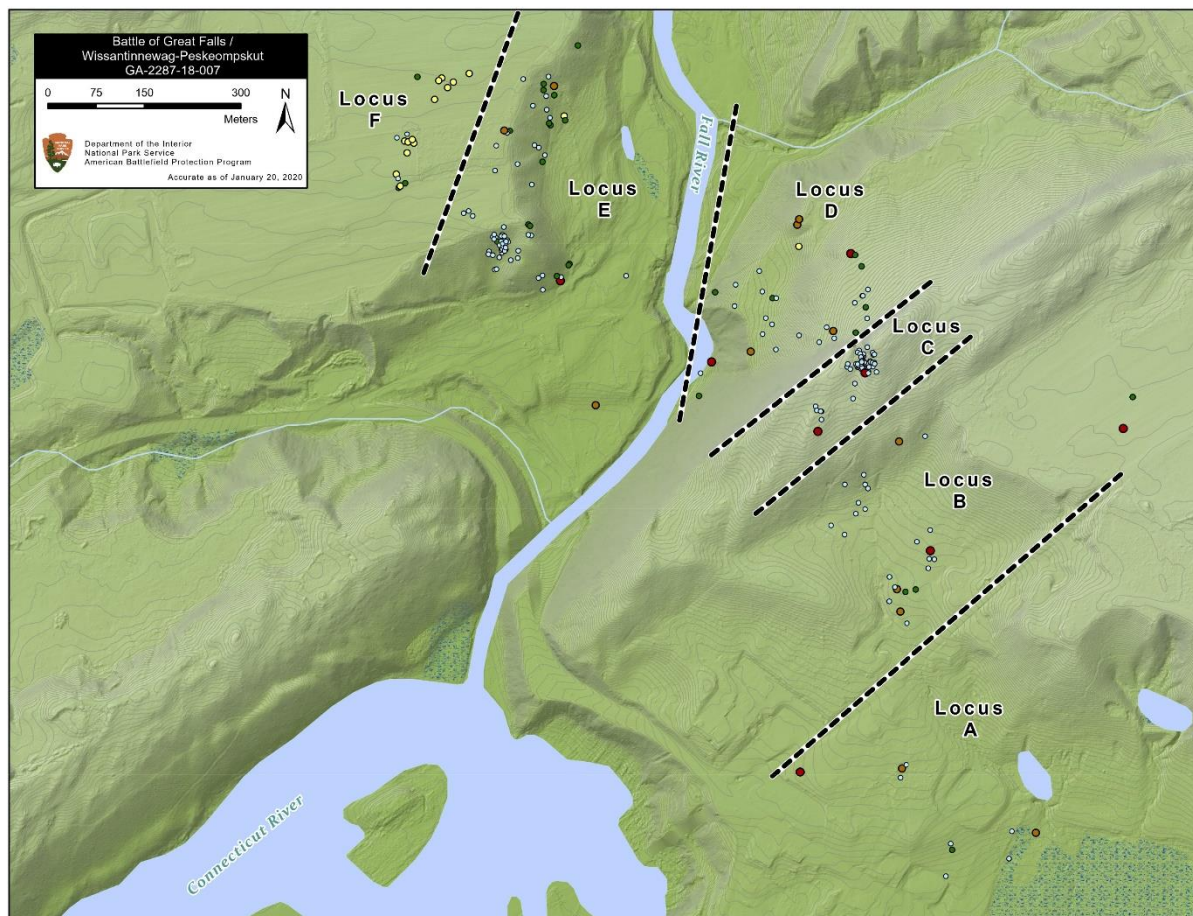


Figure 93. Battlefield Loci A – F.

Locus A: Upper Riverside Village: Ten musket balls were recovered from Locus A – Upper Riverside (Figures 92 & 93). Eleven lead, brass, and iron objects were also recovered considered to be domestic or personal and potentially associated with the battle and village (Figures 92, 94 & 95; Appendix I). The locus is approximately 100 yards north of the Mohawk Trail / State Route 2 and east of Main Road. It is not clear if the domestic/personal objects represent the northern boundary of Peskeompskut village or outlying structures such as the “wigwam or two higher up than the rest.” Similarly, the distribution of musket balls could either be associated with the English attack on the village, or the Coalition counterattack on Wells’ group, or perhaps both. There is not enough of a sample to infer much from the musket ball diameters, although the majority (60 percent, n=6) were in the .15”-.34” diameter range. The higher percentage of small

shot is usually identified as a Native signature, but evidence from other seventeenth century battlefields indicate the English used small shot when attacking a village.

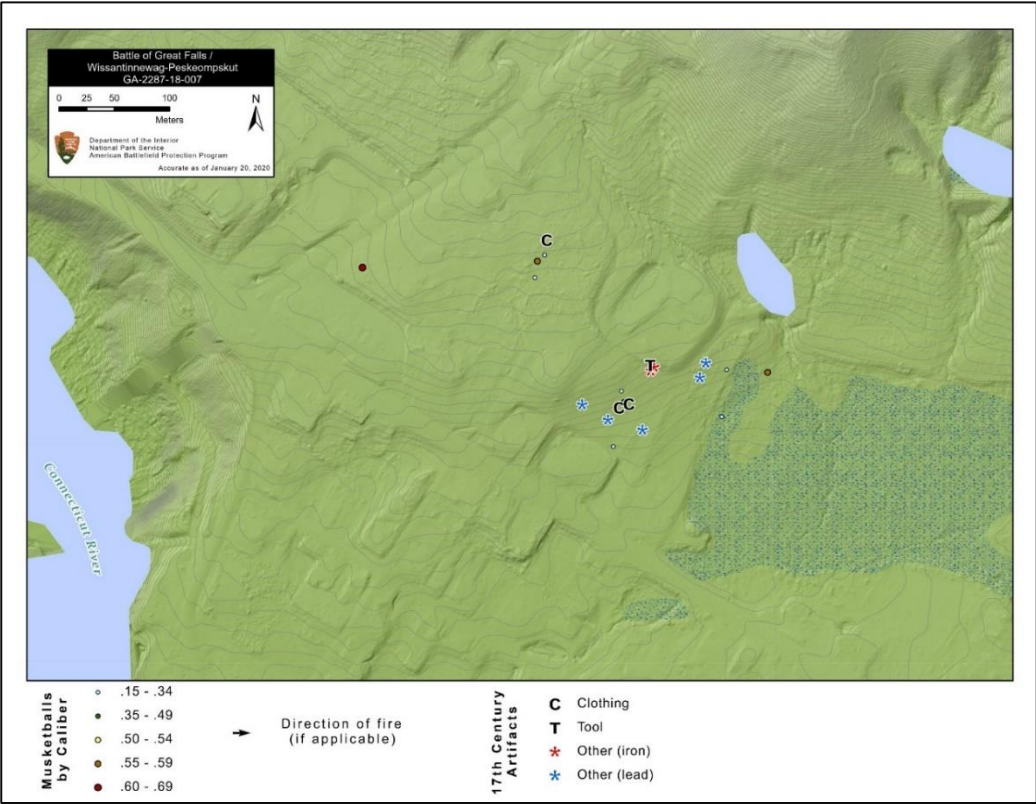


Figure 94. Battlefield Locus A.

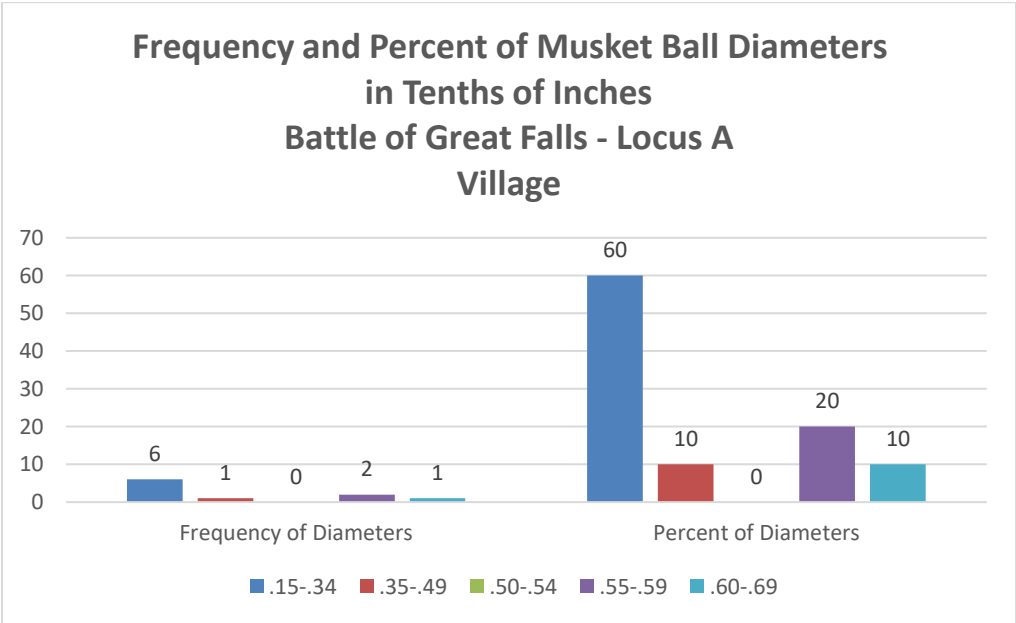


Figure 95. Locus A Musket Ball Diameters.

The domestic/personal objects include two fragments of brass scrap, several fragments of lead bar or molten lead, two pewter buttons, an iron blade, a possible cast iron kettle fragment, a lead amulet, and a possible iron kettle fragment and axe fragment (Figures 94 -96). This area may be either the northern boundary of the Peskeompskut village and/or the location where the English killed seventeen people “being in a wigwam or two higher up than the rest.”²²⁷ Brass scrap is usually considered a signature of seventeenth-century Native domestic sites. The lead bar, molten lead, and brass scrap fragments may be associated with musket ball production or reprocessing brass kettles. The pewter buttons could be associated with either an English or Native combatant or they may not be related to the battle at all. The lead amulet would be associated with a Native person.

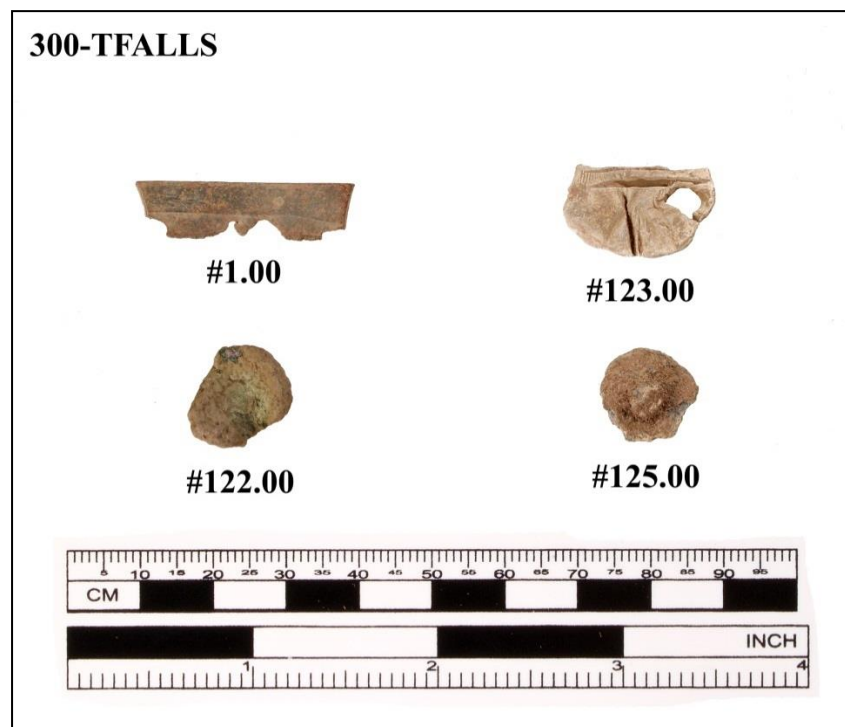


Figure 96. Locus A Domestic Objects. #1 & #122 Brass Scrap, #123 Lead Amulet, #125 Pewter Button.

²²⁷ CSL. *Colonial Wars*, Series I. Doc. 74.



Figure 97. Locus A Domestic Objects. #128 Iron Kettle Fragment, #146 Wrought Iron Fragment, #127 Iron Awl, #121 Iron Axe Fragment.

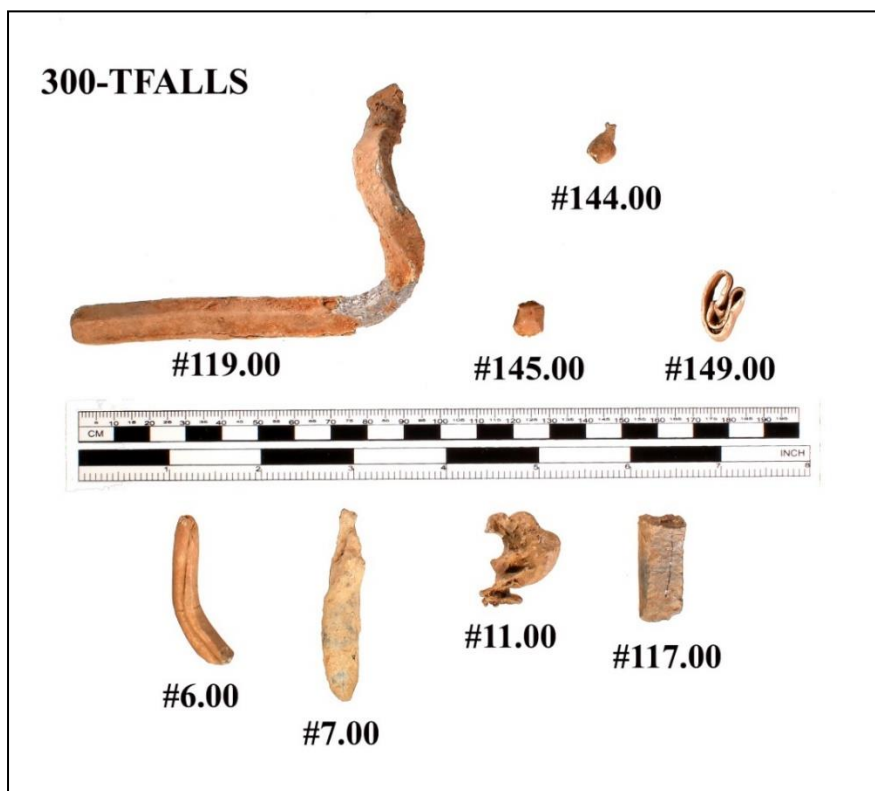


Figure 98. Locus A, Lead Bar and Molten Lead.

Locus B: Initial English Retreat: Twenty-seven musket balls were recovered from Locus B extending 250 yards west of Main Road in an area of approximately two acres. There were a few outliers 200-275 yards to the north and west of the main concentration of artifacts consisting of two musket balls and a possible gun screw (Figure 96). The terrain is relatively flat in the eastern area and begins to rise steeply 200 yards west of Main Road to the Mountain Gap 100 yards to the northwest.

Four impacted musket balls were recovered on the southeastern face of the slope indicating fire from the southeast. The direction of fire indicates Native fire toward the English who were in front of them – likely Wells’ group. Fourteen ball in the .15”-.34” diameter range (74 percent) exhibited facets and two in the .35”-.49” diameter range (.37” and .38”). Eleven percent of the ball (n=3) were in the .35”-.49” diameter range but as two had facets they were not from English pistol fire. Five of the remaining ball (19 percent) were in the .55+” diameter range and possibly some were the result of English fire.

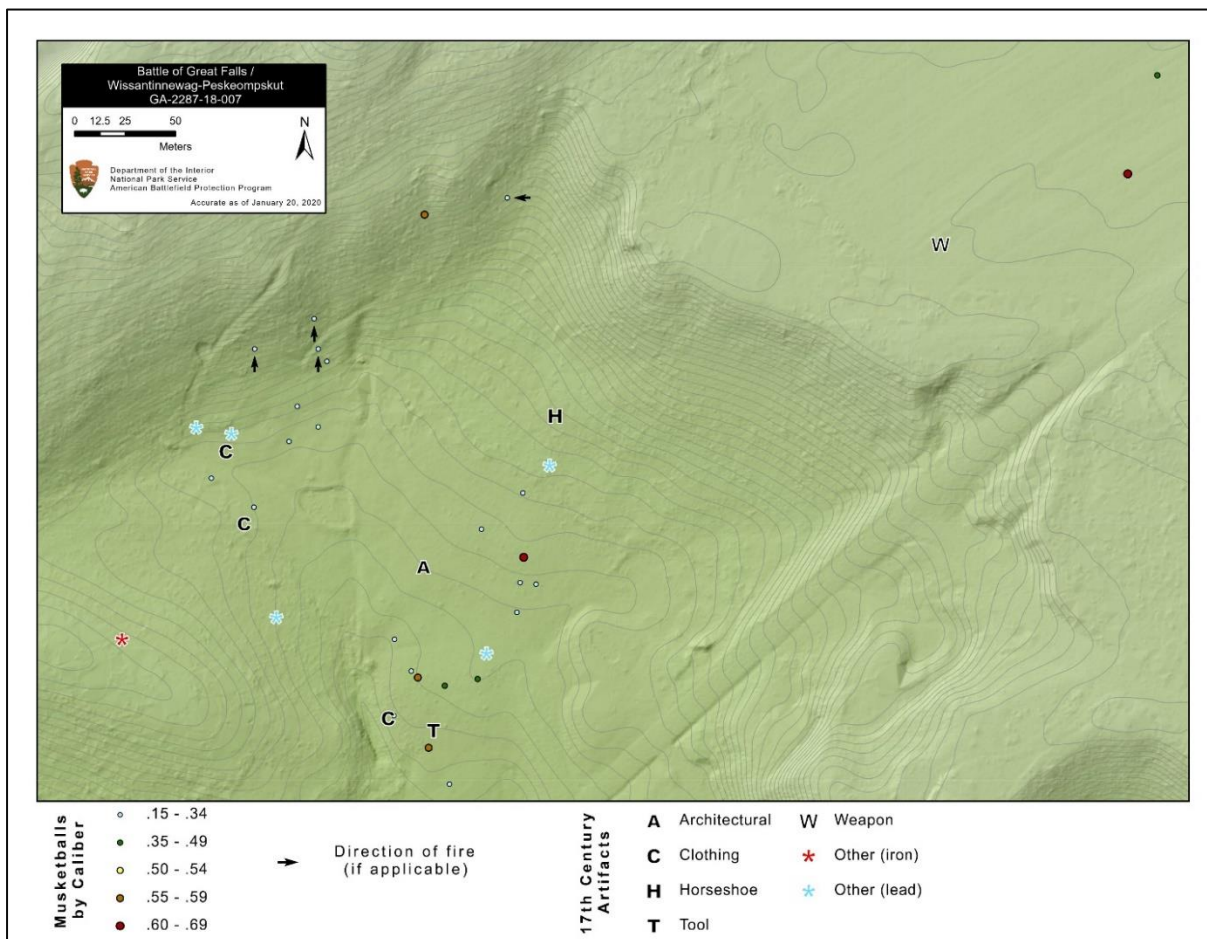


Figure 99. Locus B, – Initial English Retreat.

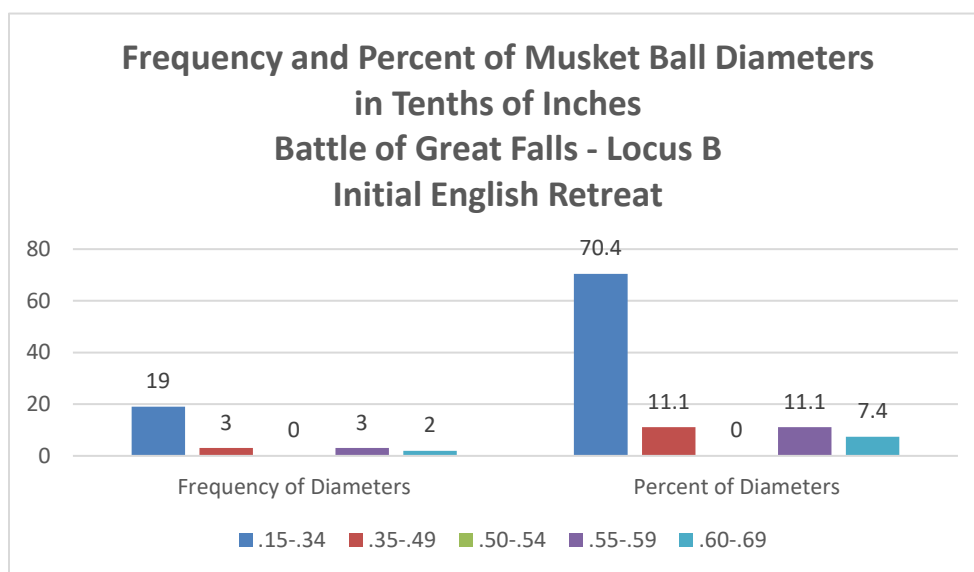


Figure 100. Locus B Musket Ball Diameters.



Figure 101. Locus B: Possible Lead Flint Wrap.

Several domestic/personal objects were recovered from the eastern section of Locus B including a possible lead flint wrap, several fragments of lead sheet and molten lead, a pewter button, a lead bead, an unidentified wrought iron object, a rose head nail, and an eyelet from a reprocessed iron hoe (Figures 99 & 100). The lead and eyelet suggest the possibility of a Native domestic area at this location but the absence of scrap brass might suggest otherwise. The pewter

button and lead bead could have been dropped by an English and Native combatant. In any event this distribution of domestic objects is not believed to be contemporaneous with the battle as none of the English narratives mention a Native village or domestic site so far from the main village at Peskeompskut.



Figure 102. Locus B: Possible Seventeenth Century Domestic Objects include Molten Lead #'s 188, 137, 197, 199, 157; 111; #156; Pewter Button # 115; Lead Bead # 171; Rose Head Nail #189; Lead Sheet Scrap #'s 162, 170, 149; Iron Hoe Eyelet #94; Unidentified Wrought Iron Object # 290.

Locus C: Mountain Gap: Fifty-seven musket balls were recovered from Locus C, the Mountain Gap (Figures 102 & 104). No personal or domestic artifacts were recovered. The “mountain” is a southwest-northeast trending bedrock ridge that parallels the Fall River 160 yards east of the river and runs for 0.6 miles in a northeasterly direction from the Connecticut River (Figure 101). The ridge is characterized by an extremely steep, almost vertical cliff face along the western edge that drops to a series of terraces leading to the Fall River. The only way to pass through the ridge and descend to the Fall River is through the narrow gap in the bedrock which allows

passage for someone on foot. The Mountain Gap is only about 15 yards wide and 30 yards long, significantly restricting movement through it to the terraces immediately to the west. Fifty-five (97 percent) of the recovered musket balls were small shot in the .15”-.34” diameter range of which 32 (58 percent) had facets and believed to Native fire (Figures 102, 103, & 105). Two musket balls were in the .60”-.69” diameter range (.62” & .63”). It is unclear if the two larger ball represent Native or English fire in this context.

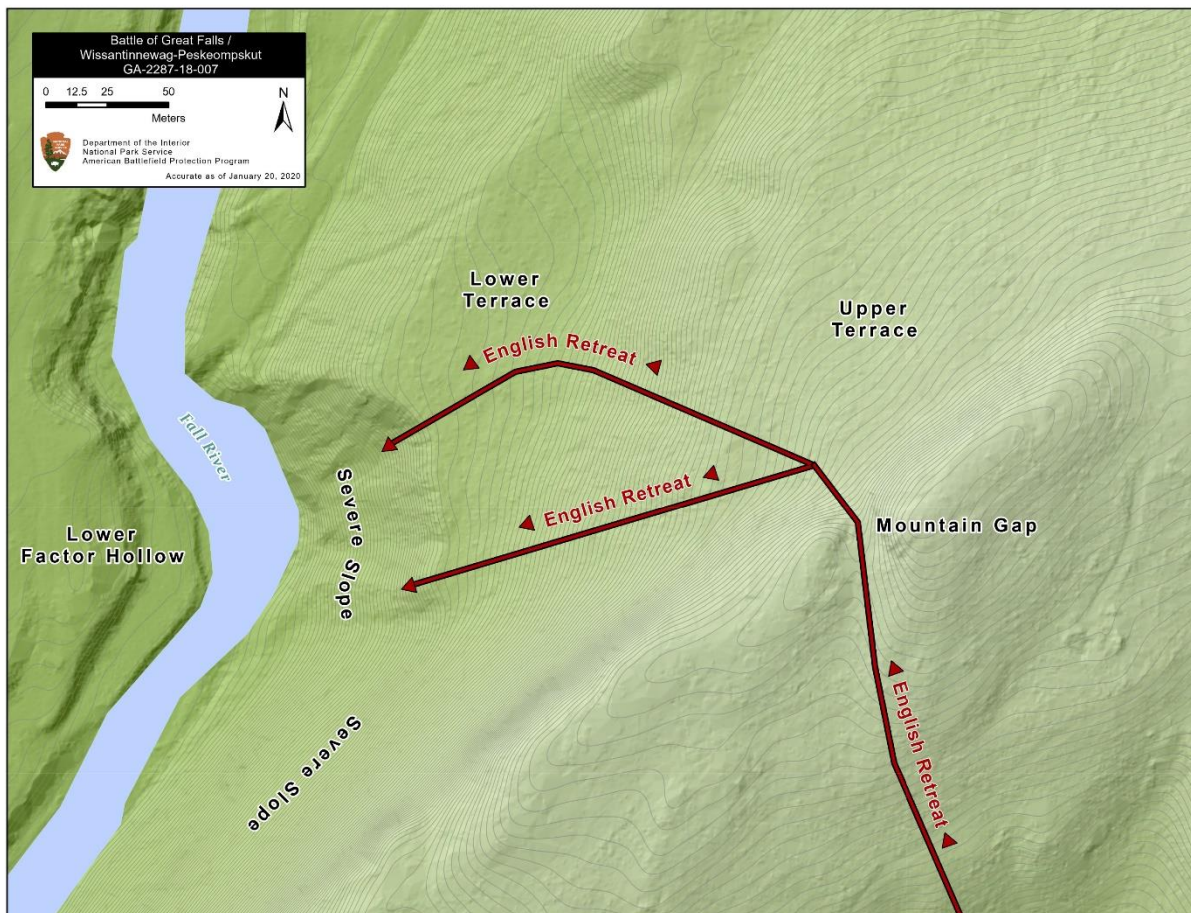


Figure 103. English Retreat from Mountain Gap to Fall River.

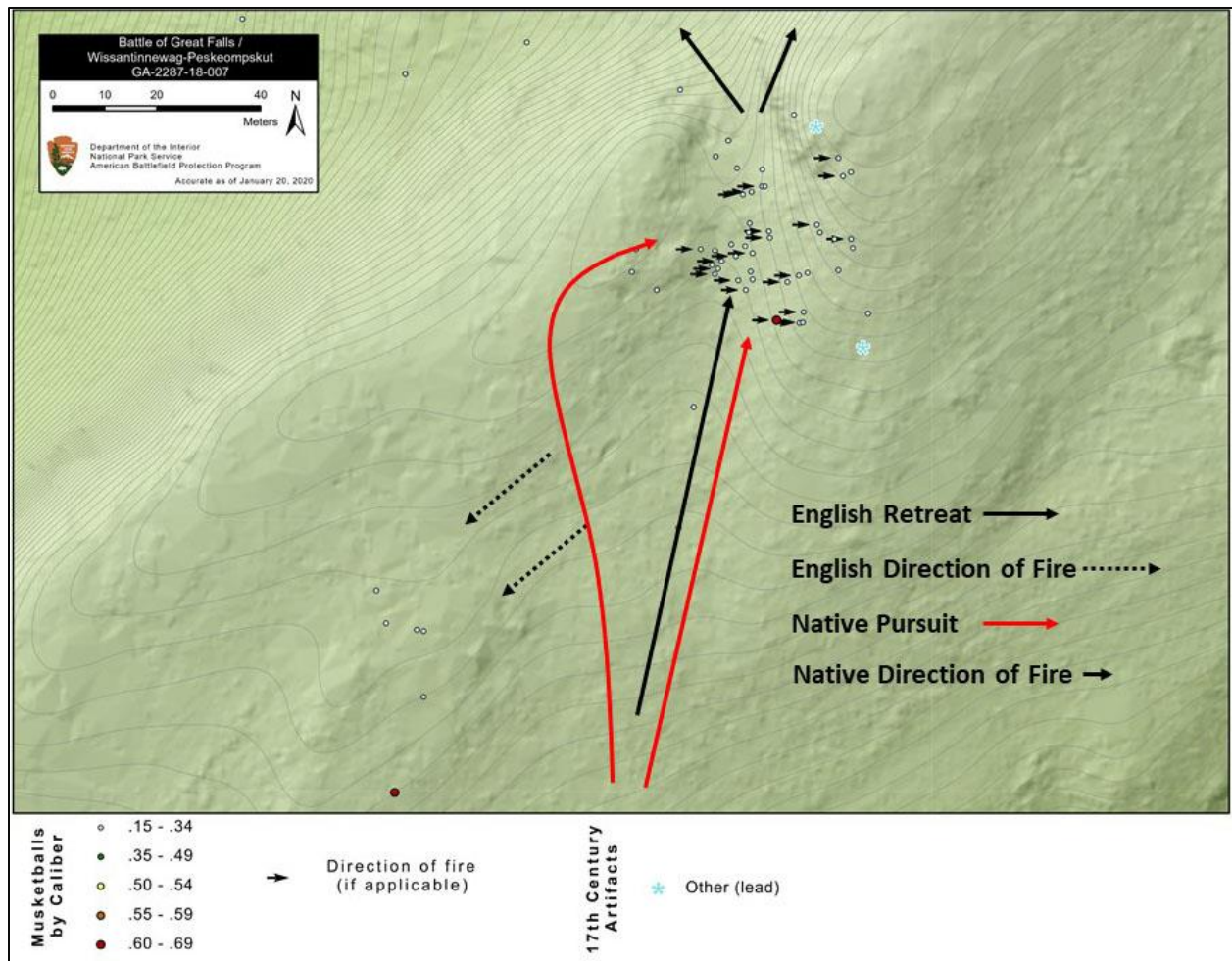


Figure 104. Locus C: Mountain Gap Overview.

During the English retreat from Peskeompskut two groups of English soldiers had to pass through the gap descend the terraces to the west of the gap to reach their horses tied on the west side of the Fall River (Figure 101). The first group was comprised of the main body of approximately 100 soldiers under the command of Captain Turner and Lieutenant Holyoke. It does not appear that Turner's company was attacked until they reached the English Assembly Area on the west side of the Fall River. The second group consisted of approximately twenty soldiers in Jonathan Wells' group who had "lagged" behind along the Connecticut River shoreline where they exchanged fire with Native soldiers crossing the river by canoe.²²⁸ At some

²²⁸ Jonathan Wells relayed his account of the Battle of Great Falls to the Reverend Stephen Wilson in his later years, circa 1730. Wells was a private soldier from Hadley, MA who was part of the 20 man company which stayed in the village when the majority of the company retreated. Wells' company was nearly cut off in their retreat. He was wounded during his retreat but survived the encounter. See: Daniel White Wells and Reuben Field Wells, *History of*

point Wells' group disengaged from fighting and retreated as well, the entire time being pursued by Native soldiers. According to Wells' account his company of twenty men was forced to fight their way to their horses. All of the battle actions in Locus B, C, and D is believed to be the result of fighting between Wells' group and Coalition forces.

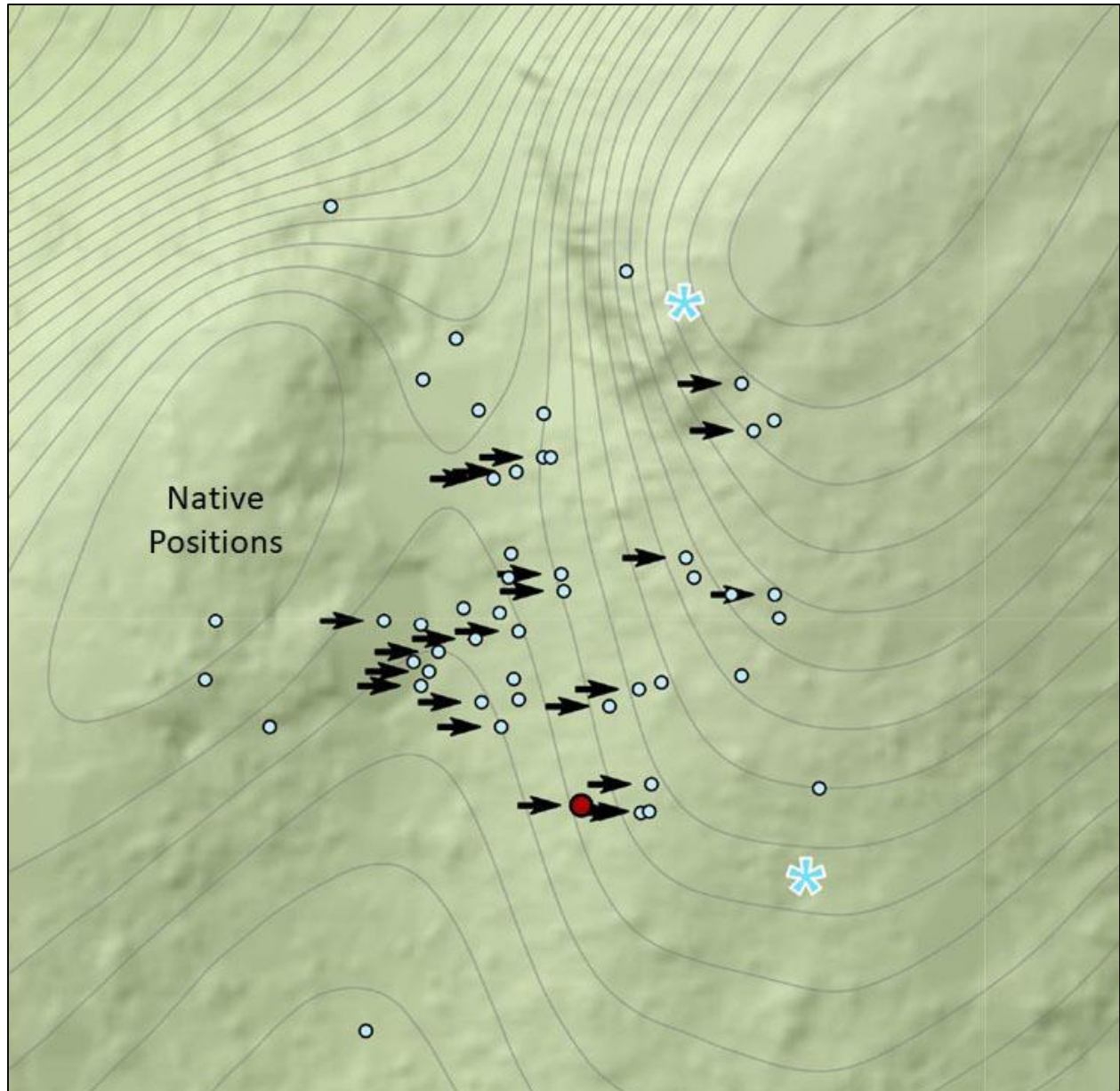


Figure 105. Locus C, Mountain Gap and Native Direction of Fire.

Hatfield, Massachusetts, in three parts (Springfield, MA: F.C.H. Gibbons, 1910); Thomas. "Rev. Stephen Williams's Notebook."

There are two groups of musket balls within Locus C. The largest grouping consists of one .63” diameter ball and forty-seven small shot in the .15” - .34” diameter range concentrated in the immediate area of the gap (Figures 102 & 103). Of the twenty-five 25 small shot for which a direction of fire could be determined, all were fired from the southwest to northeast into the gap. The .63” diameter ball was fired from south to north. A smaller group of musket balls is located approximately 75 yards southwest of the gap and consists of one .62” diameter ball and six small shot (Figure 102).

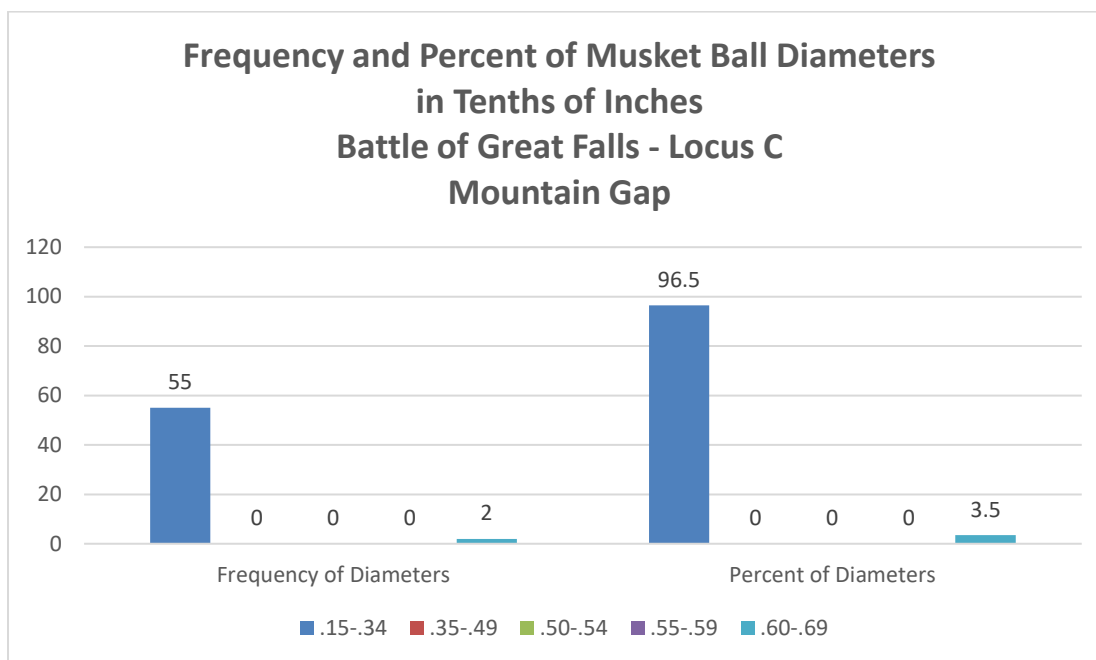


Figure 106. Locus C, Frequency and Percentage of Musket Ball Diameters.

The pattern of musket balls indicates that the group of Native soldiers that was pursuing Wells’ group through Locus B separated as they neared the gap, with one group continuing to pursue the English from the rear to force them into the gap, and the second group moving to the west and then north in a flanking movement to ambush the English as they moved through the gap (Figures 102 & 103). Native soldiers positioned themselves on high ground along the southwest rim of the gap and poured volleys of small shot into the English soldiers as they moved through the gap. Although Wells does not mention any casualties, it seems likely the English took several based on the proximity and amount of concentrated fire.

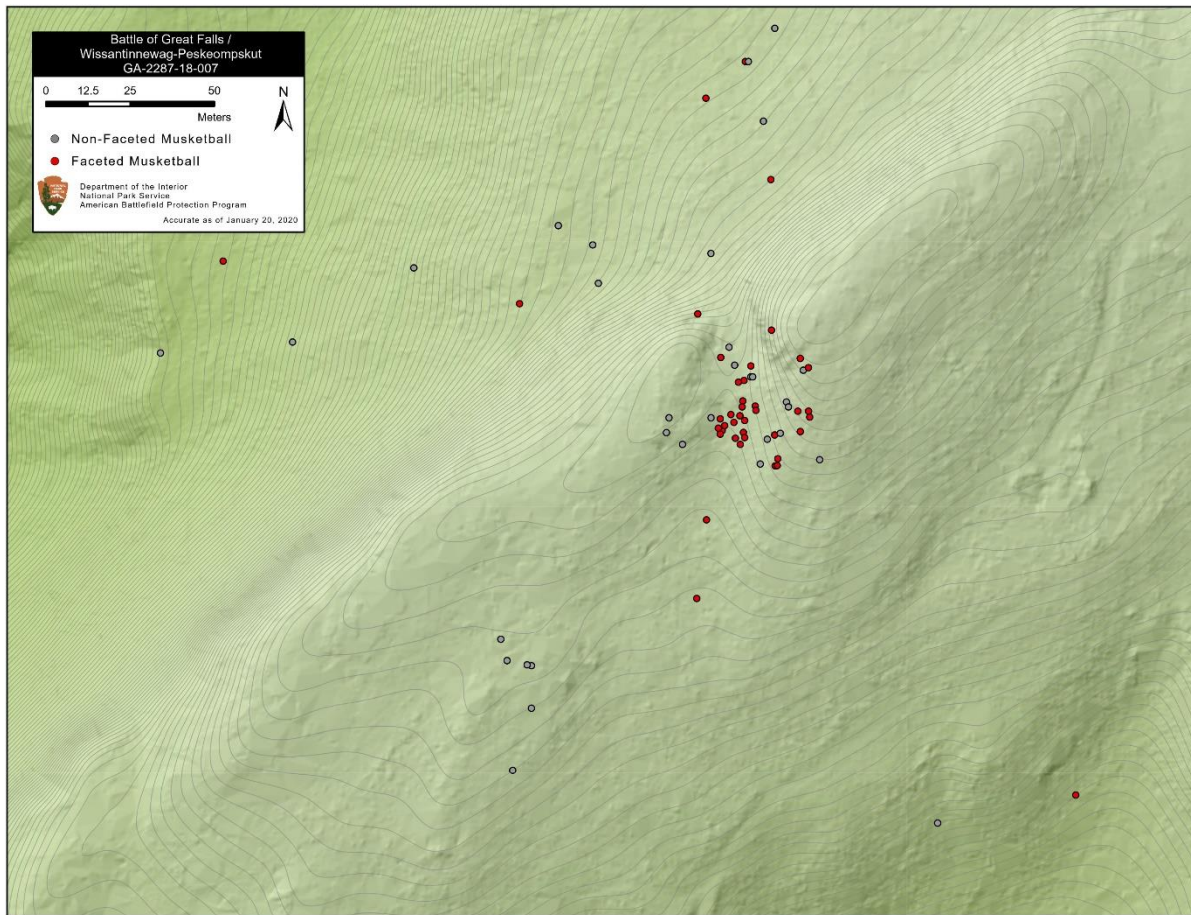


Figure 107. Locus C, Mountain Gap Musket Balls with Facets.

Locus D: Terraces: Thirty-four musket balls were recovered from Locus D and appear to represent a mix of Native and English fire (Figure 105 & 106). Fifty-nine percent (n=20) were small shot of which 55 percent exhibited facets, previously demonstrated to be a Native signature. Twenty percent (n=7) were in the pistol/carbine diameter perhaps from English fire, and 20 percent (n=7) were in the .50" diameter range likely representing a mix of English and Coalition fire.

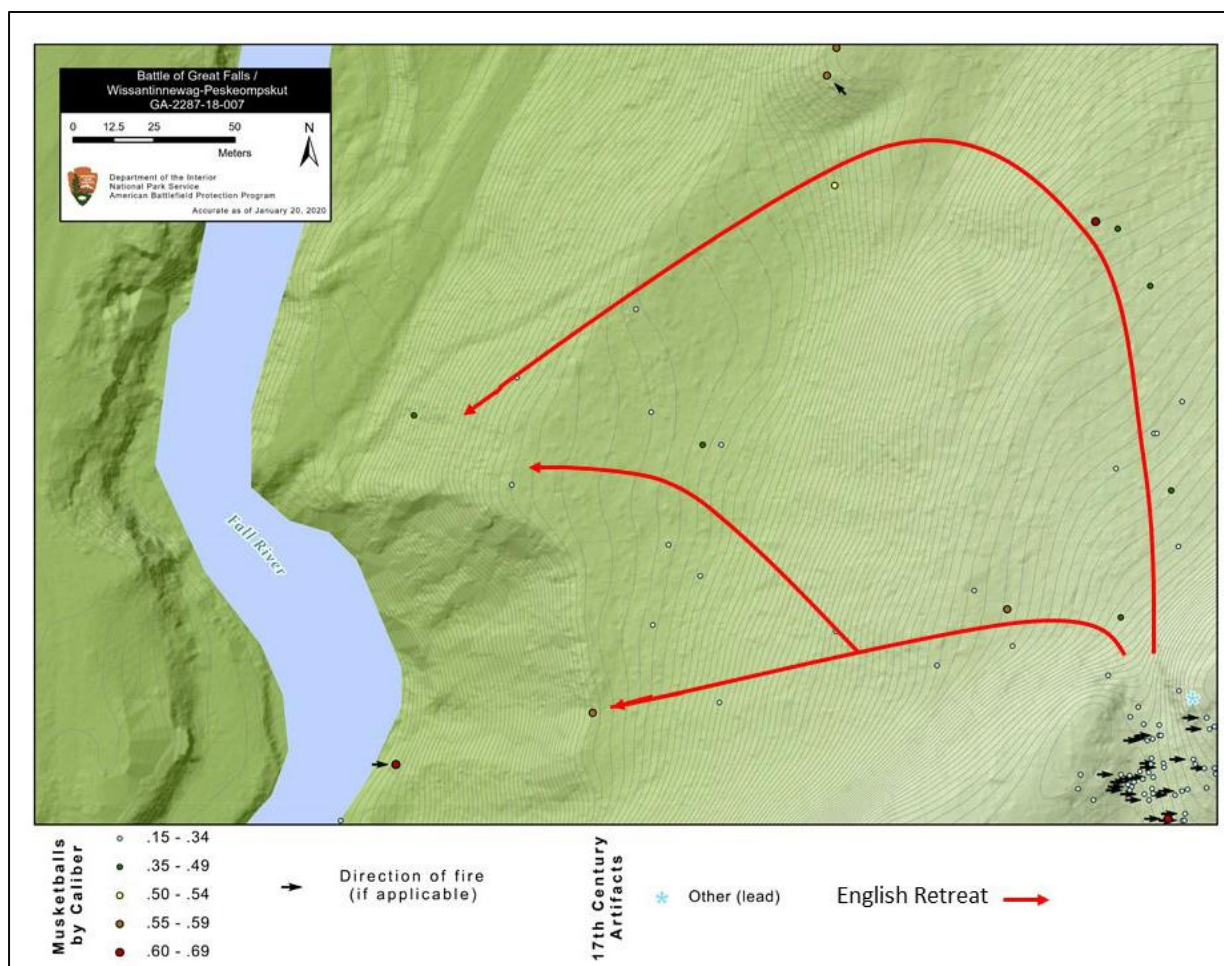


Figure 108. Locus D Musket Ball Distributions and English Retreat.

Based on the distribution of musket balls it appears that the 20 English soldiers in Wells' group dispersed after exiting the gap and took two or three different routes across the terraces to descend to the Fall River (Figure 106). Whether this was the result of close pursuit by Coalition forces that split the group or the soldiers retreated the same way(s) they traveled up the ridge is unclear, but they were definitely being pursued. There are only a few locations along the terrace edge descending to the Fall River that someone could more easily descend, but if one was being fired upon one could make the descent anywhere. One group took a westerly path and a second group a more northerly one before swinging to the west. Both paths ended up in sections of the terrace edge with a less severe slope. It is difficult to determine the direction of fire for most of the recovered musket balls and who fired them. One and perhaps two .56" diameter musket balls

appear to have been fired from the southwest to northeast along the northern route of retreat likely fire fired by Native forces.

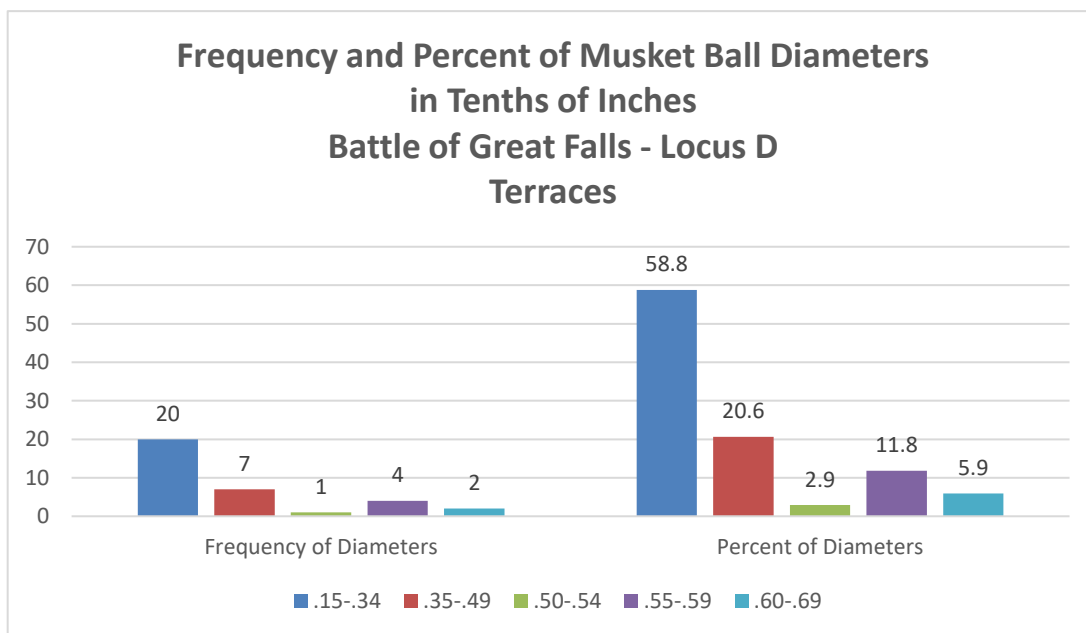


Figure 109. Locus D Musket Ball Diameters.

There were two other musket balls recovered along the northern route; an impacted .54” and .56” diameter whose direction of fire could not be determined but they are suspected to be Coalition fire from the southwest to northeast at the English retreating along the northern route. All four musket balls were fired from calibers favored by Coalition forces. Impacted .60”, .31” ,and .37” diameter impacted musket balls were recovered along the bottom of the slope adjacent to the Fall River and could only have been fired from west to east across the Fall River. While the musket balls could have been fired by the English who had crossed the river at Natives pursuing them down the terrace, they may also have been fired by Native forces from Rawson Island who had already come up the Fall River.

Locus E: English Assembly / Horse Tie Down Area. The battlefield terrain associated with Locus E is characterized by a broad, gently sloping terrace that varies between 100 and 250 yards west of the Fall River to the base of a slope that rises steeply from the 200’ to the 260’ contour interval to the edge of a terrace that demarcates Locus F. The Lower Factory Hollow terrace stretches 600 yards north from the Fall Brook paralleling the Fall River, and encompasses

an area of approximately 13 acres, more than sufficient space to tie 140 or so English horses (Figures 108 & 109).

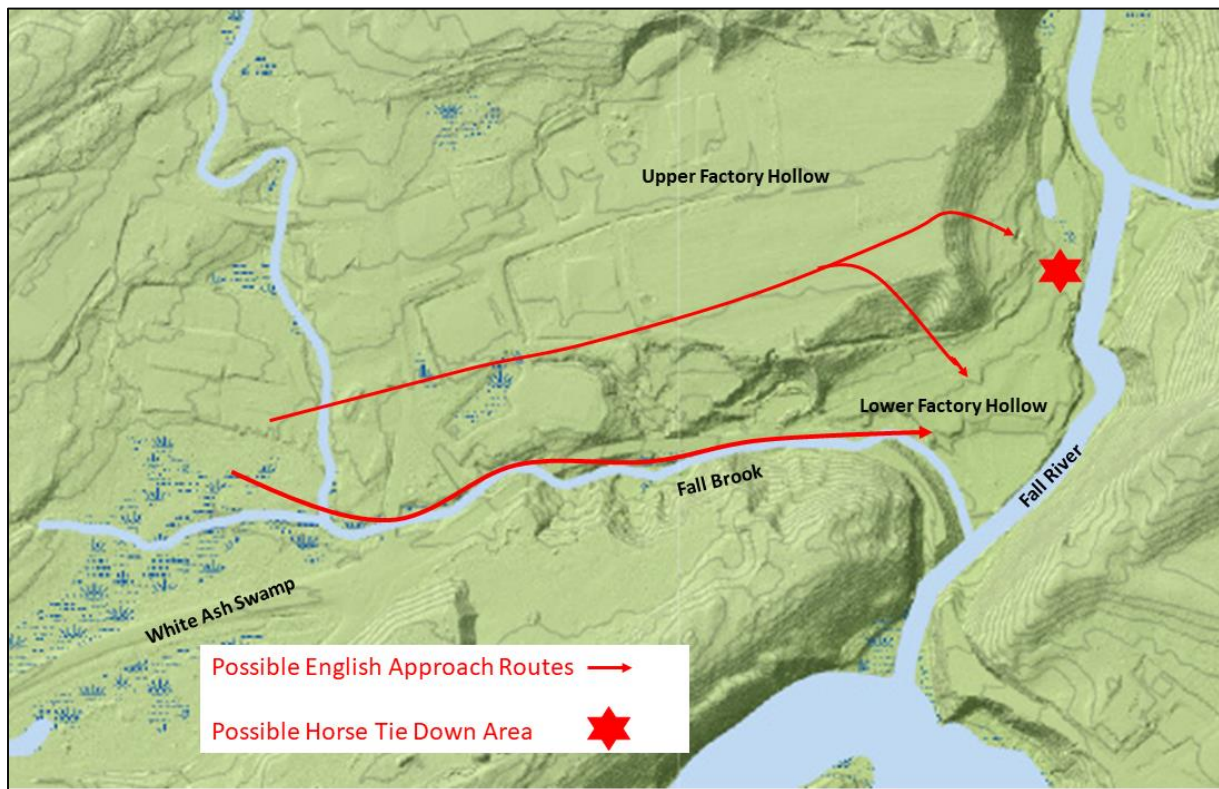


Figure 110. Locus E. Possible Routes of English Approach to Factory Hollow.

Two actions took place in Locus E; where the English dismounted and tied their horses to some small trees one quarter of a mile away, and the counterattacks from two groups of Coalition forces; one pursuing Wells' group across the Fall River from the east, and a second group from Rawson Island coming north up the Fall River to attack the English guarding the horses (as well as Wells' group). The only source that mentions the horse hitching area is Hubbard who does not indicate precisely where the horses were tied other than "When they came near the Indians rendezvous, they alighted off their horses, and tyed them to some young trees at a quarter of a mile distance," which could refer to a location anywhere in the Lower Factory Hollow area. As discussed earlier it is unlikely the English crossed the Fall River on or leading horses as it would be very difficult if not impossible to negotiate the slopes with horses.

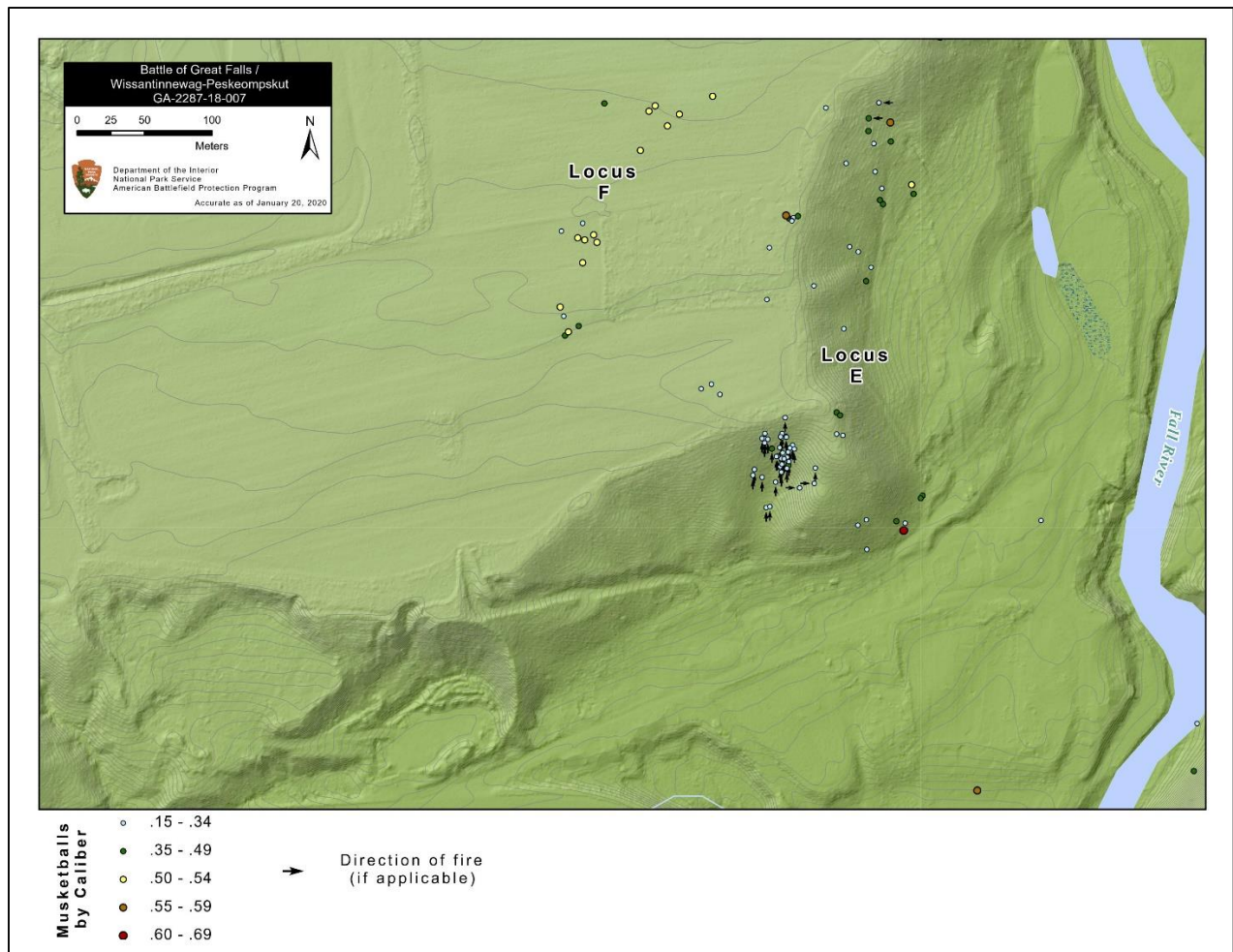


Figure 111. Loci E and F - Factory Hollow Musket Ball Distributions.

If the English descended the Fall Brook into Lower Factory Hollow and hitched their horses one quarter of a mile from where they dismounted, this area would be located in the more northerly portion of Lower Factory Hollow (Figure 108). Alternatively, the English could have approached Lower Factory Hollow from White Ash swamp using the terrace and swales leading from Upper to Lower Factory Hollow but based on Hubbard's reference the Horse Tie Down Area would still be in the northern portion of Lower Factory Hollow.

The steep incline that connects Lower and Upper Factory Hollow rises 60 feet over a distance of 225 feet (one foot per yard with 25 percent slope) which would make it extremely difficult for mounted, or even dismounted soldiers leading their horses, to ascend or descend. The slope does contain several east-west trending swales (areas of a depression or a hollow) of significantly less incline that mounted soldiers could easily ascend even at a gallop (Figures 109-

111). The swales are spaced at varying intervals along a 325 yard stretch of the slope, and all contained concentrations of musket balls (Figures 110 & 111). This may indicate that the horses were dispersed throughout Lower Factory Hollow and when the English retrieved their horses they retreated up the nearest swale to escape Coalition fire.

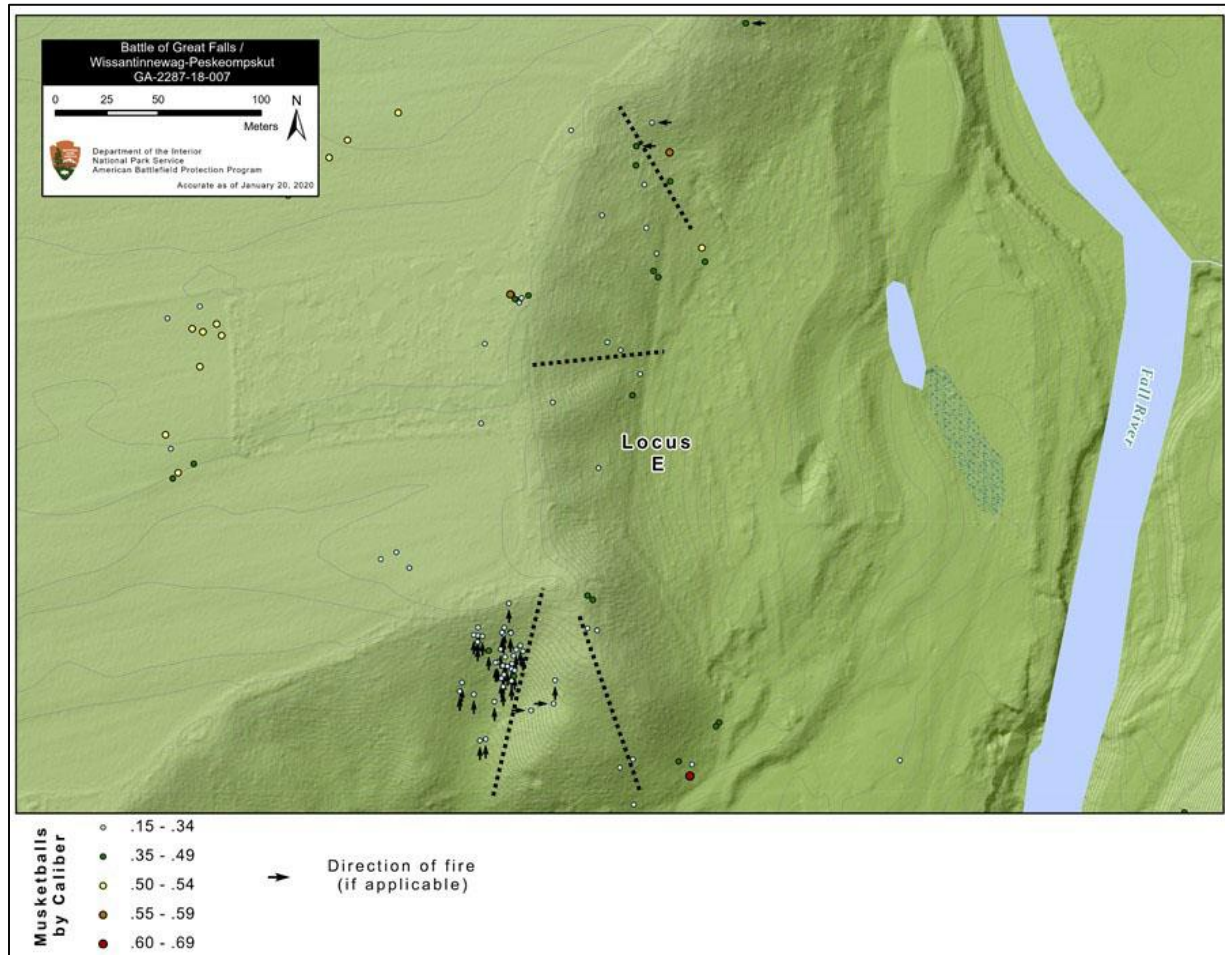


Figure 112. Locus E – Lower Factory Hollow Musket Ball Distributions, Direction of Fire and Swales.

There are a few descriptions of the action(s) that took place in Lower Factory Hollow when the English reached the spot where they hitched their horses:

...for some of the enemy fell upon the guards that kept the horses.²²⁹

In the meanwhile, a party of Indians from an Island (whose coming on shore might easily have been prevented, and the Souldiers before they set out from

²²⁹ Hubbard. *Narrative of the Indian Wars*. P. 206.

Hadley were earnestly admonished to take care about that matter) assaulted our men.²³⁰

...ab^t 20 men, y^t tarried behind to fire at some indians yt were comeing over y^e River and were left by y^e company, and were forced to dispute ye point wth y^e Enemy a considerable time before y^y cd recover y^t horses.²³¹



Figure 113. Locus E Swale. Pink Flags Mark Musket Balls.

²³⁰ Mather. *Brief History*. P. 49

²³¹ Thomas. "Rev. Stephen Williams's Notebook." P. 15.

Turner's group of 100 or so soldiers (not including the 30-40 men in Wells' group and the horse guard) probably came under attack by the group of Natives from Rawson Island as they were retrieving their horses. Alternatively, Turner's force may have already retrieved their horses and were on their way west to the White Ash Swamp when the Native group from Rawson's Island attacked Wells group and the horse guard. Either way, it appears that by the time Wells' group reached the horses the horse guards were also under attack, and Wells' group had to fight their way to the horses. At this point Wells' group faced attacks from the front and rear.

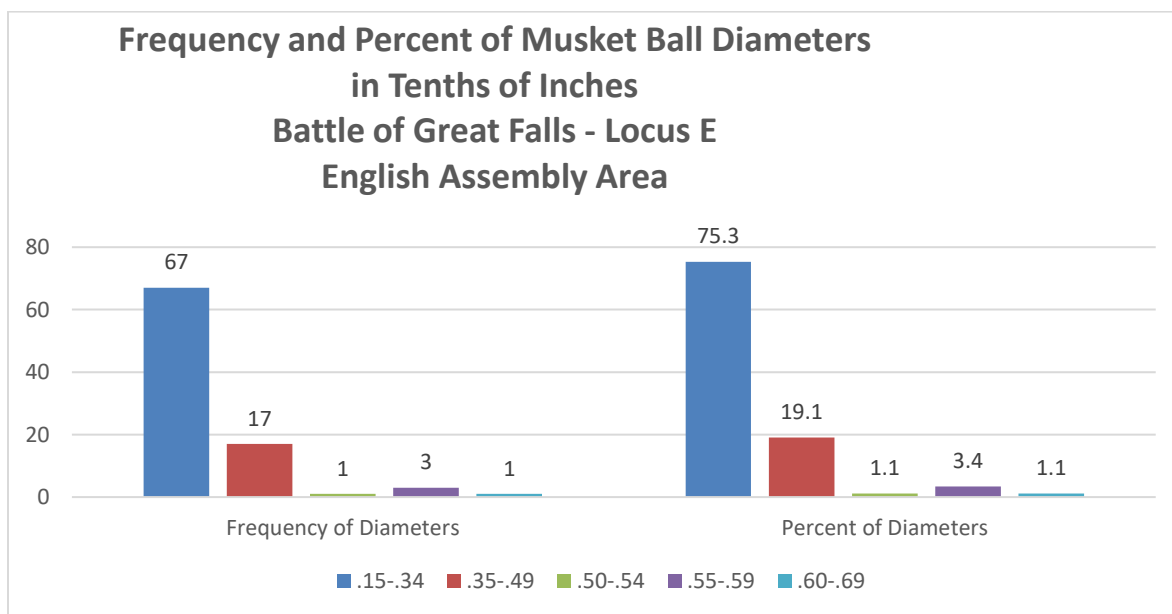


Figure 114. Locus E Musket Ball Distributions

Eighty-nine musket balls were recovered from Locus E, 87 (98 percent) were recovered directly from the swales leading to Upper Factory Hollow or at the toe of the slope leading to the swales (Figures 109-111). These distributions reflect the final phase of fighting in Lower Factory Hollow as Coalition forces attacked the now mounted English as they were trying to escape from Lower Factory Hollow and had to use the swales as their only path of retreat. Unfortunately, there is little evidence of the Coalition attacks on Wells' group or the horse guard because any battle related objects are obscured by industrial activity and related artifacts distributed throughout Lower Factory Hollow. The soil is so saturated with non-battle related iron, brass, and lead objects it proved nearly impossible to detect and recover any battle related objects.

Seventy-Five percent (n=67) of the musket balls from Locus E were small shot (.15”-.34” diameter) and of those 57j percent (n=51) had facets, considered to be characteristic of Coalition fire (Figures 112 & 113). Of the small shot in the swales for which a direction of fire could be determined, all indicated a direction of fire upslope, consistent with the hypothesis that Coalition forces were chasing the mounted English up the swales as they attempted to escape from Lower Factory Hollow (Figure 110). The association of the musket balls with the swales, distributed over a 325-yard stretch, indicates that after the English retrieved their horses they used the nearest swale to escape their Native pursuers. Nineteen percent (n=17) of the ball were in the pistol/carbine caliber range (.35”-.49” diameter) and could be from English fire. A little over 5 percent of the ball (n=5) were in the .50+” diameter range and could be associated with either English or Coalition forces (Figure 112).

There should be a recognizable signature of musket balls in Lower Factory Hollow east of the slope to mark the location(s) where Well’s group and the horse guard fought Coalition forces, but only two musket balls were recovered due to the extensive post-battle disturbance; a dropped .37” diameter and an impacted .56” diameter ball (Figure 109). These musket balls could be associated with either Coalition or English forces, but more likely Coalition forces. Three musket balls (.31,”.37”, .60” diameter) were recovered at the toe of the slope on the east side of the Fall River and are also related to the fighting in Lower Factory Hollow (Figure 114). All three musket balls were impacted and fired from west to east across the Fall River. While they could be the result of fire from Wells’ group or the horse guard directed at Natives attacking from the east across the Fall River, or overshoot from the general fighting in Lower Factory Hollow, the most probable scenario is that the fire was from Coalition forces who had come up the Fall River and directed their fire at Well’s group as they fled down the slope to escape the Native attackers in their rear.

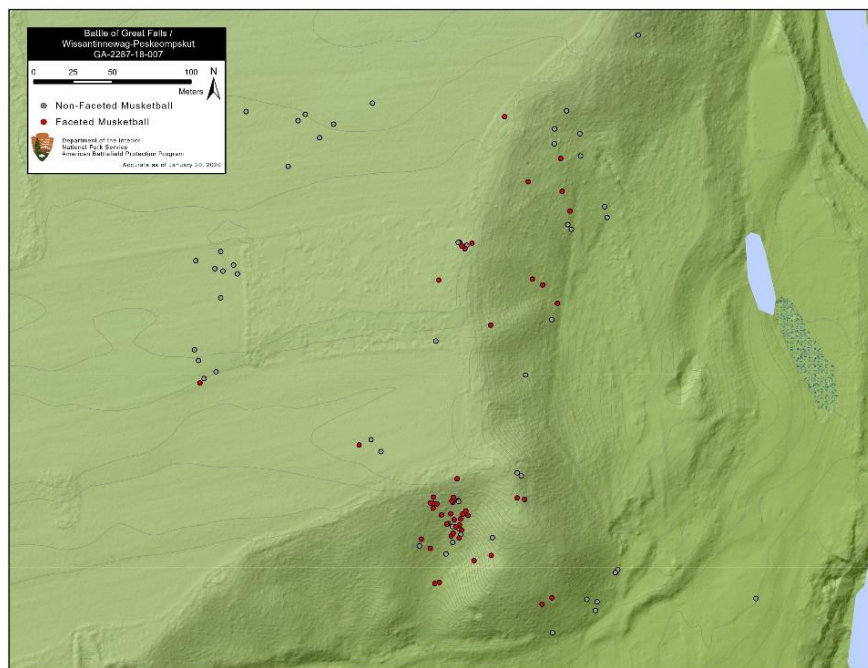


Figure 115. Locus E Musket Balls with Facets.

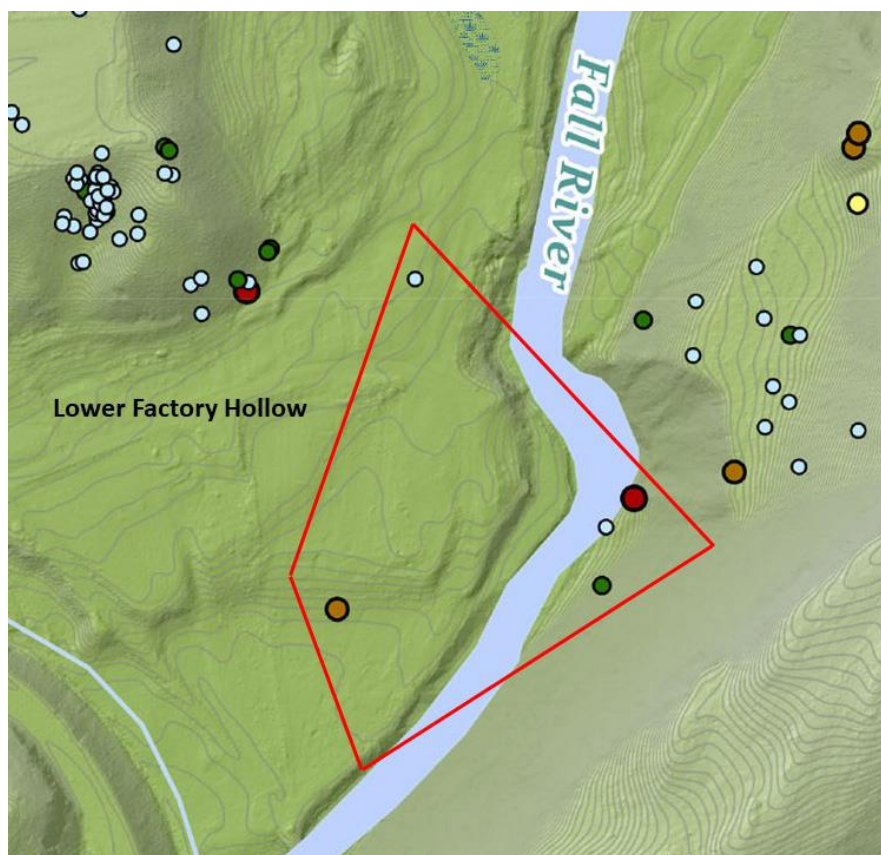


Figure 116. Locus D and E Musket Balls Associated with Fighting in Lower Factory Hollow.

Two horseshoes were recovered in Lower Factory Hollow. One was modern (cast), but the second was hand wrought suggesting it could be seventeenth-century (Figure 115). Seventeenth-century horseshoes can be highly variable with respect to shape and width, and are often (but not always) wider than later eighteenth and nineteenth century horseshoes. Figures 116 and 117 depict several horseshoes from King Philip's War contexts. Figure 116 are horseshoes from the Wheeler's Surprise site (August 2-4, 1675) in New Braintree, Massachusetts. The site is where 100 Quabaug and Nipmuc Indians ambushed a mounted contingent of 22 English and Praying Indians sent to negotiate with the Quabaug at the beginning of Philip's War. The group was ambushed as they were passing along a narrow trail between a steep hill and a swamp. Eight English and several horses were killed trying to escape up the hill. The horseshoes, several musket balls, and a shoe buckle were metal detected on the hillside and are on display in the New Braintree Historical Society. Figure 117 depicts horseshoes from the Second Battle of Nipsachuck (July 3, 1676) in North Smithfield, Rhode Island.



Figure 117. Locus E Hand Wrought Horseshoe (L) and Modern Horseshoe (R).

The Second Battle of Nipsachuck consisted of a mounted attack and envelopment by 300 Connecticut dragoons and 100 Mohegan and Pequot on a Narragansett village. Metal detected horseshoes and hand wrought horse shoe nails were recovered from the battlefield.



Figure 118. Horseshoes from the Wheeler's Surprise Site, New Braintree, MA.



Figure 119. Horseshoes from the Second Battle of Nipsachuck.

Although the horseshoe from Lower Factory Hollow is fairly narrow compared to most seventeenth century horseshoes, the form and width is similar to horseshoes recovered at Wheeler's Surprise and the Second Battle of Nipsachuck (Figures 115-117). Brass and iron rings

and two hand wrought iron buckles were also recovered from Lower Factory Hollow that could be horse tack, but given the centuries of industrial activity in Factory Hollow the objects can't be associated with the Battle of Great Falls with any degree of certainty (Figure 118).



Figure 120. Locus E Hand Wrought Iron Buckles.

Locus F: Upper Factory Hollow: Upper Factory Hollow is a large plain 50 acres in extent that measures 750 yards east to west and 350 yards north to south. Upper Factory Hollow is considered a key terrain feature as it provided the primary avenue of retreat for the English after they retrieved their horses and exited Lower Factory Hollow. The plain is bounded on the east and north by a very steep incline that forms the boundary with Locus E (Figure 119). Locus F is defined by a distribution of 19 musket balls and five pieces of possible horse tack that were recovered in three distinct concentrations within a two-acre area (Figures 119 & 121). The distribution of musket balls and horse tack only extends for approximately 160 yards east to west and ends abruptly 500 yards from the western end of Upper Factory Hollow (Figure 119). Although an additional five acres in Upper Factory Hollow were surveyed west of the concentrations, no musket balls or other battle related objects were recovered. This pattern suggests that most of the mounted English may have temporarily outdistanced their Native pursuers when they reached Upper Factory Hollow until they were ambushed at White Ash Swamp. It may also be the case that the Native fire evident in the musket distributions in Locus E and F were directed at the last of the English attempting to escape from Lower Factory Hollow. There is a fourth concentration of musket balls that is technically in Locus E and is

located at the top of the slope leading from Lower Factory Hollow where a swale empties onto Upper Factory Hollow (Concentration #4; Figure 119; Table 9). Eighty-eight percent (n=7) of the ball were small shot indicating the target was very close.

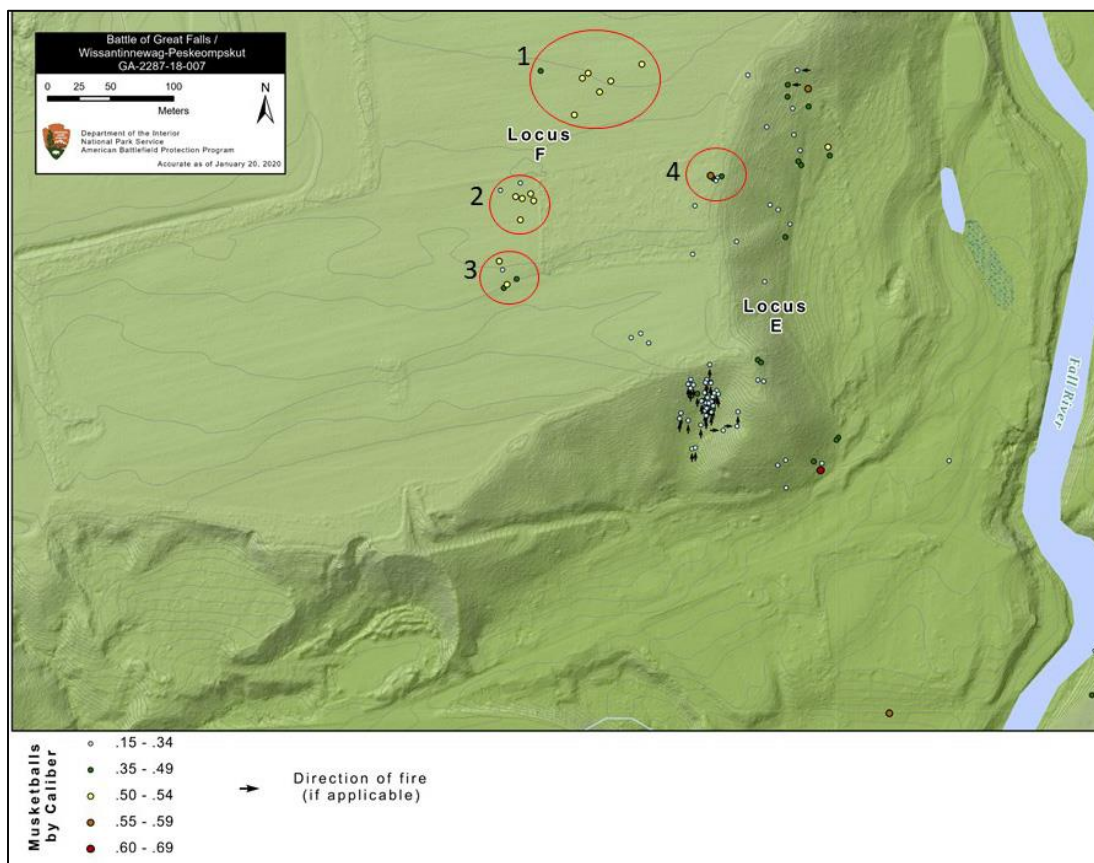


Figure 121. Locus E and F Musket Ball Concentrations.

Table 9 and Figures 121 and 122 depict the musket ball diameters and horse tack associated with each concentration. These concentrations, particularly numbers 1-3, are a unique signature not seen elsewhere on the battlefield. In Locus F (concentrations 1-3), 74 percent (n=14) of the ball are larger diameter shot fired as a single round (Figure 120). The only .45” diameter ball from Locus F included in this category has a firing hemisphere indicating that it too was fired as a single round either from a pistol or carbine.

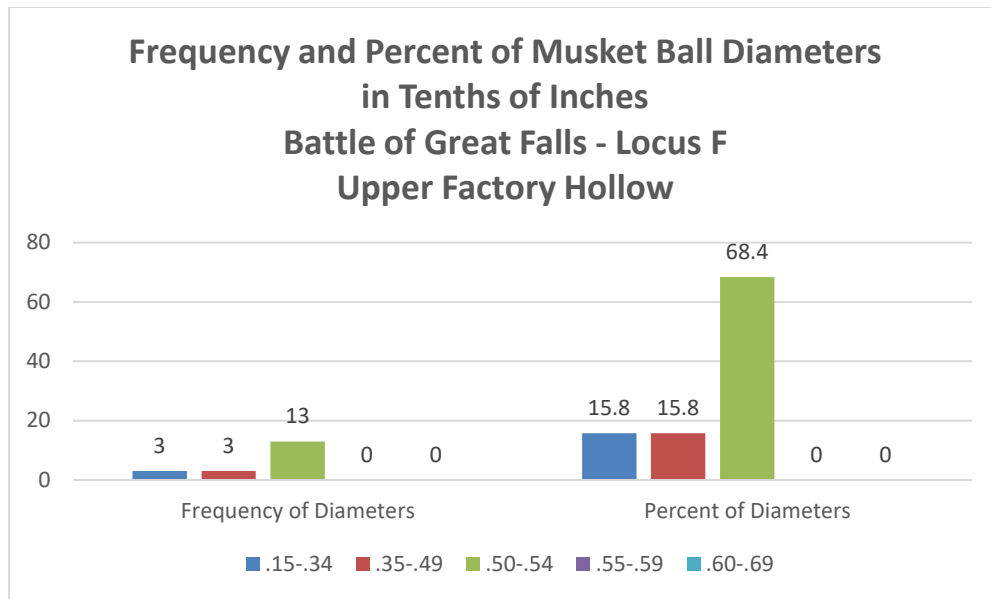


Figure 122. Locus F Musket Ball Diameters.

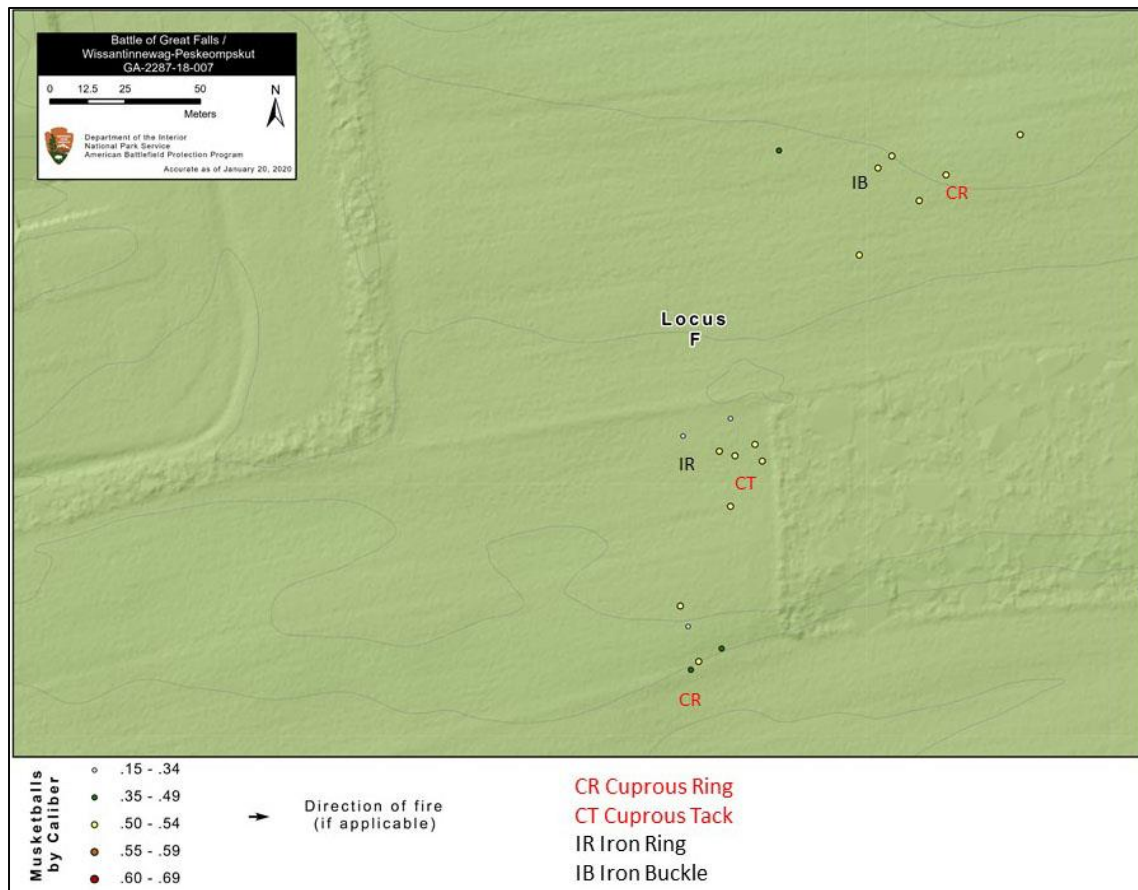


Figure 123. Locus F Musket Ball and Horse Tack Distributions.

Table 8. Locus E and F Musket Ball Diameters and Horse Tack by Concentrations

Concentration #	.59" di.	.53" di.	.52" di.	.45" di.	.35" di.	.33" di.	.32" di.	.31" di.	Horse Tack
1		5	1	1					2
2		5						2	2
3		2		1	1	1			1
4	1				2	2	3		0
Total	1	12	1	2	3	3	3	2	5

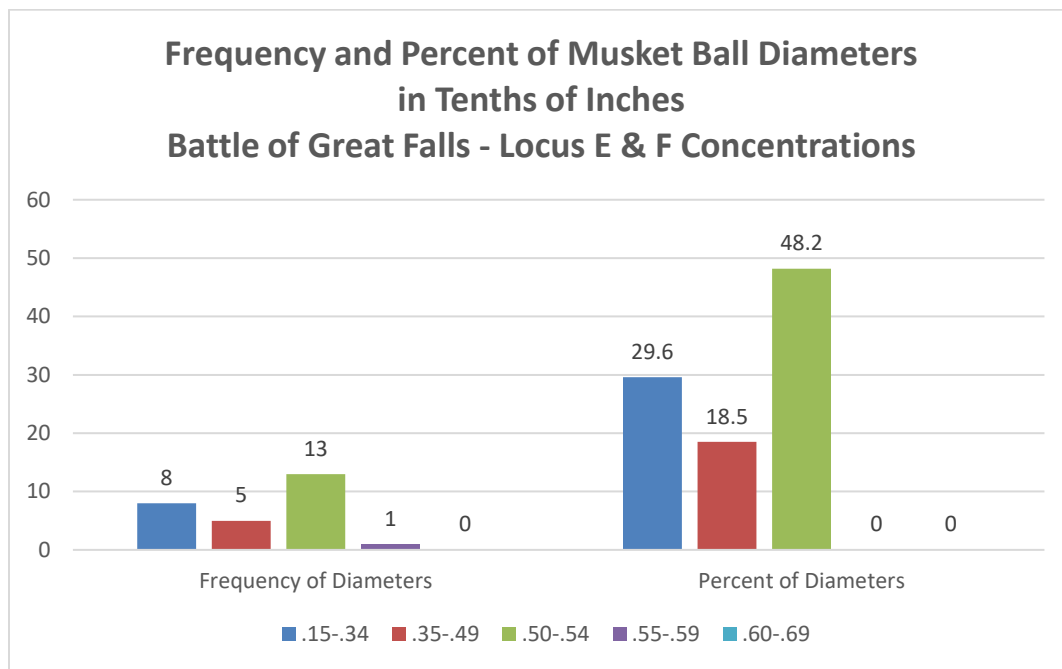


Figure 124. Locus E and F Concentrations Musket Ball Diameters.

A portion of Jonathan Wells' narrative describes the intense fighting that took place in Upper Factory Hollow. One passage in his narrative refers to an area "about a quarter of a mile [from] where they took their horses" before Wells reached the White Ash Swamp which places the location in Upper Factory Hollow assuming the horse hitching area was somewhere in Lower Factory Hollow. The passage also indicates that both English soldiers and horses were being targeted:

Jonathn Wells Esq. then abt 16 years and 2 or 3 months old, was wonded abt a quarter of a mile where they took yr horses being in ye rear shot by 3 indians. One bullet struck his thigh bone & one bullet brushd his hair, and ye other struck his horse behind, & broke part of ye bone which before had been broken by a cart wheel & never set but lapd & shatter part of ye bone & ye other part stuck where it lapped. J fond he had likd to have fallen but catchd hold of ye horse's main &

kept ye indians back by presenting his gun once or twice & wn yy stopd to charge he got from ye & came up to ye capt: & psuadd him to turn & take care of ye men in ye rear but he sd he had better lose some than lose all & then he fell into the rear again & took wth a Small company yt Separatd from others yt ran upon a parsell of indians near a Swamp & were most of ye killd.²³²

There are several scenarios which could account for the pattern of musket balls and associated horse tack in three discrete locations. During this phase of the battle, mounted English soldiers ascended the steep slope from Lower Factory Hollow using the swales to escape the Native soldiers in close pursuit. Upon reaching the flat plateau at the top of the slope the English soldiers rode as rapidly as possible to put distance between they and their attackers, who reached the top of the slope soon after and opened fire on some of the English while they were still within musket range (i.e. 100 yards). Several English soldiers and/or their horses were hit and fell as they exited the swales which drew Native gunfire to their positions. The close association of large musket balls and horse tack indicates a battlefield event in which Native soldiers positioned 100 yards to the east along the ridgeline concentrated their fire on at least three English soldiers who may have been taking cover behind, or pinned by, their downed horses.

All four concentrations of musket balls are most likely the result of repeated and concentrated fire at a single target(s) otherwise the musket balls would be distributed in a wider pattern across the area. Concentrations 1-3 are located 100 yards west of the ridge line and indicate longer-range musket fire from Native soldiers who were positioned just below and along the edge of the slope leading down to Lower Factory Hollow. The location of the musket ball concentrations 100 yards west of the terrace edge, and the lack of any musket balls recovered in the 100-yard interval between the three concentrations and the terrace edge indicates that there were no targets between the terrace edge and the three musket ball concentrations (Figure 119). The fact that the thirteen large musket balls in the three concentrations in Locus F are of nearly identical diameter suggests they could have been fired from the same caliber weapon and perhaps fired by the same individual. While it's possible that one Native soldier fired and reloaded thirteen times at the targets, it is equally plausible that several Native soldiers with identical caliber weapons were firing and reloading.

Only 16 percent of the musket balls in concentrations 1-3 are small-shot, also a unique signature compared to the rest of the battlefield loci. Small shot fired as buckshot is generally

²³² Thomas. Notebook of Stephen Williams. P. 24.

ineffective beyond 40 or 50 yards as the shot patterns spreads so far at those distances it would be hard to hit a target, and would likely not do any damage as the load would lose considerable velocity over that distance. If loads of small shot was fired at a distance of 100 yards it would also be spread over a large area. The presence of small shot only within the small concentrated areas in Locus E and F suggests they were fired at close range. The English may have been initially been fired upon with larger diameter ball and when they were disabled and out of action Native soldiers approached them and fired on them at closer range. It is doubtful that the downed English soldiers escaped from Upper Factory Hollow.



Figure 125. Possible Horse Tack Components.

Locus G: White Ash Swamp: White Ash Swamp is an east-west trending wetland that begins a few hundred yards west of Upper Factory Hollow and extends .75 miles west to within .2 miles of Cherry Rum Brook. The more level and dryer terrain along the northern boundary of the swamp could support horses and was used by the English as an avenue of retreat. A linear and fairly evenly spaced pattern of battle related objects were distributed along the northern edge of the swamp for .65 miles (Figure 122). Recovered battle related objects include 45 musket balls and a few possible seventeenth century brass and pewter buttons, and two ramrod sleeves. One of the ramrod sleeves had an intentional ‘V’ shaped cut. The purpose of the cut is not known but it may have functioned as some kind of whistle (Figure 123). It is pure speculation but perhaps the devise was used by Coalition commanders to communicate with their troops.

The distribution of musket ball diameters is similar to most of the other battlefield loci; a high percentage of .15”-.34” diameter small shot (71 percent; n=32) and lesser amounts of .35”-.49” (11 percent; n= 5), .50-.54” (2.2 percent; n=1), .55”-.59” (9 percent; n=4), and .60”-.69” (6.5 percent; n=3) diameter musket balls (Figure 124). Fifteen (47 percent) of the small shot exhibited facets indicating they were fired by Coalition forces as buckshot. The few musket balls in the .35”-.49” diameter range and a portion in the .55”-“.69” diameter range may have been fired by the English.

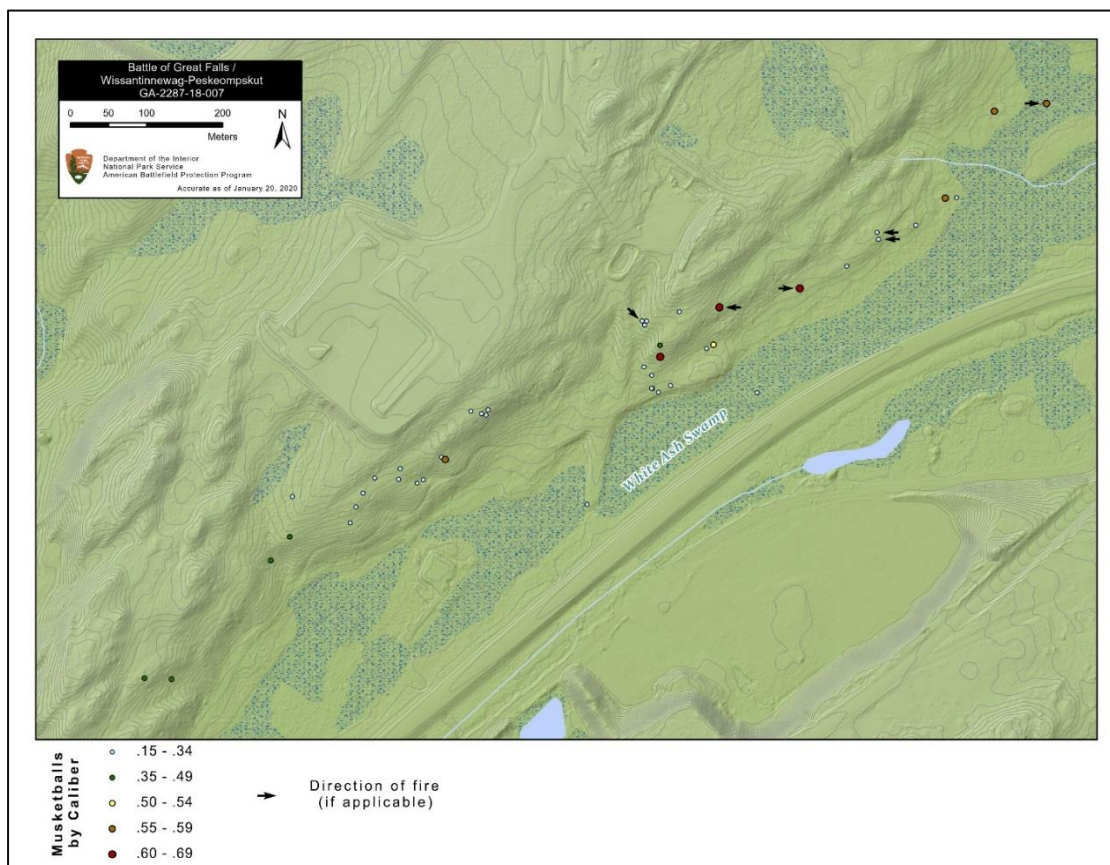


Figure 126. Locus G Musket Ball Distributions and Direction of Fire.



Figure 127. Locus G Ramrod Sleeve

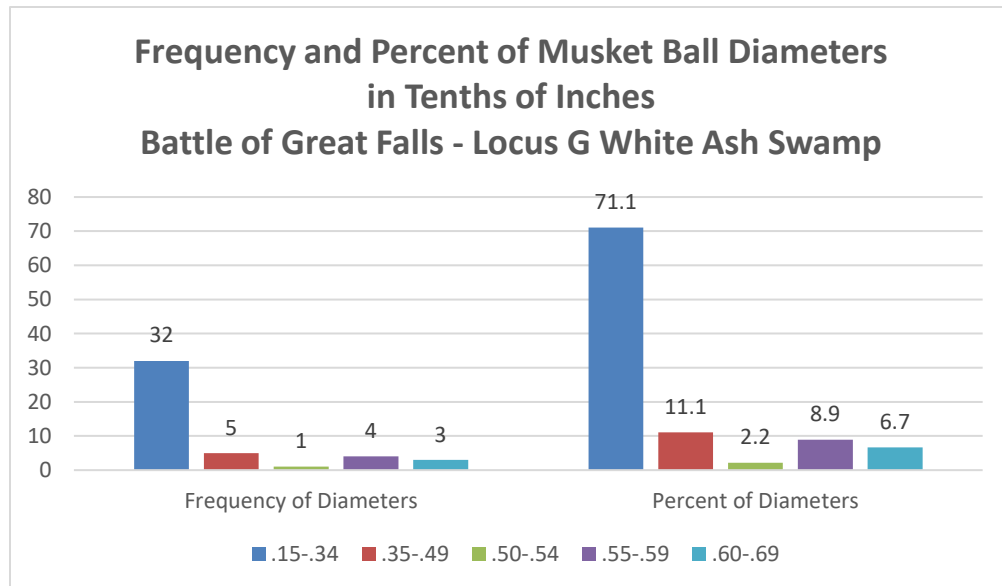


Figure 128. Locus G Musket Ball Diameters

Several sources refer to the ambush at White Ash Swamp as the battle event that caused the most significant number of English Casualties and spread disorder through the column:

and the Souldiers so cut off were supriz'd by a Party of the Enemy belonging to the *Indians* at *Deer-field-falls*, who having gotten before our forces had laid and Ambush, the chiefest execution of which was through too much fear of our Men whereby the disordered themselves.²³³

²³³ L'Estrange. *A True Account*. P. 4.

On their route the Indians had laid ambush in a swamp, but as the English were not all together, only part of them went that way. The ambushing Indians slew many of that group, in fact, about thirty-eight.²³⁴

Wells fell into the rear again and took with a small company yt separated from others y^t run upon a parcel of Indians near a swamp & was most of y^m killed. They then separated again & had about ten men left with him, and his horse failing considerably by reason of his wound, & himself spent wth bleeding, he was left with one John Jones, a wounded man likewise. He had now got about 2 miles from ye place where yy did y^e exploit in, & now y^y had left y^e track of y^e company & were left both by y^e Indians y^t persued y^m and by their own men that should have terried with y^m.²³⁵

At least two groups of English appear to have been ambushed in the swamp, a large group under Turner and perhaps Holyoke and a smaller group with Wells. Both Harris (Leach) and Wells indicate the English suffered very high casualties as a result of the ambushes. Harris claims all 38 of the English casualties were in the group “that went that way [i.e. swamp]. The ‘group’ he refers to may include all of the English that followed that avenue of retreat; the main body and Wells’ group. Wells claims he was with a small company and not with the main body and that most of the soldiers in his group was killed in the ambush. Harris also refers to a group of English who had split from the main body before the ambush in the White Ash Swamp “but as the English were not all together, only part of them went that way”.²³⁶ Perhaps this was a group under Holyoke. L’Estrange does not mention the number of casualties but states that “the chiefest execution of which [ambush] was through too much fear of our Men whereby they disordered themselves”. Regardless of how these passages are interpreted it appears the English suffered significant (if not most) of their casualties in the swamp ambush.

None of the sources indicate precisely where the ambush took place along White Ash Swamp. Wells’ reference that “He had now got about 2 miles from ye place where yy did y^e exploit” doesn’t give a specific location either, only that he had traveled two miles from Peskeompskut where “now y^y had left y^e track of y^e company.”²³⁷ This passage does suggest that the ambush took place before Wells “left ye track.”

It’s tempting to assume that the ambushes took place in a single locale and that there would be high concentrations of musket balls to mark the location(s) of the ambush. However,

²³⁴ Leach. *A Rhode Islander Reports*. P. 80.

²³⁵ Thomas. *Notebook of Stephen Williams*. P. 24.

²³⁶ Leach. *A Rhode Islander Reports*. P. 80.

²³⁷ Leach. *A Rhode Islander Reports*. P. 80.

the distribution of battle related objects indicates otherwise. It may be that there was not a specific location(s) where the ambush took place but occurred along the entire length of the swamp. The distribution of musket balls in Locus G is evenly and continuously distributed along the entire .65 miles of the northern boundary of the swamp that was surveyed, with no evidence of a higher concentration of musket balls in a particular locale (Figure 122). However, approximately 170 yards at the eastern end of the swamp was not surveyed as the landowner didn't grant permission and it is possible the area contains a higher concentration of musket balls. L'Estrange claims that the "Indians from Deerfield Falls having gotten before our forces had laid an Ambush". This indicates a separate group of Coalition forces than those who came up the Fall River or were pursuing Well's group from Peskeompskut. It is not known precisely where Deerfield Falls is located but the location may have been close enough to the battlefield to give Coalition forces sufficient time to set an ambush along the entire length of the swamp.

The direction of fire could be determined for several of the musket balls. Some were fired east to west from the swamp by Coalition forces and several larger diameter musket balls were fired from west to east in the direction of the swamp and are considered to be from English fire. Based on the direction of fire associated with a few small diameter musket balls it appears that in some locations Coalition forces had the English 'sandwiched' between the swamp and uplands (Figure 122). In spite of the narratives which give the impression the fight in the White Ash Swamp was one sided in favor of Coalition forces, it appears the English were beginning to mount a defense. Twenty-seven percent (n=12) of the musket balls were in the .35"- .49" and .55"- .69" diameter range which may be from English fire.

Lieutenant Holyoke is credited with organizing his command into a cohesive unit that was better able to defend themselves:

a fear possessed some part of the English, whereby they fell into a disorder, and thereby Captain *Turner* and several of his Souldiers were slain and others to the number of two and thirty. But Captain *Holyoke* exhorted them not to be terrified, saying God hath wrought hitherto for us wonderfully, let us trust in him still: and reducing his men into close order made a safe and a valiant retreat, and preserved the Souldiers under him; that there were but few of them slain.²³⁸

²³⁸ L'Estrange. *A True Account*. P. 4

And if Capt. *Holioke* had not played the man at a more than ordinary rate, sometimes in the Front, sometimes in the flank and reer, at all times encouraging the Souldiers, it might have proved a fatal business to the assailants.²³⁹

L'Estrange also states that "the chiefest execution of which [swamp ambush] was through too much fear of our Men whereby the disordered themselves.²⁴⁰ It is tempting to speculate that was the moment Holyoke stepped up and brought order to the column but we don't know which group Holyoke was with or even if he and his men took that avenue of retreat. However, it does appear that the English were better organized after the White Ash Swamp as the battlefield loci from the White Ash Swamp to the Deer River Ford indicate increasing amounts of English fire.

Locus H: Cherry Rum Brook Engagement: After the English reached the western end of the White Ash Swamp they traversed three hundred yards from the end of the swamp to pick up the Cherry Rum Brook which served as their avenue of retreat to the Green River two miles away. Locus H is located .55 miles downstream from where the English picked up the brook. The three hundred yards between the end of the White Ash Swamp and the Cherry Rum Brook was not surveyed but based on the nearly continuous distribution of musket balls along the brook to the confluence with the Green River it's safe to assume that the English were under fire most of the way.

²³⁹ Hubbard. *A Narrative of the Troubles*. P. 86.

²⁴⁰ L'Estrange. *A True Account*. P. 4.

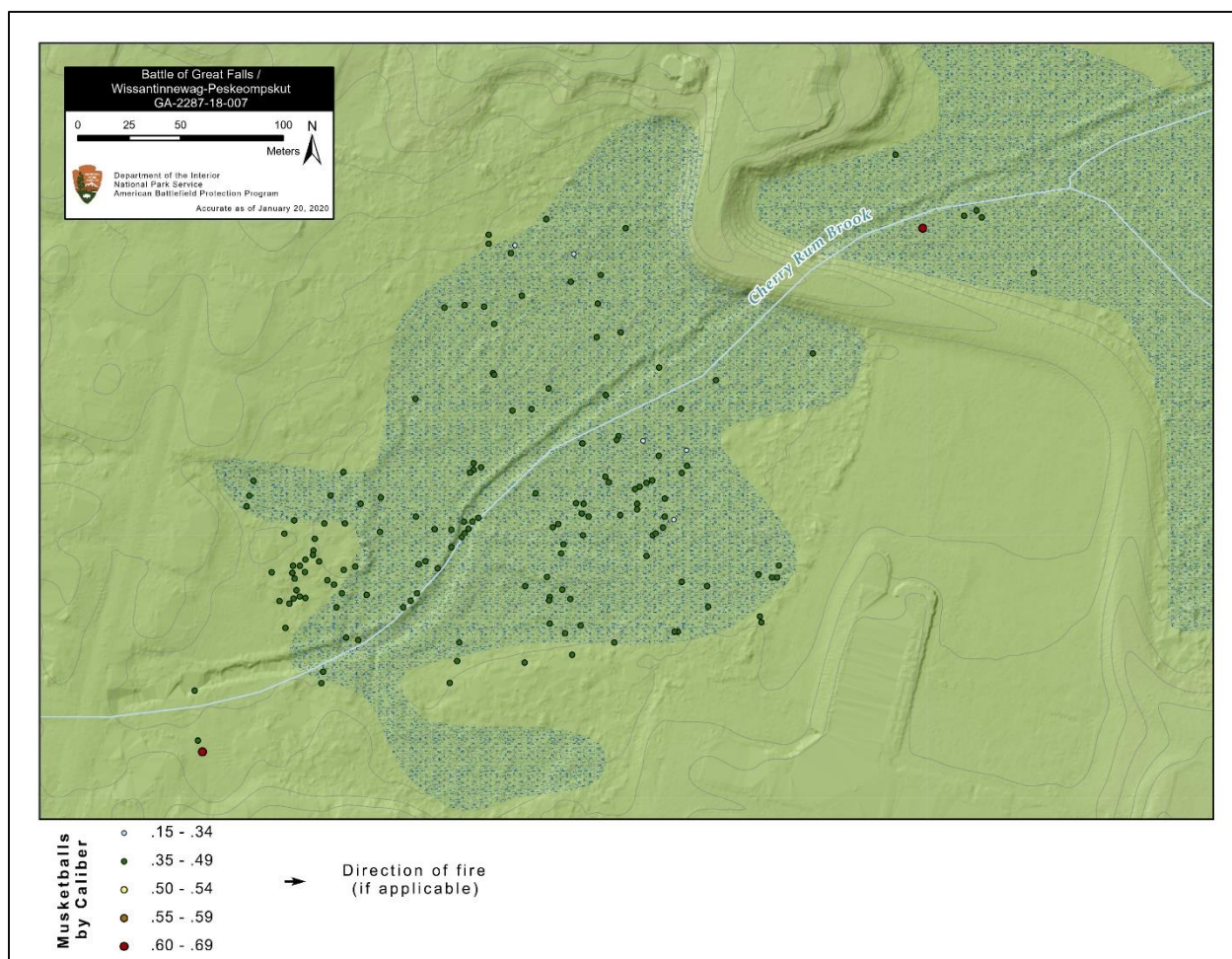


Figure 129. Locus H Spatial Distribution of Musket Balls.

The spatial distribution of musket balls in Locus H is largely associated with a six-acre portion of a 15-acre wetland bisected by the Cherry Run Brook (Figure 125). There is a 70-yard gap in the distribution of musket balls toward the eastern end of Locus H, but that area was heavily impacted by the construction of Cherry Street and an elementary school. The survey at the western end of Locus H was never completed but nonetheless there does appear to be a lower density of musket balls at both the western and eastern ends of Locus H as if the intensity of fire increased and then abated from east to west (Figure 125). The number of musket balls per acre in the eastern end of Locus H was 5/acre and in the 6-acre portion of the wetland in the central portion of the locus associated with the 6-acre portion of the wetland the density was 25/acre. There is almost a perfect correlation between the distribution of the 148 musket balls recovered and the boundaries of the six-acre portion of the wetland (Figure 125). There is a continuous

distribution of musket balls that extends between a few yards to 80 yards on north and south sides of the brook. The stream bed is 30 feet wide and composed of a firm, packed gravel base which could easily support horses. The brook was wide enough in this area that the English could have ridden two abreast. Assuming the main body of English numbered 60 soldiers at this point in the battle, and they were riding two abreast, the column would have stretched between 320- and 350- yards along the brook.

Locus H is very unique compared to the other battlefield Loci in terms of the density of musket balls over a relatively large area (6-acres), the frequency of musket balls in the .35”-.49” diameter range, and the low number of musket balls in the .15”-.34” diameter range (Figures 125-127). Ninety-five percent of the musket balls are in the .35”-.49” diameter range. As previously discussed this category of musket ball diameters is considered to be English fire from pistols or carbines. Two musket balls are in the .60”-.69” diameter range (.62” and .64”) and may also be from English fire. Only five musket balls were in the .15”-.34” diameter range and four (80 percent) had facets indicating they were fired as buckshot, a pattern generally associated with Coalition fire elsewhere on the battlefield. However, the five ball in this category were among the general distribution of musket balls in the .35”-.49” diameter range and may have been from English fire as well. Unlike other battlefield loci there is no compelling evidence to indicate a Coalition presence in Locus H.

None of the 151 musket balls in the .35-.49” diameter range exhibited facets suggesting they may have fired as a single projectile, although there are a number of factors which would preclude the presence of facets such as the amount of gunpowder, how closely packed the musket balls were and the use of wadding, and the hardness or composition of the musket ball. Additionally, five ball in the .35-.49” diameter range showed evidence of ramrod marks and one .48” diameter ball exhibited a firing hemisphere further suggesting ball in that range were fired as a single shot from a pistol or possibly carbine.

The frequency of specific musket ball diameters in the .34”-.49” range are interesting and exhibit two peaks (Figure 127). Eighty-six percent of the musket balls were either .37”-.38” or .44”-.45” diameter. Fifty percent (n=75) of the ball were .37”-.38” diameter and 36 percent (n=54) were .44”-.45” diameter. There is no obvious explanation for this pattern but it is statistically significant. It could be that most of the ball in those categories were cast from only two or a few molds and/or either reflects the caliber of the weapons carried by the English

generally, or by only a few individuals. Alternatively, the English used these diameters because they were more plentiful and readily available even though they didn't necessarily match the caliber of their weapon. None of these explanations adequately address why 86 percent of the musket balls fall into two narrow diameter categories. A more detailed analysis of the musket balls in these two categories will be conducted to determine if there are any casting flaws such as Jupiter rings or misaligned seams that indicate an association with a particular mould.

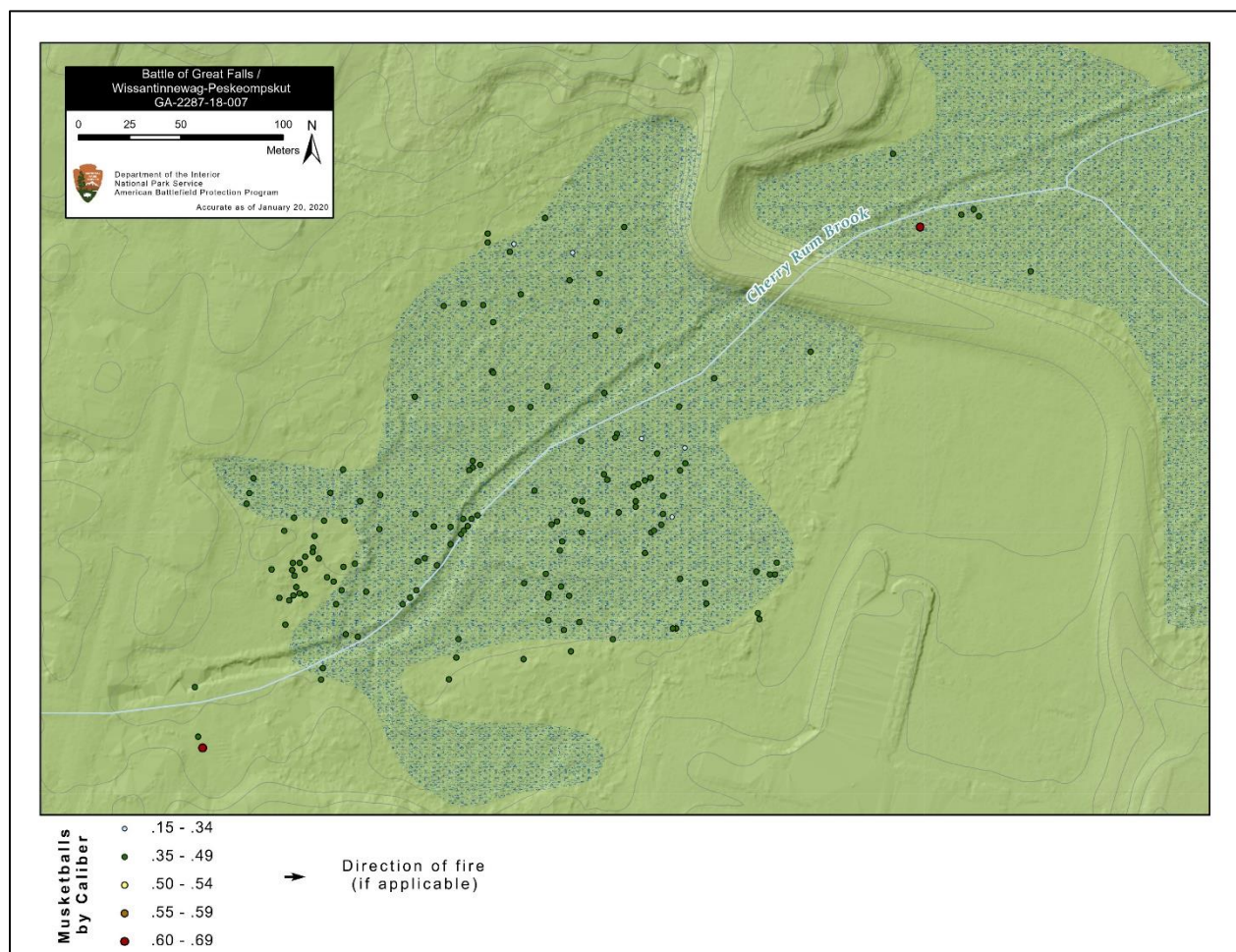


Figure 130. Locus H Musket Ball Distributions.

The musket balls in the .15"- .34" and .60"- .69" diameter range were misshapen and clearly impacted. None of the musket balls in the .35"- .49" diameter range exhibited any obvious evidence of an impact and only upon close examination under a microscope could impacts in the form of slight striations and/or gouges be identified. Obvious signs of impact usually occur if the

musket ball is deformed by impacting against something solid such as a tree or rock, or if the musket ball skips along the ground for some distance if fired at an angle more horizontal to the ground surface. Generally, slight impacts such as were observed in the .35”-.49” diameter range musket balls occur if the musket ball was fired at more of a down angle and hit the ground quickly and if the soils were largely devoid of gravel or stones. The soils in Locus H were fine silts and the only stone were very small particles of grit.

The spatial distribution, limited range of musket ball diameters and the general lack of obvious impacts raises a number of questions for which there are no ready explanations. The distribution of musket balls is correlated with wetlands. The English had been ambushed from a wetland (White Ash Swamp) just a short time and distance (.75 miles) prior. The English, particularly if they were on horseback, avoiding passing by or entering a wetland because the thick vegetation provided ideal cover for Natives to set an ambush, a strategy used by Native forces throughout King Philip’s War. Assuming the wetland may have concealed Coalition forces with the intention of ambushing the English, they may have preemptively fired into the swamp. As there is no evidence of Native fire, the wetland apparently was not occupied by Coalition forces intending to ambush the English.

The similar distribution of musket balls on either side of the brook indicates that the English were riding in the brook and directed fire to their flanks. The fact that none of the musket balls exhibited any obvious signs of impact suggests they entered the ground quickly because they were fired at a down angle from soldiers on horseback. Another factor could be the musket balls did not have a lot of velocity because the English didn’t load their weapons with a full charge of gunpowder. Hubbard states that the English were low on gunpowder which contributed to the high casualty rate among the English as well as their general disorder:

The loss that befell our men in the retreat, was occasioned principally by the bodily weakness of Capt. *Turner*, unable to manage his charge any longer, yet some say they wanted powder, which forced them to retire as fast as they could by Capt. *Tuners* order.²⁴¹

²⁴¹ Hubbard. *A Narrative of the Troubles*. P. 86.

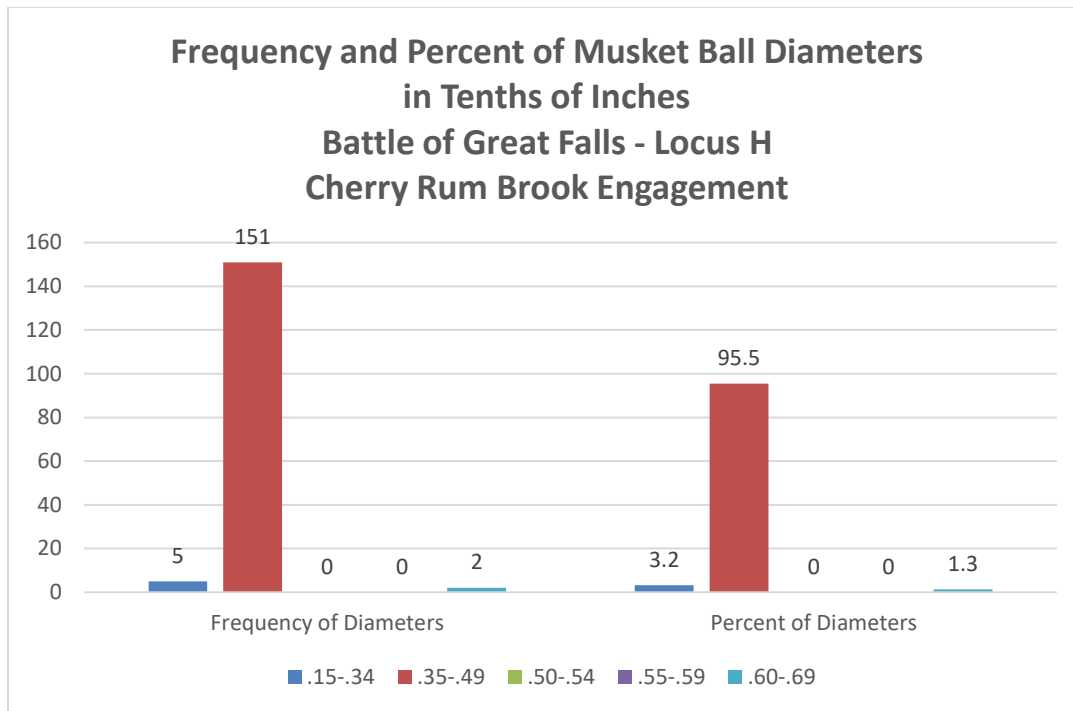


Figure 131. Locus H Frequency and Percent of Musket Ball Diameters.

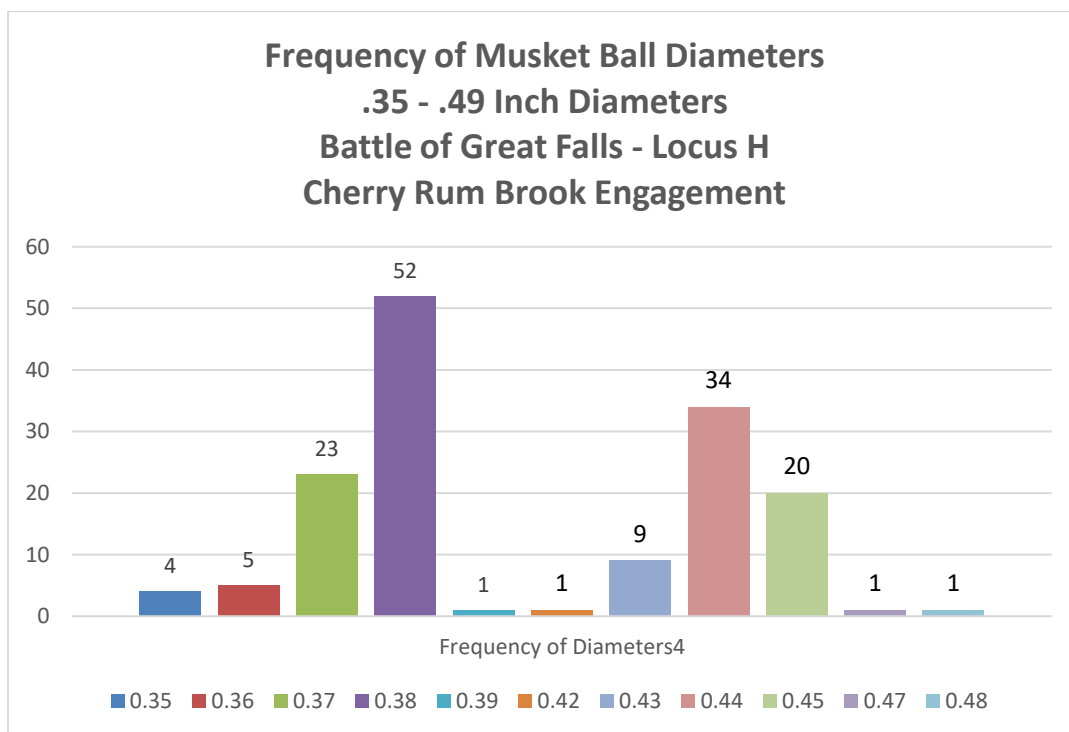


Figure 132. Locus H .35 inch - .49” musket ball diameters.

Locus I: Cherry Rum Brook: Locus I is defined by a discontinuous distribution of musket balls recovered along a 1-mile stretch of the Cherry Rum Brook. Only .5-miles was surveyed due to land disturbance or lack of landowner permissions. Battle related objects were recovered from three separate areas within the loci (Figure 128). The areas were defined based on different distributions of musket balls and terrain. In all, fifty-one musket balls and several possible seventeenth century domestic / personal objects were recovered including a ramrod sleeve, lead bead (Figure 130), hand wrought hatchet/axe fragment, two brass rings and an iron buckle.

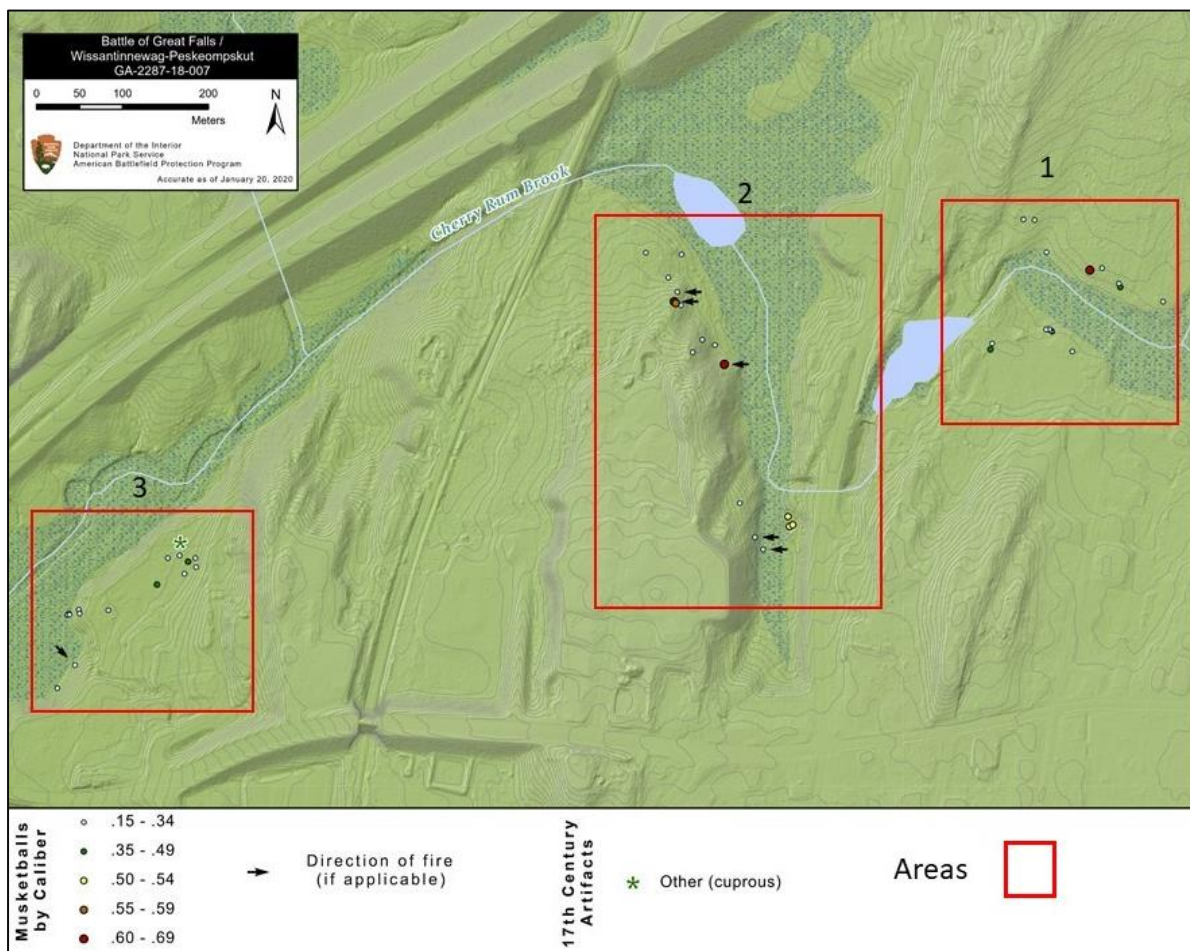


Figure 133. Locus I Musket Ball Distributions and Areas.

The Cherry Rum Brook meanders through the one-mile length of Locus I significantly increasing the danger and the amount of time if the English were traveling along the brook, as it appears they were. The English could have shortened their route and avoided wetlands and

potential ambushes in some areas if they cut across the meanders, yet they followed closely along the course of the brook. This suggests that they were moving through territory unfamiliar to them and the Cherry Rum Brook was the only landmark to guide them. In some areas the English appear to have traveled in the stream bed and in other areas they traveled along flat ground adjacent to the brook, or both. When direction of fire could be determined the fire was from east to west across the brook and sometimes from the English rear. Based on the musket ball distributions and direction of fire they were being pursued both from the rear and ambushed from the swamp simultaneously. The lead bead was found in Area 3 on flat ground on the south side of the brook probably dropped from one of the Native soldiers pursuing the English from the rear of the column. In Area 3 the musket balls were recovered along the south bank of the brook on a flat terrace thirty feet above the brook and could have only been fired by Coalition forces to the rear of the English.

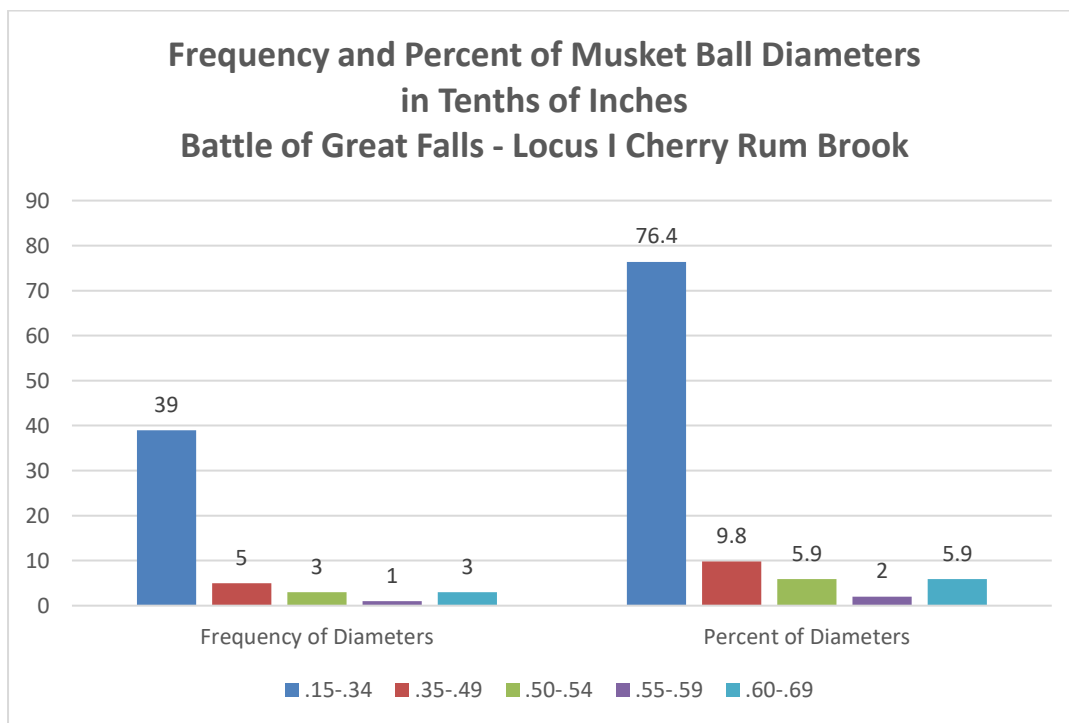


Figure 134. Locus I Frequency and Percent of Musket Ball Diameters.



Figure 135. Locus I Lead Bead.

The frequency and distribution of musket ball diameters suggests a mix of Coalition and English fire (Figure 129). Thirty-nine ball (76.5 percent) were in the .15”-.34” diameter range, five (9.8 percent) in the .35”-.49”, three (5.9 percent) in the .50”-.54”, one in the .55”-.59”, and three (5.9 percent) in the .60”-.69” diameter range. Based on the analysis presented earlier, the musket balls in the .15”-.34” and .50”-.54” diameter ranges are considered to be from Coalition fire, while ball in the .35”-.49” diameter range are mostly from English fire. Fifty-six percent (n=22) of the musket balls in the .15”-34” diameter range and one .35” diameter musket ball had facets also considered to be a Coalition signature. Three impacted .50” diameter musket balls were recovered from the south end of Area 2 believed to be from Coalition fire. All were recovered in a 200 square foot area suggesting they were fired from the same weapon at a stationary target. Although musket balls were only recovered from only .5-miles along the brook there is no reason to believe the fighting was not continuous. The terrain is so rugged and steep it is unlikely the English could put any distance between themselves and Coalition Forces.

Locus J: Green River Ford: The terrain at the western end of Cherry Rum Brook at the confluence with the Green River is so constricted and steep the English were forced to stay within the stream bed of the Cherry Rum Brook (Figure 131). As Coalition forces clearly knew the route of the English retreat, the Green River Ford was an ideal location to set an ambush. Coalition forces positioned themselves along a steep slope on the north side of the ford to fire down on the English as they passed through Cherry Rum Brook and crossed the ford. No

primary sources mention the fighting at the ford, only that Captain Turner was killed there after he crossed the ford to the west bank of the Green River:

John Wecopeak, on his examination saith...that he saw Capt. Turner, and that he was shot in the thigh, and that he knew it was him, for the said Turner said that was his name.²⁴²

Within a few days after this [the battle], Capt. *Turners* dead Corps was found a small distance from the River; it appeared that he had been shot through his thigh and back, of which its judged he dyed speedily without any great torture from the enemy.

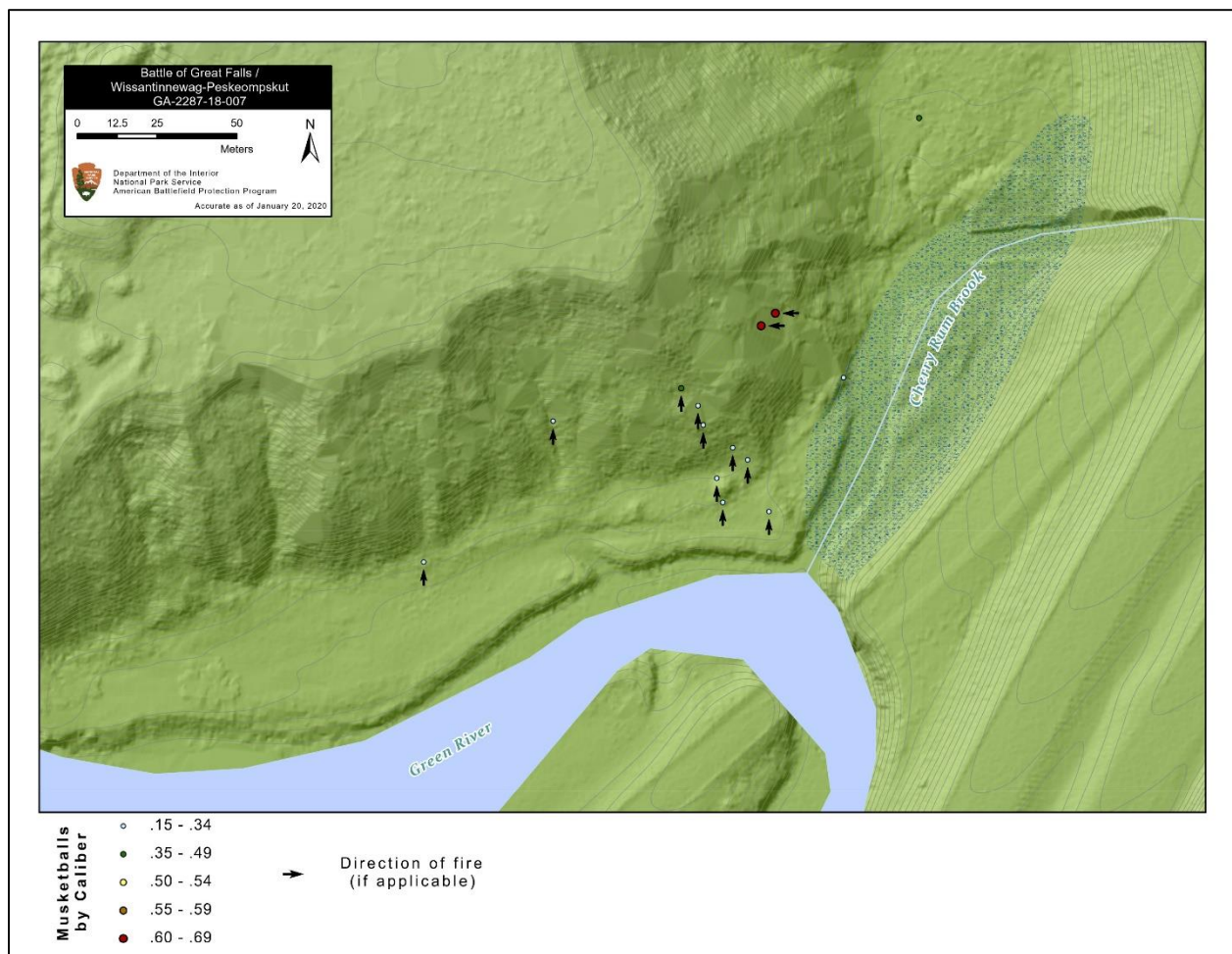


Figure 136. Locus J Musket Ball Distributions.

²⁴² Easton. *A Narrative of the causes*. P. 180.

When John Wecopeak saw Captain Turner on the west side of the ford he was alive and had received one shot in his thigh. When the English returned a few days later they observed Turner he had been shot in the thigh and back. They also noted that Turner was not tortured as if they had encountered other English dead who were. None of these observations can help determine which direction the fire came from that killed Turner. The area around the west side of the ford and Green River has been heavily disturbed from construction activities precluding the recovery of any battle related objects that might indicate if Coalition forces were waiting for the English on the west side of the ford or if they were pursuing the English from the rear.

Fourteen musket balls were recovered from Locus J, all were impacted against the slope on the north side of the ford (Figure 131). All of the shot was clearly fired by the English and directed at Native Coalition forces positioned along the slope. Horses could not ascend or descend the slope so the fire was not directed at English along the slope. The distribution of musket ball diameters is interesting as it is the only battlefield loci where all of the recovered musket balls were fired by the English. Seventy-one percent (n=10) of the shot was in the .15”-.34” diameter range of which 60 percent (n=6) were faceted. Two of the musket balls in that range appear to have been fired from pistols; a .33” with a firing hemisphere and ramrod mark and a .36” diameter with a firing hemisphere. Two musket balls were in the .35”-.49” diameter range (.36” and .40”) and two in the .60”-.69” diameter range (.62” and .63”).

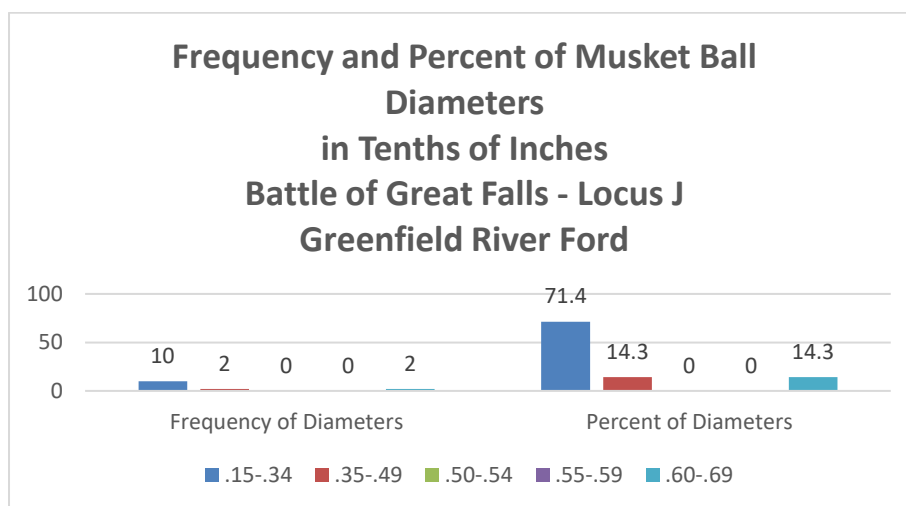


Figure 137. Locus J Frequency and Percent of Musket Ball Diameters.

Even though the sample of musket balls was small, a number of conclusions can be reached. At this point in the battle, and clearly before as well, the English were organized enough to mount a determined defense. The .33” and .36” musket balls were most likely fired from pistols, argued to be an English signature. The contention that .60”-.69” diameters are associated with English fire (although not exclusively) is supported by the evidence at Locus J. No musket balls in the .50”-.59” diameters were recovered which supports the contention that ball in these ranges are largely associated with Native Coalition fire. The only anomaly is that all but one of ball in the .15-.34” diameter range were fired as small shot (buckshot) loads, demonstrating that the English would also load their weapons with multiple loads of small shot as buckshot when the situation called for it. If so, the English may have been fairly close to the Coalition forces along the hillside for the buckshot to be effective.

Locus K Holyoke’s Retreat: When the English crossed the Green River Ford they took advantage of the large expanse of relatively open and level ground along the western terraces of the Green River to put some distance from the Coalition forces. The only impediment was the east-west trending gulley’s extending hundreds of yards from the Green River that the English had to go around as they couldn’t be traversed them on horseback. Of the .8- miles and 28-acres surveyed south of the Green River Ford only three musket balls and a few possible seventeenth century objects were recovered (Figures 133-135).

One musket ball was an impacted .58” diameter cylindrical shot re-fashioned from a .62” diameter round ball (Figure 136). This was one of only two cylindrical shot recovered from the battlefield, the other was recovered from Locus L. The cylindrical shot could be associated with either English or Coalition forces. The other musket balls included an impacted .36” diameter and an impacted .65” diameter ball, generally believed to be from English fire. The most significant aspect of the assemblage is how few and dispersed the musket balls were; only three in a 25-acre area. The pattern is unlike any other loci and indicates that once the English crossed the Green River Ford they moved very rapidly, easily outdistancing their pursuers. As no surveys were conducted between and Locus K and Locus L (Deerfield River Ford) 1.85 miles to the south, it cannot be determined at this time if this pattern characterized the remainder of the route of retreat until Deerfield River Ford.

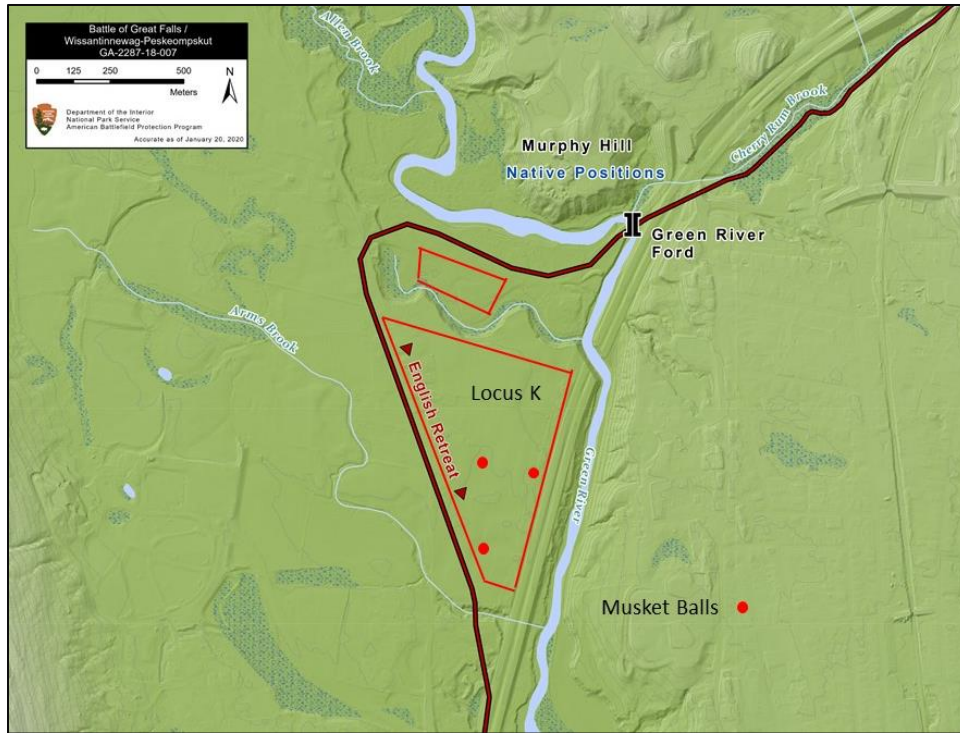


Figure 138. Locus K Surveyed Areas and Musket Balls.

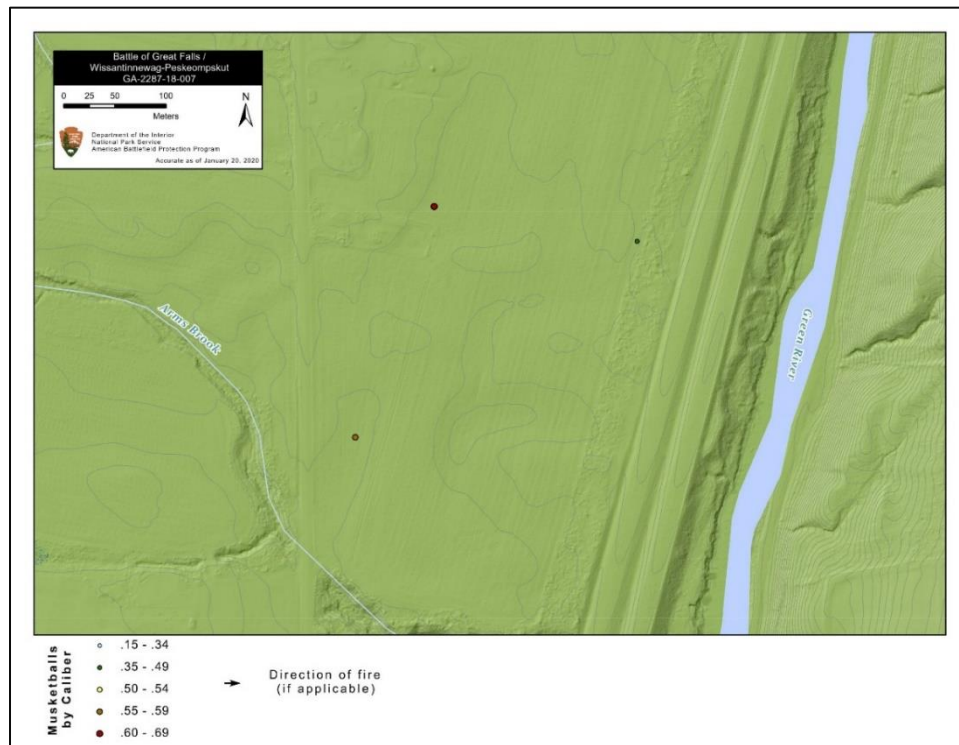


Figure 139. Locus K Musket Ball Distributions.

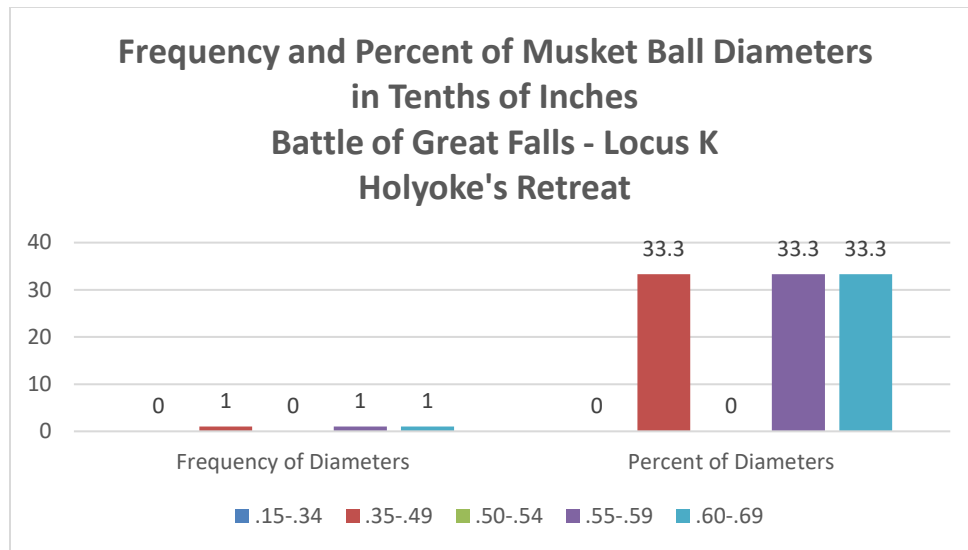


Figure 140. Locus K Frequency and Percent of Musket Ball Diameters.



Figure 141. Locus K Impacted .58" diameter Cylindrical Shot.

Locus L Deerfield River Ford: After Captain Turner was killed at the Green River Ford the remnants of his company, now likely under the command of Lieutenant Holyoke, probably

numbered no more than 60 or 80 soldiers considering the number of killed (38), an unknown number who took a different route before the White Ash Swamp ambush, a dozen or so who came into Hatfield in the days after the battle, and individuals such as Jonathan Wells and the Reverend Atherton who remained lost for several days. The English were not familiar with the landscape and kept the Green River in sight on their left as best they could considering the deep gullies cutting west from the Green River which forced them to keep as much as .3-miles (550 yards) west of the river (Figure 137).

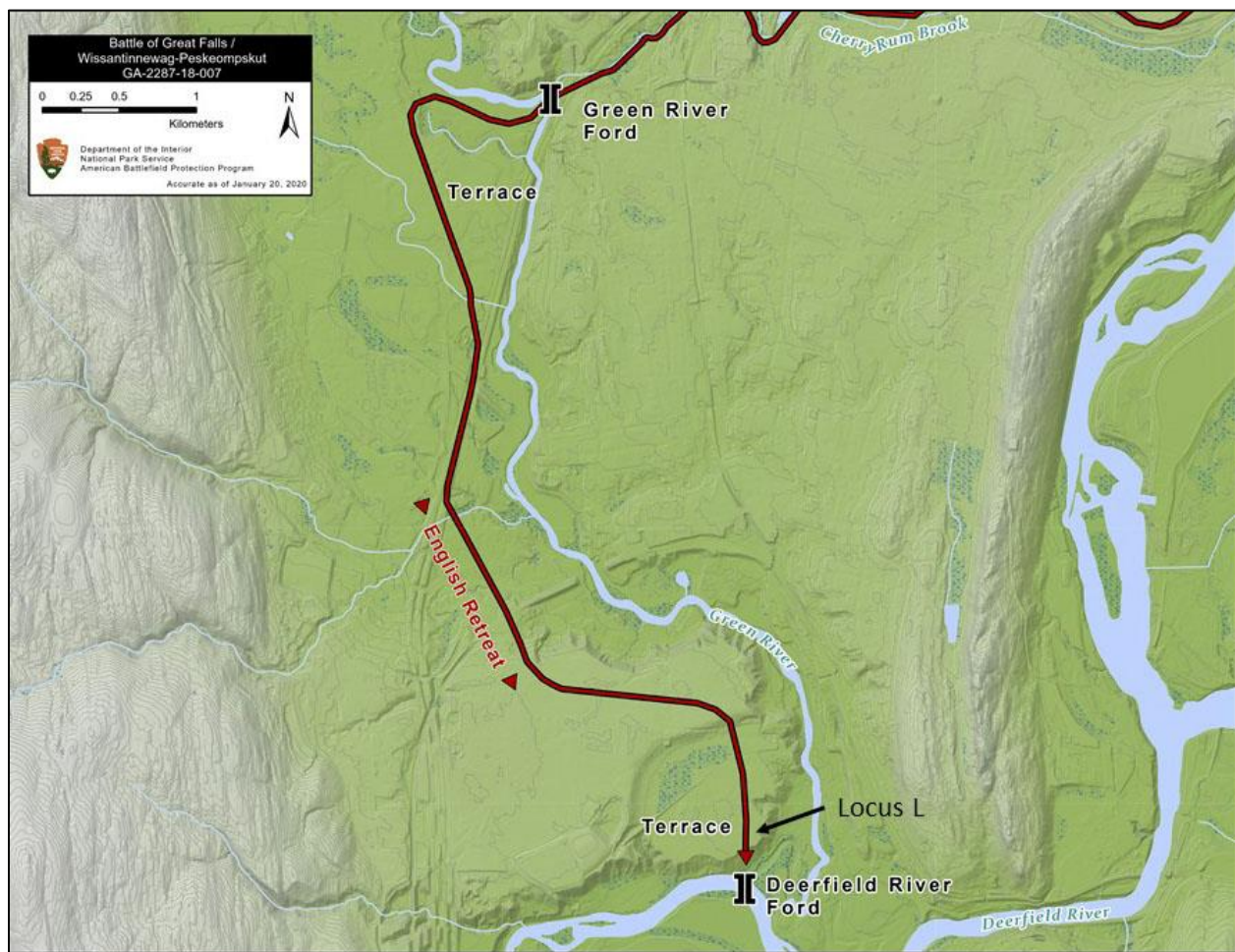


Figure 142. Locus L. Secondary Ford and Route of English Retreat.

Locus L is situated in the southeastern corner of a large terrace overlooking the Green River to the east and the Deerfield River to the south. The secondary Deerfield River Ford was used by the English as an avenue of approach and retreat and lies 40 feet below the southern

edge of the terrace (Figures 137 & 138). The slope leading to the ford is so steep that it is impossible to descend on horseback except by a very narrow trail that could accommodate only one horse at a time. This terrain feature created a bottleneck whereby the English had to wait their turn to descend to the ford and were vulnerable to Coalition attacks.

The northern and western boundaries of Locus L were determined by the distribution of musket balls and Native domestic objects. The greatest extent of battle related objects encompassed approximately 6.5-acres, but the majority of the battle related objects, as well as the Native domestic objects, were concentrated within a .8-acre area (Figure 138).

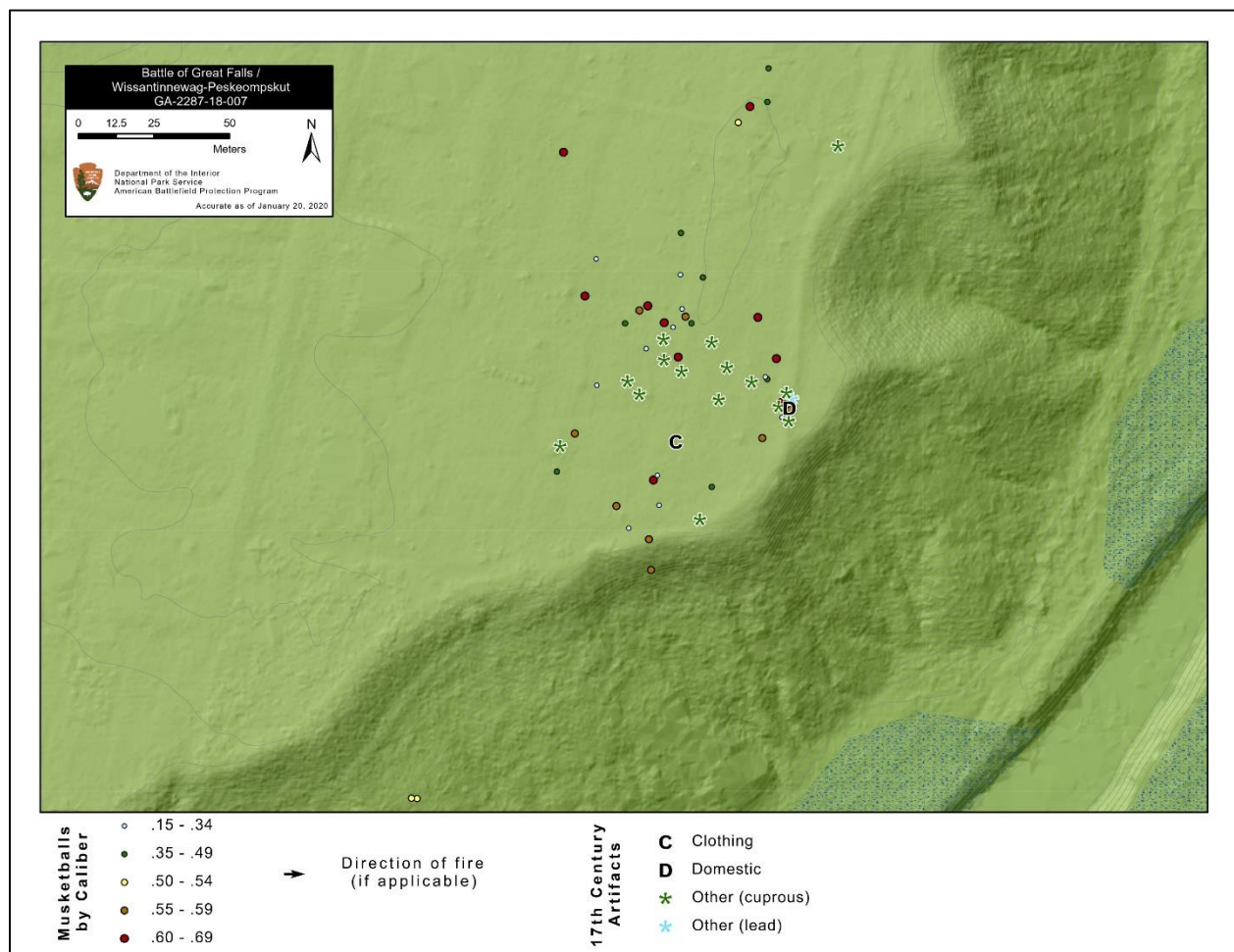


Figure 143. Locus L. Battle Related and Domestic Objects.

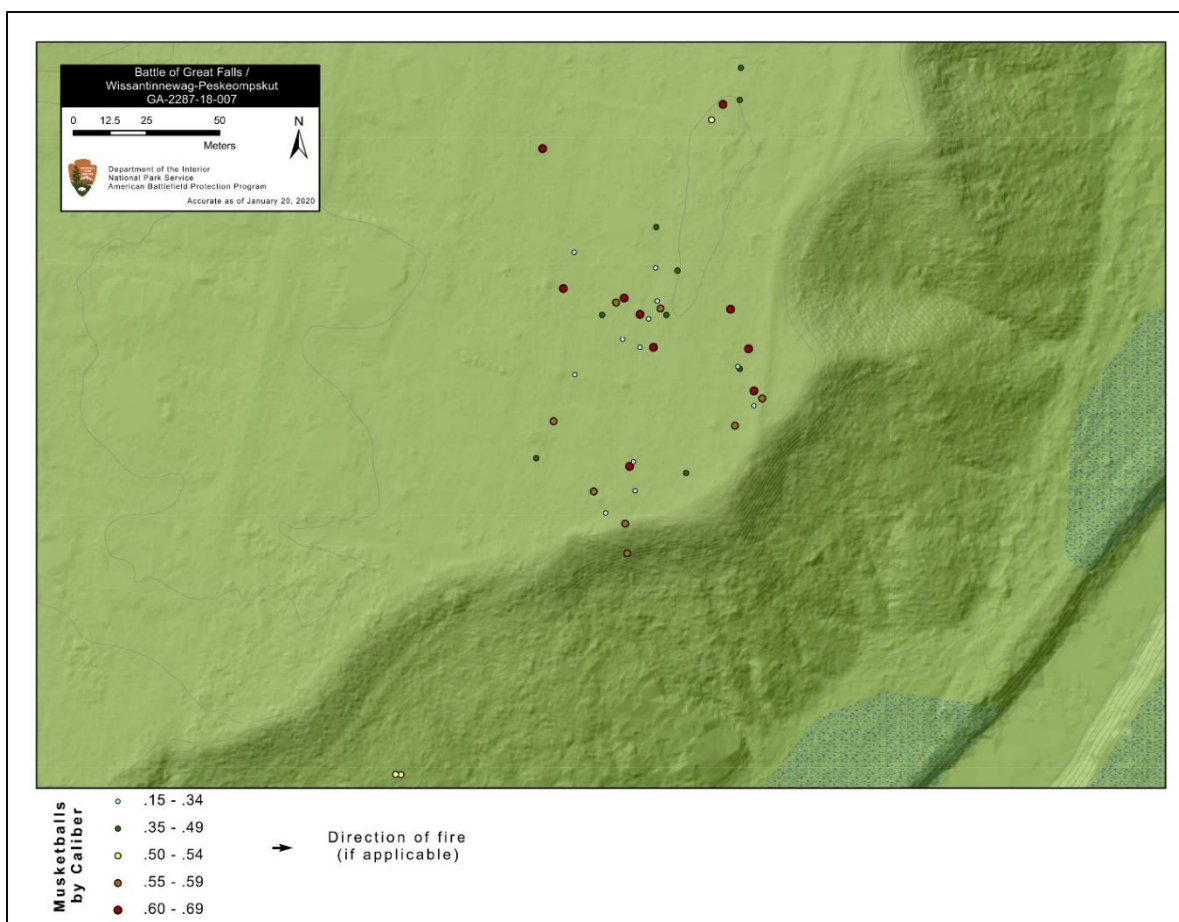


Figure 144. Locus L. Musket Ball Distributions

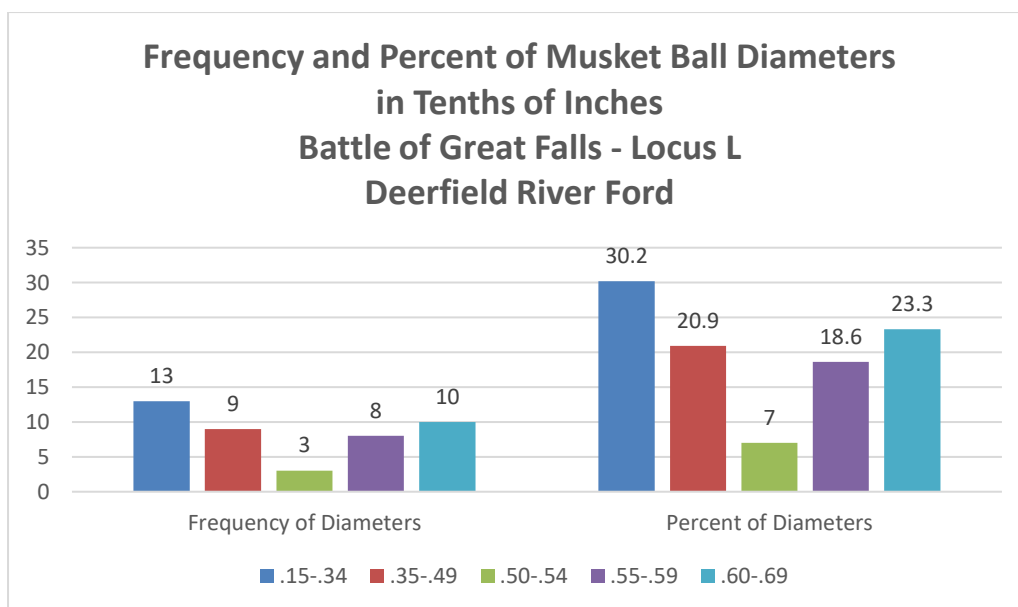


Figure 145. Locus L. Frequency and Percent of Musket Balls Diameters.

Locus L yielded a total of 43 musket balls, 41 were recovered from the terrace and two were recovered half-way down the slope leading to the ford. The two musket balls recovered from the slope were an impacted .51” and .52” diameter and could only have been Coalition fire from the edge of the terrace presumably toward the English as they were crossing the ford.

The most interesting and perplexing aspect of the musket ball assemblage is the equal amounts of large ball between .50” and .69” diameter and smaller ball between .22” and .46” diameter, a pattern unlike any of the other battlefield loci (Figures 139 & 140). The large and small diameter musket balls were fairly evenly distributed throughout Locus L. Nine musket balls in the .15”-.34” range and four in the .35”-.49” diameter range (60 percent) exhibited facets, which suggest Coalition fire. Eleven of the faceted ball were recovered within a .8-acre area indicating that they were fired as buckshot at close range. Two large diameter musket balls had unusual impact marks most likely from hitting a metal object with a sharp edge such as a sword, stirrup, or horse bit (Figure 144).

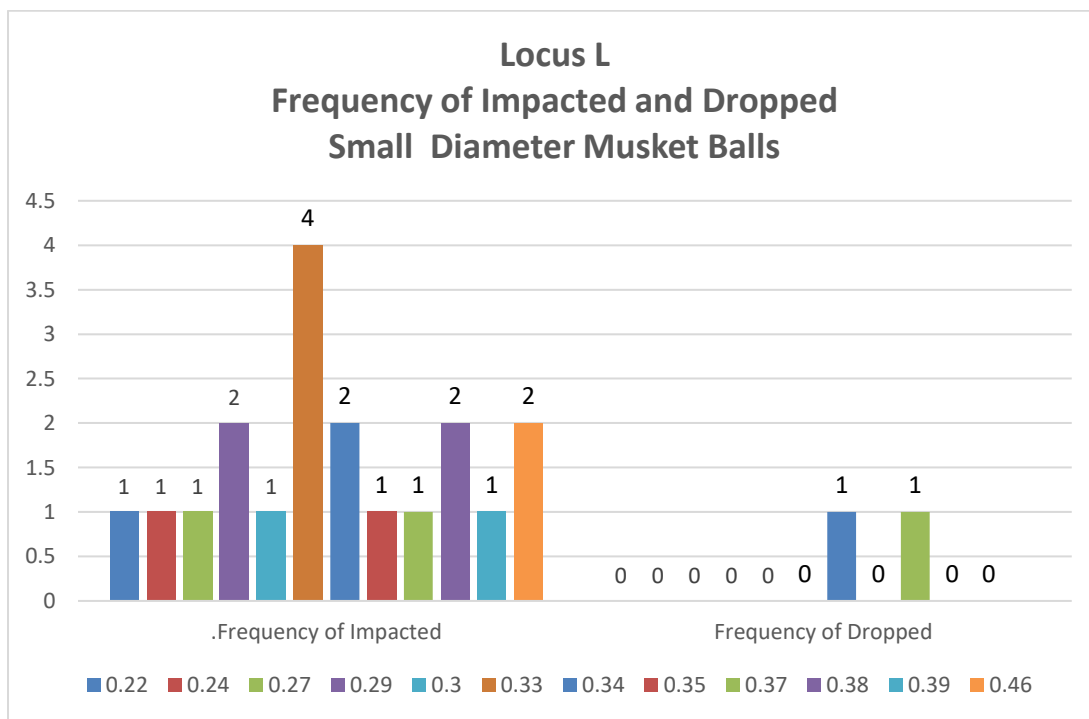


Figure 146. Locus L, Frequency of Impacted and Dropped Musket Balls.

Five musket balls (12 percent) were dropped, an unusually high percent compared to any of the other battlefield loci (Figures 141 & 142).²⁴³ Excluding Locus H, 25 percent of all dropped musket balls on the battlefield were recovered from Locus L. The relatively high percentage of dropped musket balls suggests both duress under fire as well as repeated loading and firing. Two musket balls were sandwich shot (.52” and .60” diameter) and one was a cylindrical .55” diameter shot re-fashioned from a .58” diameter round ball (Figure 143).

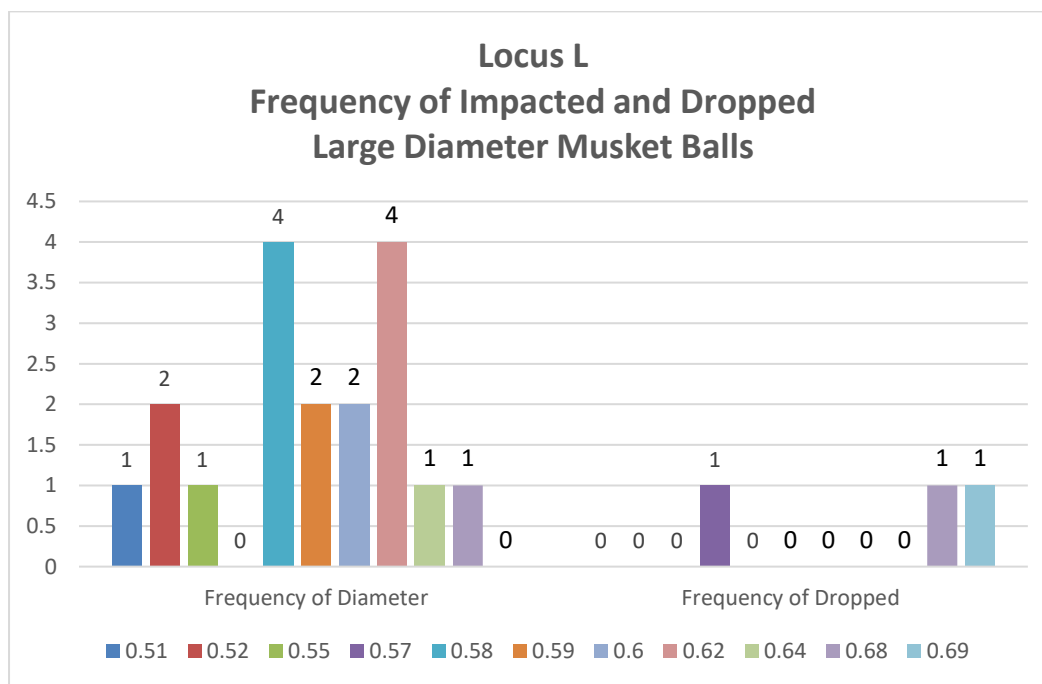


Figure 147. Locus L. Frequency of Impacted and Dropped Large Diameter Musket Balls.

The fighting that took place at Locus L was very different compared to the other battlefield loci given that most of the musket balls were recovered in a very circumscribed area and half of the assemblage were large diameter musket balls. The other battlefield loci were running fights that took place over large areas, Locus L was a stationary fight that took place within a relatively small area (.8-acres). Control of the southeastern corner of the terrace was vital for both the English and Coalition forces; the former to secure their route of retreat and the latter to prevent them from doing so. Once the English crossed the Deerfield River they could use their horses to advantage to escape the Coalition pursuit.

²⁴³ Twenty-six of the musket balls at Locus H were identified as dropped but only because they were so degraded that the striations and gouges that characterized all the other impacted ball could not be detected.



Figure 148. Locus L Impacted Sandwich Shot.



Figure 149. Locus L .52 Inch (L) and .68 Inch (R) Impacted Musket Balls.

Two scenarios present themselves. The first is that Coalition forces, perhaps from the Cheapside area, occupied the terrace first to prevent the English from using the ford. When the English arrived, they were forced to drive them away and subsequently occupied the terrace continuing to receive fire from Coalition forces as they waited to descend the slope to the ford. A more likely scenario is that the English occupied the terrace first having put some distance between themselves and Coalition forces once they crossed the Green River Ford. The distance from the Green to the Deerfield River Fords is 2.5 miles and if the English traveled at 15-20 MPH they would have reached the ford in 10-15 minutes. It would have taken Coalition forces 20-25 minutes to cover that same distance at a jog, only 10-15 minutes behind the English. Many, but not all, of the English could have descended to the Deerfield Ford in that span of time perhaps leaving 20-30 men on the terrace waiting their turn to descend. Because of the delay caused by the bottleneck, Coalition forces were able to catch up to the English and fired upon them as they waited their turn to descend to the ford.

The second scenario is more probable, as it is very unlikely that Coalition and English forces were receiving and giving fire in precisely the same location. If Coalition forces occupied the terrace first it is doubtful they would have exposed themselves to English fire in such a close formation for an extended period of time. As such, all of the impacted musket balls are considered to be from Coalition fire and the dropped musket balls are English. The mix of small and large diameter ball also suggests there were two phases of the battle. Many of the English had already descended the slope by the time Coalition forces arrived, leaving only a small group of English on the terrace. When Coalition forces arrived, they exchanged fire with the remaining English at a distance of 100-150 yards. The percentage of smaller diameter ball with facets indicates that as the number of English dwindled Coalition forces closed in on the remaining English and exchanged fire at a distance of 30-40 yards. The .51" and .52" diameter musket balls recovered on the slope leading to the ford were likely from Coalition fire in the last phase of the battle. The musket balls could only have been fired from the edge of the terrace, indicating that as the last of the English vacated the terrace Coalition forces occupied it and fired at the retreating English.

The high percentage of large diameter musket balls (n=21; 49 percent) suggests an extended exchange of fire between 100 and 150 yards. If there was an exchange of large ball, Coalition positions would be identified by a distribution of large musket balls, including

diameters of the dropped 57”,.68”, and .69” ball fired by the English 100-150 yards from Locus L. The terrain and topography preclude Coalition fire coming from any other direction except the west and northwest, but unfortunately these areas have not yet been surveyed.

Once the English crossed the Deerfield River Ford they continued to be pursued by Coalition forces through the upper Deerfield Meadows. This area was not considered for survey given the many engagements that took place in Deerfield between the English and Natives during King Philip’s War and Queen Anne’s War and the many musket balls that could have resulted from Native attacks on Deerfield.

A seventeenth-century Native domestic site was also identified at Locus L. Although the battle related and Native domestic objects are closely associated spatially, the site is not believed to have been occupied at the time of the battle. No temporally diagnostic objects were recovered to narrow the time period beyond the seventeenth-century, and the site could have been occupied before or after the battle.

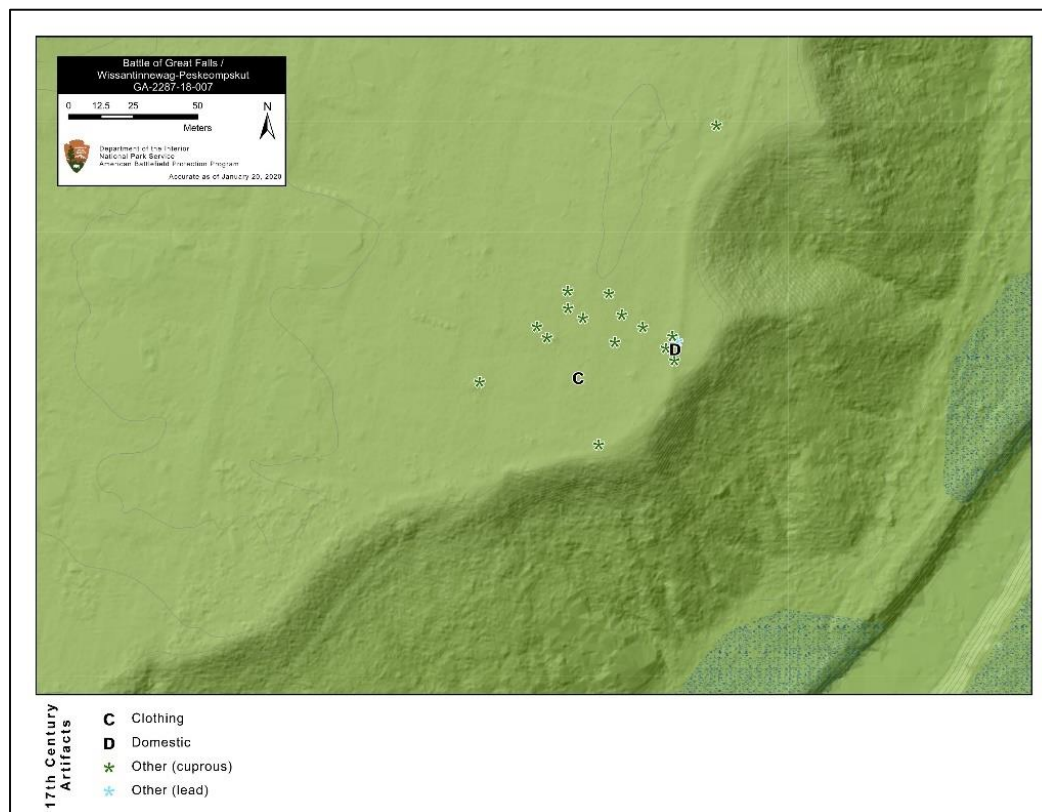


Figure 150. Locus L Native Domestic Objects.

Thirty-seven seventeenth or possibly seventeenth century objects were recovered from an area of approximately 0.6 acres (Figure 145). The objects included 13 pieces of brass scrap from reprocessing brass trade kettles, a brass finger ring, several punched or incised brass objects, a brass spoon bowl, two brass buckles, a lead bale seal, and several fragments of lead bar and scrap, and five copper nuggets (Table 9; Figures 146- 151). Several of the brass scraps were scored and several exhibited cut or chisel marks indicative of reprocessing (Figures 146 & 147).

Table 9. Locus L Native Domestic Objects.

1	brass	finger ring	complete	
1	brass	object	whole	punched
13	brass	scrap		
1	brass	scrap	fragment	punched
1	brass	spoon	bowl fragment	
3	brass	tack	complete	
1	brass	object	complete	incised
1	coarse earthenware		base shard	
5	copper	nugget		
	cuprous	buckle	fragment	
2	cuprous	buckle	fragment	
1	lead	bale seal	complete	
1	lead	bar	fragment	
1	lead	bead	whole	
2	lead	scrap		
1	lead	sheet	fragment	
1	pewter	fragment	fragment	
1	pewter	spoon	bowl	

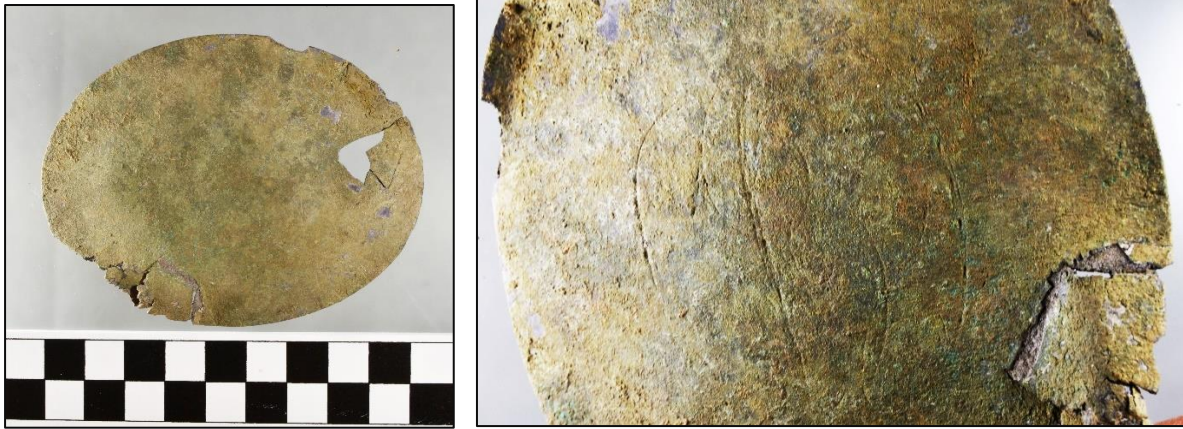


Figure 151. Locus L Etched Brass Object



Figure 152. Locus L Domestic Objects. Left-Right; Brass Tack, Brass Ring, Cut Brass Scrap, Brass Tack.



Figure 153. Copper Nugget

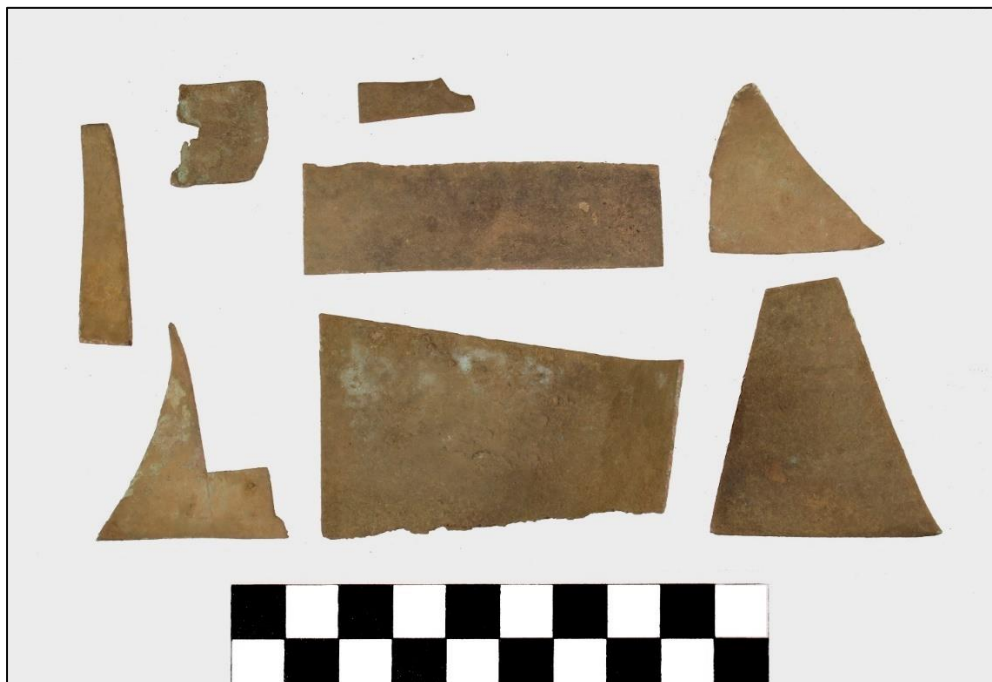


Figure 154. Locus L Cut Brass Scrap.



Figure 155. Locus L Brass Scrap with Score Mark.



Figure 156. Locus L Lead Bead.

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IX Appendices

Appendix I – Artifact Descriptions & Artifact Inventory

During the course of the project, MPMRC archeologists surveyed 1.5 miles of the Battle of Great Falls/Peskeompskut Core Area which yielded a total of 284 lead musket balls, all of which were considered seventeenth-century. An additional 91 objects of a domestic or equipment nature were recovered that were considered seventeenth or possibly seventeenth century. These objects were a mix of domestic (e.g., brass scrap, lead bar, molten lead, lead beads, spoon fragments, pewter buttons, iron awl, iron axe fragments, rose head nails) and non-domestic objects (e.g., buckles, horse tack). Lead shot was by far the most commonly encountered battle-related artifact of a total of 375 seventeenth or possible seventeenth-century objects recovered.

In most cases, the military equipment, ammunition, and personal items recovered from the surveyed portions of the Battle of Great Falls/Peskeompskut Core Area (Site 300-TFALLS) could have been feasibly carried by either English or Native combatants. Examples include pewter buttons or buckle fragments (Figure 86). In some cases, some personal items were determined to be of Native origin based on their archeological context and as a result of comparative research. This includes several lead beads, a punched cuprous disk, and a lead ornamental object (Figure 87). Several pieces of Seventeenth-century horse tack are likely associated with English forces who were mounted during their approach and retreat from the Falls River. Since both English and Native soldiers were armed with similar firearm weaponry and therefore it is difficult to determine which firearm-related objects (lead shot, firearms parts, accoutrements) were originated from Native or English combatants (Figure 88). Ultimately, the context in which the artifacts appear is the most important factor in attributing the object to a either side. Comparing the physical landscape where the artifacts were located to the historical record, through the lens of KOCO analysis, many of the artifacts can be reasonably associated with Native or English combatants.²⁴⁴ Although Native and English objects undoubtedly overlap on the battlefield, great efforts are made to deconstruct recovered battlefield objects in order to attribute the proper artifact to the appropriate combatant.

²⁴⁴ See Section VII. Battlefield Reconstruction.



Figure 157. European or Native Personal Items



Figure 158. Native personal items



Figure 159. Impacted musket balls

Inv. #	Unit	Depth	Soil	Type	Variety	Fragment	Period
1	GPS	4	Fill	cuprous	unidentified	fragment	
2	GPS	14	Ap (Plowzone)	Lead	bullet	fragment	
3	GPS	10	Ap (Plowzone)	Lead	unidentified	fragment	
4	GPS	10	Ap (Plowzone)	Lead	unidentified	fragment	
5	GPS	20	Ap (Plowzone)	Lead	musket ball	.64" diameter	17th century
6	GPS	17	Ap (Plowzone)	Lead	unidentified	fragment	
7	GPS	8	Ap (Plowzone)	lead	unidentified object		
8	GPS	10	Ap (Plowzone)	lead	cylinder		
9	GPS	6	Ap (Plowzone)	lead	musket ball	.42" diameter	17th century
10	GPS	6	Ap (Plowzone)	lead	unidentified object		
11	GPS	6	Ap (Plowzone)	lead	unidentified	fragment	
12	GPS	7	Ap (Plowzone)	porcelain		rim shard	
13	GPS	7	Ap (Plowzone)	lead	unidentified	fragment	
14	GPS	7	Ap (Plowzone)	lead	unidentified	fragment	
15	GPS	7	Ap (Plowzone)	lead	unidentified		
16	GPS	10	Ap (Plowzone)	cuprous	unidentified object		
17	GPS	13	Ap (Plowzone)	lead	bale seal		
18	GPS	12	Ap (Plowzone)	coarse earthenware	milk pan	rim shard	19th century

19	GPS	12	Ap (Plowzone)	lead	bale seal		
20	GPS	12	Ap (Plowzone)	lead	bale seal		
21	GPS	10	Ap (Plowzone)	cuprous	buckle		
22	GPS	10	Ap (Plowzone)	kaolin pipe		bowl fragment	19th century
23	GPS	10	Ap (Plowzone)	coarse earthenware	flowerpot	shard	
24	GPS	10	Ap (Plowzone)	whiteware		shard	1820- 1900+
25	GPS	12	Ap (Plowzone)	cuprous	brooch		
26	GPS	12	Ap (Plowzone)	cuprous			
27	GPS	18	Ap (Plowzone)	cuprous	unidentified object		
28	GPS	18	Ap (Plowzone)	cuprous	unidentified object		
29	GPS	15	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
30	GPS	15	Ap (Plowzone)	cuprous	unidentified object		
31	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
32	GPS	3	Ap (Plowzone)	iron	unidentified object		
33	GPS	11	Ap (Plowzone)	lead	unidentified object		
34	GPS	25	Ap (Plowzone)	cuprous	unidentified object		
35	GPS	7	Ap (Plowzone)	cuprous	unidentified object		

36	GPS	7	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
37	GPS	14	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
38	GPS	8	Ap (Plowzone)	iron	unidentified		
39	GPS	4	Ap (Plowzone)	iron	horse shoe	fragment	
40	GPS	10	Ap (Plowzone)	iron	axe head		
41	GPS	15	Ap (Plowzone)	lead	musket ball	.56" diameter	17th century
42	GPS	13	Ap (Plowzone)	iron	wedge		
43	GPS	15	Ap (Plowzone)	cuprous	unidentified object		
44	GPS	15	Ap (Plowzone)	pewter	unidentified	fragment	
45	GPS	13	Ap (Plowzone)	cuprous	unidentified	fragment	
46	GPS	10	Ap (Plowzone)	cuprous	disc		
47	GPS	10	Ap (Plowzone)	iron	buckle		
48	GPS	10	Ap (Plowzone)	iron	buckle		
49	GPS	20	Ap (Plowzone)	pewter	unidentified object		
50	GPS	15	Ap (Plowzone)	cuprous and iron	unidentified object		
51	GPS	20	A1 (Topsoil)	cuprous	scrap		

52	GPS	8	A1 (Topsoil)	pewter	unidentified	fragment	
53	GPS	10	A1 (Topsoil)	brass	trigger		
54	GPS	17	A1 (Topsoil)	lead	unidentified object		
55	GPS	9	A1 (Topsoil)	unidentified metal	button		19th century
56	GPS	10	A1 (Topsoil)	pewter	unidentified object		
57	GPS	20	A1 (Topsoil)	iron	horse shoe	fragment	
58	GPS	8	A1 (Topsoil)	lead	unidentified object		
59	GPS	7	A1 (Topsoil)	lead	cylinder		
60	GPS	22	A1 (Topsoil)	cuprous	unidentified object		
61	GPS	14	A1 (Topsoil)	brass	unidentified object		
62	GPS	12	A1 (Topsoil)	cuprous	buckle		
63	GPS	9	Ap (Plowzone)	cuprous	strap		
64	GPS	18	Ap (Plowzone)	lead	unidentified object		
65	GPS	26	Ap (Plowzone)	cuprous	strap		
66	GPS	10	Ap (Plowzone)	lead	unidentified	fragment	
67	GPS	35	Ap (Plowzone)	cuprous	disc		

68	GPS	10	Ap (Plowzone)	pewter	unidentified object		
69	GPS	19	Ap (Plowzone)	pewter	unidentified object		
70	GPS	10	Ap (Plowzone)	lead	musket ball	.40" diameter	17th century
71	GPS	7	Ap (Plowzone)	lead	unidentified object		
72	GPS	13	Ap (Plowzone)	lead	unidentified object		
73	GPS	16	Ap (Plowzone)	cuprous	unidentified object		
74	GPS	4	Ap (Plowzone)	lead	unidentified object	fragment	
75	GPS	9.5	Ap (Plowzone)	cuprous	unidentified object	fragment	
76	GPS	9	Ap (Plowzone)	cuprous	button		19th century
77	GPS	16.5	Ap (Plowzone)	lead	flashing		
78	GPS	9	Ap (Plowzone)	iron	unidentified object		
79	GPS	7	Ap (Plowzone)	lead	unidentified object		
80	GPS	4	Ap (Plowzone)	cuprous	tack		
81	GPS	8	Ap (Plowzone)	lead	unidentified		
82	GPS	12.5	Ap (Plowzone)	iron	unidentified object		
83	GPS	10	Ap (Plowzone)	cuprous	suspender	fragment	Modern
84	GPS	12	Ap (Plowzone)	cuprous	amulet		

85	GPS	17	Ap (Plowzone)	gold	ring		
86	GPS	13	Ap (Plowzone)	pewter	buckle	fragment	
87	GPS	15	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
88	GPS	16	Ap (Plowzone)	lead	musket ball	.57" diameter	17th century
89	GPS	10	Ap (Plowzone)	cuprous	rivet		
90	GPS	13	Ap (Plowzone)	iron	folding knife		
91	GPS	17	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
92	GPS	13	Ap (Plowzone)	pewter	button		17th century
93	GPS	11	Ap (Plowzone)	lead	unidentified		
94	GPS	17	Ap (Plowzone)	iron	eyelet		
95	GPS	19	Ap (Plowzone)	lead	unidentified object		
96	GPS	9	Ap (Plowzone)	lead	musket ball	.37" diameter	17th century
97	GPS	13	Ap (Plowzone)	lead	bullet		
98	GPS	14	Ap (Plowzone)	lead	musket ball	.38" diameter	17th century
99	GPS	8	Ap (Plowzone)	lead	musket ball	.58" diameter	17th century

100	GPS	10	Ap (Plowzone)	lead	bullet	.22" diameter	
101	GPS	16	Ap (Plowzone)	lead	musket ball	.56" diameter	17th century
102	GPS	12	Ap (Plowzone)	cuprous	bracelet	fragment	
103	GPS	13	Ap (Plowzone)	lead	bale seal		
104	GPS	9	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
105	GPS	12	Ap (Plowzone)	lead	unidentified		
106	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
107	GPS	13	Ap (Plowzone)	lead	unidentified object		
108	GPS	11	Ap (Plowzone)	cuprous	escutcheon		
109	GPS	14	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
110	GPS	10	Ap (Plowzone)	cuprous	ox nose ring		
111	GPS	9	Ap (Plowzone)	lead	bale seal		
112	GPS	11	Ap (Plowzone)	iron	hand wrought nail		
113	GPS	7	Ap (Plowzone)	cuprous and iron	button		19th century
114	GPS	17	Ap (Plowzone)	iron	unidentified object		
115	GPS	9	Ap (Plowzone)	pewter	button		17th century

116	GPS	7	Ap (Plowzone)	cuprous	button		
117	GPS	26	Ap (Plowzone)	lead	bar	fragment	17th century
118	GPS	20	Ap (Plowzone)	cuprous	button		19th century
119	GPS	12	Ap (Plowzone)	lead	bar		
120	GPS	10	Ap (Plowzone)	cuprous	washer		
121	GPS	15	Ap (Plowzone)	iron	axe head		
122	GPS	12	Ap (Plowzone)	cuprous	unidentified object		
123	GPS	26	Ap (Plowzone)	lead	amulet		17th century
124	GPS	15	Ap (Plowzone)	lead	musket ball	.44" diameter	17th century
125	GPS	15	Ap (Plowzone)	pewter	button		17th century
126	GPS	12	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
127	GPS	10	Ap (Plowzone)	iron	unidentified object		
128	GPS	12	Ap (Plowzone)	iron	kettle	fragment	
129	GPS	20	Ap (Plowzone)	iron	hook		
130	GPS	10	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
131	GPS	32	Ap (Plowzone)	iron	unidentified object		
132	GPS	20	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century

133	GPS	22	A1 (Topsoil)	lead	musket ball	.30" diameter	17th century
134	GPS	18	A1 (Topsoil)	lead	unidentified		
135	GPS	23	A1 (Topsoil)	lead	musket ball	.55" diameter	17th century
136	GPS	10	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
137	GPS	20	Ap (Plowzone)	lead	unidentified object		
138	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
139	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
140	GPS	20	Ap (Plowzone)	cuprous	coin		
141	GPS	14	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
142	GPS	19	Ap (Plowzone)	iron	unidentified object		
143	GPS	22	Ap (Plowzone)	cuprous	unidentified object		
144	GPS	16	Ap (Plowzone)	lead	unidentified		
145	GPS	19	Ap (Plowzone)	lead	bar		
146	GPS	17	Ap (Plowzone)	iron	bar	fragment	
147	GPS	18	Ap (Plowzone)	iron	unclassified nail		
148	GPS	18	Ap (Plowzone)	silver	unidentified object		
149	GPS	18	Ap (Plowzone)	lead	scrap		

150	GPS	5	Ap (Plowzone)	pewter	unidentified object		
151	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
152	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
153	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
154	GPS	15	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
155	GPS	15	Ap (Plowzone)	lead	bullet	.28" diameter	
156	GPS	22	Ap (Plowzone)	lead	bale seal		
157	GPS	6	Ap (Plowzone)	lead	unidentified		
158	GPS	6	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
159	GPS	8	Ap (Plowzone)	cuprous	button	complete	
160	GPS	8	Unrecorded	lead	shot	.33" diameter	
161	GPS	10	Ap (Plowzone)	lead	shot	.33" diameter	
162	GPS	8	Ap (Plowzone)	lead	scrap		
163	GPS	8	Ap (Plowzone)	lead	bullet	.32" diameter	
164	GPS	?	Unrecorded	lead	musket ball	.66" diameter	17th century
165	GPS	?	Unrecorded	cuprous	screw		
166	GPS	16	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century

167	GPS	7	Ap (Plowzone)	lead	shot	.33" diameter	
168	GPS	8	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
169	GPS	11	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
170	GPS	10	Ap (Plowzone)	lead	scrap		
171	GPS	12	Ap (Plowzone)	lead	bead		17th century
172	GPS	5	Ap (Plowzone)	cuprous	cap		
173	GPS	18	Ap (Plowzone)	cuprous	unidentified object		
174	GPS	10	Ap (Plowzone)	cuprous		fragment	
175	GPS	15	Ap (Plowzone)	lead	unidentified		
176	GPS	13	Ap (Plowzone)	lead	unidentified	fragment	
177	GPS	20	Ap (Plowzone)	iron	unidentified object		
178	GPS	15	Ap (Plowzone)	cuprous	unidentified object		
179	GPS	23	B1 (Upper Subsoil)	cuprous	unidentified	fragment	
180	GPS	21	B1 (Upper Subsoil)	lead	unidentified		
181	GPS	17	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
182	GPS	6	Ap (Plowzone)	lead	unidentified		
183	GPS	10	A1 (Topsoil)	iron	folding knife		

184	GPS	10	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
185	GPS	8	A1 (Topsoil)	silver			
186	GPS	19	A1 (Topsoil)	cuprous	button		
187	GPS	14	A1 (Topsoil)	iron	horse shoe nail	complete	
188	GPS	14	A1 (Topsoil)	lead	unidentified		
189	GPS	8	A1 (Topsoil)	iron	horse shoe nail		
190	GPS	15	A1 (Topsoil)	lead	unidentified object		
191	GPS	13	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
192	GPS	18	A1 (Topsoil)	lead	musket ball	.34" diameter	17th century
193	GPS	10	A1 (Topsoil)	lead	pipe		
194	GPS	16	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
195	GPS	21	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
196	GPS	17	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
197	GPS	10	A1 (Topsoil)	lead	unidentified		
198	GPS	13	A1 (Topsoil)	pewter	unidentified	fragment	
199	GPS	20	A1 (Topsoil)	lead	unidentified		
200	GPS	12	A1 (Topsoil)	cuprous	rivet		

201.01	GPS		Surface	quartzite	projectile point	base snapped	Middle Archaic
201.02	GPS		Surface	rhyolite	projectile point	complete	
201.03	GPS		Surface	quartz	untyped uniface	midsection fragment	
201.04	GPS		Surface	chert	flake		
201.05	GPS		Surface	chert	flake		
201.06	GPS		Surface	chert	microflake		
201.07	GPS		Surface	quartz	microflake		
201.08	GPS		Surface	quartz	small angular debris		
201.09	GPS		Surface	quartz	flake		
201.1	GPS		Surface	quartzite	flake		
201.11	GPS		Surface	rose quartz	small angular debris		
201.12	GPS		Surface	quartzite	flake		
201.13	GPS		Surface	quartzite	microflake		
201.14	GPS		Surface	quartzite	flake		
201.15	GPS		Surface	quartzite	small angular debris		

201.16	GPS		Surface	rhyolite	chunk		
201.17	GPS		Surface	quartz	chunk primary reduction		
201.18	GPS		Surface	rhyolite	large angular debris primary reduction		
201.19	GPS		Surface	rhyolite	chunk primary reduction		
201.2	GPS		Surface	rhyolite	primary reduction flake		
201.21	GPS		Surface	rhyolite	small angular debris primary reduction		
201.22	GPS		Surface	rhyolite	flake		
201.23	GPS		Surface	rhyolite	flake		
201.24	GPS		Surface	rhyolite	flake		
201.25	GPS		Surface	rhyolite	flake		
201.26	GPS		Surface	granite	flake		
201.27	GPS		Surface	quartz	flake		
201.28	GPS		Surface	mudstone	flake		
201.29	GPS		Surface	siltstone	microflake		
201.3	GPS		Surface	siltstone	flake		

201.31	GPS		Surface	sandstone	flake		
201.32	GPS		Surface	rhyolite	flake		
201.33	GPS		Surface	rhyolite	large angular debris		
201.34	GPS		Surface	quartz	large angular debris		
202	GPS	10	A1 (Topsoil)	iron	knife		
203	GPS	13	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
204	GPS	19	A1 (Topsoil)	lead	musket ball	.59" diameter	17th century
205	GPS	14	Ap (Plowzone)	cuprous	scrap		
206	GPS	6	Ap (Plowzone)	cuprous	flashing		
207	GPS	9	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
208	GPS	19	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
209	GPS	12	A1 (Topsoil)	cuprous	unidentified object		
210	GPS	8	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
211	GPS	10	A1 (Topsoil)	lead	musket ball	.27" diameter	17th century
212	GPS	4	A1 (Topsoil)	lead	musket ball	.33" diameter	17th century

213	GPS	12	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
214	GPS	5	A1 (Topsoil)	lead	musket ball	.30" diameter	17th century
215	GPS	10	A1 (Topsoil)	lead	musket ball	.33" diameter	17th century
216	GPS	14	A1 (Topsoil)	lead	musket ball	.28" diameter	17th century
217	GPS	8	A1 (Topsoil)	lead	musket ball	.31" diameter	17th century
218	GPS	9	A1 (Topsoil)	lead	musket ball	.29" diameter	17th century
219	GPS	6	A1 (Topsoil)	lead	musket ball	.32" diameter	17th century
220	GPS	10	A1 (Topsoil)	iron	unidentified object		
221	GPS	5	A1 (Topsoil)	lead	musket ball	.26" diameter	17th century
222	GPS	18	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
223	GPS	16	Ap (Plowzone)	lead	musket ball	.22" diameter	17th century
224	GPS	19	Ap (Plowzone)	cuprous	unidentified object		
225	GPS	18	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
226	GPS	8	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
227	GPS	16	Ap (Plowzone)	lead	musket ball	.58" diameter	17th century
228	GPS	15	Ap (Plowzone)	lead	musket ball	.22" diameter	17th century

229	GPS	8	Ap (Plowzone)	iron	horse shoe	fragment	
230	GPS	12	Ap (Plowzone)	lead	musket ball	.60" diameter	17th century
231	GPS	13	Ap (Plowzone)	cuprous	button		19th century
232	GPS	17	Ap (Plowzone)	lead	bullet		
233	GPS	7	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
234	GPS	18	Ap (Plowzone)	lead	musket ball	.57" diameter	17th century
235	GPS	10	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
236	GPS	12	Ap (Plowzone)	lead	bullet		
237	GPS	9	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
238	GPS	10	Ap (Plowzone)	lead	musket ball	.26" diameter	17th century
239	GPS	20	Ap (Plowzone)	iron	hand wrought nail	fragment	
240	GPS	12	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
241	GPS	5	Ap (Plowzone)	cuprous	pin		19th century
242	GPS	14	Ap (Plowzone)	iron	folding knife		
243	GPS	18	Ap (Plowzone)	lead	musket ball	.22" diameter	17th century
244	GPS	8	Ap (Plowzone)	lead	musket ball	.24" diameter	17th century

245	GPS	10	Ap (Plowzone)	pewter	musket ball	.39" diameter	17th century
246	GPS	15	Ap (Plowzone)	lead	musket ball	.28" diameter	17th century
247	GPS	13	Ap (Plowzone)	lead	musket ball	.22" diameter	17th century
248	GPS	10	Ap (Plowzone)	lead	musket ball	.24" diameter	17th century
249	GPS	12	Ap (Plowzone)	cuprous	awl		
250	GPS	12	Ap (Plowzone)	pewter	musket ball	.25" diameter	17th century
251	GPS	14	Ap (Plowzone)	lead	musket ball	.43" diameter	17th century
252	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
253	GPS	10	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
254	GPS	13	Ap (Plowzone)	lead	shot	.33" diameter	
255	GPS	14	Ap (Plowzone)	iron	buckle		
256	GPS	9	Ap (Plowzone)	lead	musket ball	.40" diameter	17th century
257	GPS	9	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
258	GPS	20	Ap (Plowzone)	lead	bullet	.24" diameter	
259	GPS	5	Ap (Plowzone)	iron	horse bit		
260	GPS	15	Ap (Plowzone)	iron	horse bit		

261	GPS	10	Ap (Plowzone)	iron	unidentified object		
262	GPS	15	Ap (Plowzone)	iron	horse shoe		
263	GPS	17	Ap (Plowzone)	iron	horse shoe nail		
264	GPS	13	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
265	GPS	13	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
266	GPS	13	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
267	GPS	10	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
268	GPS	8	Ap (Plowzone)	lead	bullet	.48" diameter	
269	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
270	GPS	7	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
271	GPS	10	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
272	GPS	9	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
273	GPS	10	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
274	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
275	GPS	11	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
276	GPS	8	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century

277	GPS	9	Ap (Plowzone)	lead	musket ball	.26" diameter	17th century
278	GPS	11	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
279	GPS	9	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
280	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
281	GPS	14	Ap (Plowzone)	lead	bullet	.33" diameter	
282	GPS	14	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
283	GPS	13	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
284	GPS	15	Ap (Plowzone)	lead	disc		
285	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
286	GPS	17	Ap (Plowzone)	cuprous and iron	button		
287	GPS	14	Ap (Plowzone)	iron	unidentified object		
288	GPS	14	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
289	GPS	14	Ap (Plowzone)	cuprous	coin		
290	GPS	12	Ap (Plowzone)	iron	unidentified object		
291	GPS	10	Ap (Plowzone)	cuprous and iron	buckle		19th century
292	GPS	12	Ap (Plowzone)	lead	musket ball	.62" diameter	17th century

293	GPS	12	Ap (Plowzone)	iron	unidentified object		
294	GPS	12	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
295	GPS	10	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
296	GPS	10	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
297	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
298	GPS	20	Ap (Plowzone)	cuprous	folding knife	scale	
299	GPS	8	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
300	GPS	17	Ap (Plowzone)	lead	musket ball	.63" diameter	17th century
301	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
302	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
303	GPS	8	Ap (Plowzone)	lead	bale seal		
304	GPS	14	Ap (Plowzone)	lead	flint wrap		
305	GPS	13	Ap (Plowzone)	iron	rivet		
306	GPS	15	Ap (Plowzone)	lead	musket ball	.64" diameter	17th century
307	GPS	20	Ap (Plowzone)	iron	knife	blade	
308	GPS	12	Ap (Plowzone)	lead	musket ball	.45" diameter	17th century
309	GPS	20	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century

310	GPS	20	Ap (Plowzone)	lead	musket ball	.54" diameter	17th century
311	GPS	10	Ap (Plowzone)	lead	bullet		
312	GPS	12	Ap (Plowzone)	iron	axe head		
313	GPS	20	Ap (Plowzone)	lead	musket ball	.56" diameter	17th century
314	GPS	18	Ap (Plowzone)	lead	musket ball	.56" diameter	17th century
315	GPS	23	Ap (Plowzone)	iron	knife	blade	
316	GPS	10	Ap (Plowzone)	iron	unidentified object		
317	GPS	17	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
318	GPS	10	Ap (Plowzone)	lead	musket ball	.38" diameter	17th century
319	GPS	7	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
320	GPS	12	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
321	GPS	10	Ap (Plowzone)	cuprous	rivet		
322	GPS	6	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
323	GPS	12	Ap (Plowzone)	cuprous	rivet		
324	GPS	15	Ap (Plowzone)	cuprous	flashing		
325	GPS	12	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century

326	GPS	10	Ap (Plowzone)	iron	knife	blade	
327	GPS	10	Ap (Plowzone)	lead	musket ball	.62" diameter	17th century
328	GPS	20	Ap (Plowzone)	iron	unidentified object		
329	GPS	8	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
330	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
331	GPS	12	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
332	GPS	15	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
333	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
334	GPS	30	Ap (Plowzone)	cuprous	unidentified object		
335	GPS	12	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
336	GPS	8	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
337	GPS	12	Ap (Plowzone)	silver	unidentified		
338	GPS	11	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
339	GPS	13	Ap (Plowzone)	cuprous	unidentified object		
340	GPS	15	Ap (Plowzone)	lead	bar		
341	GPS	14	Ap (Plowzone)	cuprous	machine cut nail		
342	GPS	14	Ap (Plowzone)	lead	unidentified object		

343	GPS	9	Ap (Plowzone)	lead	musket ball	.37" diameter	17th century
344	GPS	18	Ap (Plowzone)	iron	key		
345	GPS	17	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
346	GPS	22	Ap (Plowzone)	iron	unidentified object		
347	GPS	5	Ap (Plowzone)	lead	musket ball	.26" diameter	17th century
348	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
349	GPS	12	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
350	GPS	15	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
351	GPS	13	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
352	GPS	19	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
353	GPS	8	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
354	GPS	13	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
355	GPS	19	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
356	GPS	12	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
357	GPS	13	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
358	GPS	16	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century

359	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
360	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
361	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
362	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
363	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
364	GPS	20	Ap (Plowzone)	iron	hand wrought nail	complete	
365	GPS	13	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
366	GPS	9	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
367	GPS	14	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
368	GPS	11	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
369	GPS	9	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
370	GPS	19	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
371	GPS	19	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
372	GPS	13	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
373	GPS	14	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century

374	GPS	17	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
375	GPS	14	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
376	GPS	24	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
377	GPS	9	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
378	GPS	10	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
379	GPS	11	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
380	GPS	16	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
381	GPS	20	Ap (Plowzone)	lead	scrap		
382	GPS	15	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
383	GPS	8	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
384	GPS	13	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
385	GPS	21	Ap (Plowzone)	iron	unidentified object		
386	GPS	5	Ap (Plowzone)	cuprous	unidentified object		
387	GPS	3	Ap (Plowzone)	lead	unidentified		
388	GPS	16	Ap (Plowzone)	lead	unidentified		

389	GPS	14	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
390	GPS	10	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
391	GPS	17	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
392	GPS	10	Ap (Plowzone)	cuprous	ring		
393	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
394	GPS	8	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
395	GPS	9	Ap (Plowzone)	lead	musket ball	.25" diameter	17th century
396	GPS	3	Ap (Plowzone)	cuprous	unidentified object		
397	GPS	11	Ap (Plowzone)	lead	musket ball	.46" diameter	17th century
398	GPS	14	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
399	GPS	9	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
400	GPS	9	Ap (Plowzone)	lead	unidentified object		
401	GPS	9	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
402	GPS	9	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
403	GPS	4	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century

404	GPS	4	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
405	GPS	5	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
406	GPS	5	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
407	GPS	4	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
408	GPS	6	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
409	GPS	5	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
410	GPS	10	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
411	GPS	7	Ap (Plowzone)	lead	unidentified object		
412	GPS	13	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
413	GPS	13	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
414	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
415	GPS	12	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
416	GPS	7	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
417	GPS	15	Ap (Plowzone)	lead	musket ball	.59" diameter	17th century
418	GPS	14	Ap (Plowzone)	lead	musket ball	.47" diameter	17th century

419	GPS	14	Ap (Plowzone)	lead	musket ball	.58" diameter	17th century
420	GPS	10	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
421	GPS	12	Ap (Plowzone)	cuprous	unidentified object		
422	GPS	18	Ap (Plowzone)	lead	musket ball	.41 " diameter	17th century
423	GPS	16	Ap (Plowzone)	lead	musket ball	.26" diameter	17th century
424	GPS	12	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
425	GPS	10	Ap (Plowzone)	iron	hand wrought nail	complete	
426	GPS	12	Ap (Plowzone)	lead	musket ball	.26" diameter	17th century
427	GPS	10	Ap (Plowzone)	lead	musket ball	.50" diameter	17th century
428	GPS	20	Ap (Plowzone)	lead	musket ball	.49" diameter	17th century
429	GPS	12	Ap (Plowzone)	cuprous	unidentified object		
430	GPS	10	Ap (Plowzone)	cuprous	unidentified object		
431	GPS	6	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century
432	GPS	12	Ap (Plowzone)	lead	musket ball	.31" diameter	17th century
433	GPS	10	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
434	GPS	12	Ap (Plowzone)	lead	musket ball	.47" diameter	17th century

435	GPS	8	Ap (Plowzone)	lead	unidentified object		
436	GPS	12	Ap (Plowzone)	cuprous	unidentified object		
437	GPS	9	Ap (Plowzone)	lead	musket ball	.32" diameter	17th century
438	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
439	GPS	10	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
440	GPS	14	Ap (Plowzone)	cuprous	ring		
441	GPS	28	B1 (Upper Subsoil)	cuprous	ramrod tip	.50" diameter	
442	GPS	10	Ap (Plowzone)	iron	knife	blade	
443	GPS	10	Ap (Plowzone)	brass	tack	complete	
444	GPS	10	Ap (Plowzone)	cuprous	ring		
445	GPS	20	Ap (Plowzone)	lead	musket ball	.67" diameter	17th century
446	GPS	10	Ap (Plowzone)	lead	unidentified object		
447	GPS	20	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
448	GPS	12	Ap (Plowzone)	cuprous	folding knife	scale	
449	GPS	8	Ap (Plowzone)	lead	musket ball	.36" diameter	17th century
450	GPS	20	Ap (Plowzone)	lead	musket ball	.36" diameter	17th century

451	GPS	8	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
452	GPS	10	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
453	GPS	20	Ap (Plowzone)	lead	musket ball	.52" diameter	17th century
454	GPS	10	Ap (Plowzone)	iron	buckle		
455	GPS	12	Ap (Plowzone)	lead	musket ball	.45" diameter	17th century
456	GPS	10	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
457	GPS	6	Ap (Plowzone)	cuprous	unidentified object		
458	GPS	5	Ap (Plowzone)	cuprous	coin		
459	GPS	12	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
460	GPS	10	Ap (Plowzone)	lead	musket ball	.43" diameter	17th century
461	GPS	10	Ap (Plowzone)	lead	musket ball	.25" diameter	17th century
462	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
463	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
464	GPS	5	Ap (Plowzone)	cuprous	ring		
465	GPS	15	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
466	GPS	12	Ap (Plowzone)	lead	musket ball	.30" diameter	17th century

467	GPS	5	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
468	GPS	6	Ap (Plowzone)	lead	musket ball	.45" diameter	17th century
469	GPS	8	Ap (Plowzone)	cuprous	button		
470	GPS	8	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
471	GPS	10	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
472	GPS	12	Ap (Plowzone)	iron	horse shoe		
473	GPS	10	Ap (Plowzone)	lead	flashing		
474	GPS	6	Ap (Plowzone)	cuprous	rivet	head	
475	GPS	4	Ap (Plowzone)	brass	spoon	bowl	
476	GPS	10	Ap (Plowzone)	cuprous	ring		
477	GPS	8	Ap (Plowzone)	cuprous	unclassified nail		
478	GPS	8	Ap (Plowzone)	cuprous	rivet		
479	GPS	10	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century
480	GPS	10	Ap (Plowzone)	cuprous	unidentified object		
481	GPS	10	Ap (Plowzone)	lead	musket ball	.53" diameter	17th century

482	GPS	10	Ap (Plowzone)	iron	unidentified object		
483	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
484	GPS	5	Ap (Plowzone)	iron	horse shoe		
485	GPS	15	Ap (Plowzone)	iron	ring		
486	GPS	20	Ap (Plowzone)	iron	ring		
487	GPS	3	Ap (Plowzone)	cuprous	scrap		
488	GPS	9	Ap (Plowzone)	cuprous	unidentified object		
489	GPS	7	Ap (Plowzone)	iron	screw		
490	GPS	6	Ap (Plowzone)	iron	knife	blade	
491	GPS	3	Ap (Plowzone)	iron	horse shoe nail		
492	GPS	5	Ap (Plowzone)	iron	hook		
493	GPS	11	Ap (Plowzone)	lead	musket ball	.28" diameter	17th century
494	GPS	8	Ap (Plowzone)	lead	musket ball	.37" diameter	17th century
495	GPS	18	B1 (Upper Subsoil)	lead	musket ball	.36" diameter	17th century
496	GPS	10	Ap (Plowzone)	cuprous	unidentified object		

497	GPS	11	Ap (Plowzone)	cuprous	ramrod tip		
498	GPS	8	Ap (Plowzone)	lead	musket ball	.27" diameter	17th Century
499	GPS	8	Ap (Plowzone)	pewter	unidentified object		
500	GPS	13	B1 (Upper Subsoil)	iron	ring		
501	GPS	8	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
502	GPS	13	B1 (Upper Subsoil)	lead	musket ball	.24" diameter	17th century
503	GPS	10	Ap (Plowzone)	lead	musket ball	.37" diameter	17th century
504	GPS	10	Unrecorded	lead	musket ball	.33" diameter	17th century
505	GPS	10-20	Ap (Plowzone)	lead	musket ball	.27" diameter	17th century
506	GPS	15	Ap (Plowzone)	lead	musket ball	.38" diameter	17th century
507	GPS	10	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
508	GPS	4	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
509	GPS	10	Ap (Plowzone)	lead	musket ball	.38" diameter	17th century
510	GPS	14	B1 (Upper Subsoil)	silver	coin		Late 18th century
511	GPS	16	B1 (Upper Subsoil)	lead	musket ball	.59" diameter	17th century
512	GPS	12	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
513	GPS	10	Ap (Plowzone)	cuprous	scrap		17th century

514	GPS	8	Ap (Plowzone)	lead	bead		
515	GPS	12	Ap (Plowzone)	lead	musket ball	.46" diameter	17th century
516	GPS	10	Ap (Plowzone)	pewter	spoon	bowl	
517	GPS	20	Ap (Plowzone)	lead	musket ball	.68" diameter	17th century
518	GPS	12	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
519	GPS	10	Ap (Plowzone)	lead	musket ball	.29" diameter	17th century
520	GPS	12	Ap (Plowzone)	brass	ring		17th century
521	GPS	15	Ap (Plowzone)	lead	cufflink		
522	GPS	8	Ap (Plowzone)	cuprous	scrap		
523	GPS	14	Ap (Plowzone)	lead	musket ball	.46" diameter	17th century
524	GPS	10	Ap (Plowzone)	lead	musket ball	.58" diameter	17th century
525	GPS	10	Ap (Plowzone)	coarse earthenware		base shard	
526	GPS	8	Ap (Plowzone)	lead	musket ball	.51" diameter	17th century
527	GPS	8	Ap (Plowzone)	lead	musket ball	.52" diameter	17th century
528	GPS	10	Ap (Plowzone)	lead	unidentified object		
529	GPS	11	B1 (Upper Subsoil)	cuprous	scrap		17th century
530	GPS	14	B1 (Upper Subsoil)	cuprous	scrap		17th century
531	GPS	16	B1 (Upper Subsoil)	lead	scrap		17th century

532	GPS	11	A1 (Topsoil)	cuprous		fragment	17th century
533	GPS	8	A1 (Topsoil)	cuprous	scrap		17th century
534	GPS	14	A1 (Topsoil)	cuprous	scrap		17th century
535	GPS	16	A1 (Topsoil)	lead	musket ball	.62" diameter	17th century
536	GPS	14	A1 (Topsoil)	lead	sheet	fragment	
537	GPS	18	B1 (Upper Subsoil)	copper			
538	GPS	10	A1 (Topsoil)	lead	scrap		
539	GPS	5	A1 (Topsoil)	cuprous	scrap		17th century
540	GPS	18	Ap (Plowzone)	cuprous	scrap		17th century
541	GPS	20	Ap (Plowzone)	lead	musket ball	.55" diameter	17th century
542	GPS	18	Ap (Plowzone)	lead	musket ball	.60" diameter	17th century
543	GPS	10	A1 (Topsoil)	lead	musket ball	.68" diameter	17th century
544	GPS	14	B1 (Upper Subsoil)	lead	musket ball	.33" diameter	17th century
545	GPS	10	Unrecorded	lead	musket ball	.52" diameter	17th century
546	GPS	17	B1 (Upper Subsoil)	cuprous	spoon	bowl fragment	17th century
547	GPS	17	B1 (Upper Subsoil)	lead	musket ball	.64" diameter	17th century

548	GPS	16	B1 (Upper Subsoil)	cuprous	scrap		17th century
549	GPS	12	A1 (Topsoil)	iron	unidentified object		
550	GPS	10	A1 (Topsoil)	cuprous	scrap		17th century
551	GPS	10	A1 (Topsoil)	lead	musket ball	.62" diameter	17th century
552	GPS	7	A1 (Topsoil)	lead	musket ball	.22" diameter	17th century
553	GPS	12	A1 (Topsoil)	lead	musket ball	.60" diameter	17th century
554	GPS	16	A1 (Topsoil)	lead	musket ball	.58" diameter	17th century
555	GPS	10	A1 (Topsoil)	lead	musket ball	.34" diameter	17th century
556	GPS	8	A1 (Topsoil)	lead/pewter	musket ball	.57" diameter	17th century
557	GPS	11	A1 (Topsoil)	cuprous	unidentified object		
558	GPS	7	A1 (Topsoil)	lead	musket ball	.62" diameter	17th century
559	GPS	18	B1 (Upper Subsoil)	cuprous	unidentified	fragment	17th century
560	GPS	10	A1 (Topsoil)	cuprous	unidentified	fragment	17th century
561	GPS	10	A1 (Topsoil)	pewter	unidentified	fragment	
562	GPS	8	A1 (Topsoil)	cuprous	button		19th century
563	GPS	15	Ap (Plowzone)	lead	musket ball	.58" diameter	17th century
564	GPS	12	Unrecorded	iron	unidentified object		

565	GPS	10	Ap (Plowzone)	lead	bale seal		
566	GPS	20	Ap (Plowzone)	iron	unidentified object		
567	GPS	12	Ap (Plowzone)	lead	musket ball	.39" diameter	17th century
568	GPS	10	Ap (Plowzone)	cuprous	unidentified object		17th century
569	GPS	8	Ap (Plowzone)	lead	musket ball	.33" diameter	17th century
570	GPS	20	Ap (Plowzone)	cuprous	scrap		17th century
571	GPS	20	Ap (Plowzone)	lead	musket ball	.35" diameter	17th century
572	GPS	10	Ap (Plowzone)	lead	musket ball	.34" diameter	17th century
573	GPS	10	Ap (Plowzone)	lead	musket ball	.20" diameter	17th century
574	GPS	?	Unknown	iron	horse shoe		

Appendix II – Order of Battle

ORDER of BATTLE: Battle of Great Falls/Peskeompskut²⁴⁵

Army: Native Allied Forces

Location: Pocumtuck Territory,
Peskeompskut

Commanding Officer: Metacom

Date: May 19, 1676

Units	Troop Strength	Casualties
Peskeompskut Village	Approximately 60-80	Unknown
East Side of CT River Village	Approximately 60-80	Unknown
Smead Island Village	Approximately 60-80	Unknown
Cheapside Village	Approximately 60-80	Unknown
Soldiers from Northern Villages	Approximately 100	Unknown
Total:	Approximately 340-420	Approximately 60-80

Army: Captain Turner's Company

Location: Pocumtuck Territory,
Peskeompskut

Commanding Officer: Captain William Turner
Lieutenant Samuel Holyoke

Date: May 19, 1676

Units	Troop Strength	Casualties
CPT Turner's Detachment	Approximately 60	Unknown
Militia Detachment - Holyoke	Approximately 88	Unknown
Springfield – LT Holyoke	Unknown	Unknown
Northampton – ENS Lyman	Unknown	Unknown
Hatfield – SGT Dickinson	Unknown	Unknown
Hadley – SGT Kellogg	Unknown	Unknown
Guides – Wait & Hinsdale	2	1
Reverend - Atherton	1	0
Total:	Approximately 151	Approximately 39 Killed, 29+ Wounded

²⁴⁵ The troops strengths and casualties reflected in the Order of Battle were largely derived from the Notebook of Stephen Williams (Pocumtuck Valley Memorial Association Library Archives) as transcribed by Dr. Peter A. Thomas (2016) and research conducted by Mr. John S. Wilson in his unpublished manuscript "The Probable Composition Of Captain William Turner's Forces: February 20 – May 19, 1676" (2017).

Appendix III – European and Native Military Technology

Massachusetts Bay Forces

At the beginning of King Philip's War English Allied forces were armed with a wide array of weaponry with three main categories of firearms—matchlock, wheelock, and flintlock. Of these, the flintlock firearm was the primary armament for combatants on both sides in King Philip's War. The matchlock musket was a muzzle-loading firearm, and was discharged by a pull of the trigger which mechanically lowered a burning match clasped into a serpentine arm into a pan of black powder. Once the powder ignited the arm fired. The matchlock musket had many disadvantages the greatest of which was the use of a burning match to fire the arm. The matchlock was completely ineffective in mobile, woodland warfare as one could not “snap shoot” (i.e. quickly bring the weapon to bear, aim, and shoot at a moving target as someone using a flintlock could. Nevertheless, the matchlock continued to be used through King Philip's War most often by garrison troops who could use the long reach of a large caliber firearm to great advantage.²⁴⁶

The wheelock ignition system was developed after the matchlock and consisted of a spring-loaded arm in which a piece of iron pyrite was clamped. A serrated wheel was wound up with a key, known as a spanner, and when the trigger was pulled the wheel would spin on the pyrite creating a spark to ignite the powder in the pan. During King Philip's War the wheelock was primarily used by mounted forces as it was safer and more reliable than other weapons of the day and could always be carried loaded and ready to fire.²⁴⁷

Flintlock arms employed an ignition system consisting of a flint and steel system. With the flintlock arm a pull of the trigger released a piece of flint screwed tightly between the jaws of the musket hammer snapped forward to strike the frizzen, or steel, which covered a pan of powder. When the flint hit the frizzen, a shower of sparks would fall into the now exposed pan which ignited the main powder charge in the barrel, firing the musket. Of all the musket designs

²⁴⁶ Harold L. Peterson, *Arms and Armor in Colonial America 1526-1783* (Harrisburg, PA: Stackpole Publications, 1956). Pp. 14-20; David Blackmore, *Arms & Armour of the English Civil Wars* (London, UK: Royal Armouries Publications, 1990). Pp. 68-69.

²⁴⁷ Peterson, *Arms and Armor in Colonial America*. Pp. 22-24; Blackmore, *Arms & Armour of the English Civil Wars*. P. 50.

the flintlock was the most effective and reliable weapon and, consequently, the one which the majority of English and Native used.²⁴⁸

English colonial forces carried muskets (primarily flintlocks if they were operating in the field), as well as swords, hatchets, and knives, and powder horns and pouches. Full musket calibers, regardless if they were a flintlock, matchlock, snaphaunce, or wheellock, usually ranged between .60 and .70 caliber and had four-foot barrels. Carbines usually had a barrel length of between two and three feet and usually ranged between .50 and .60 caliber. Regardless of the ignition system (match, flint, wheelock) smoothbore weapons had an effective range of 50-75 yards for shorter barreled weapons and a range of 100-150 yards for longer barreled weapons. Pistols, with calibers most often between .45 and .55 caliber, only had an effective range between 30 and 50 yards.

Native Coalition Forces

Native military tactics and technology had advanced significantly since the Pequot War when Native men had just begun to adopt European arms technology and had only a limited knowledge of English military capabilities. By 1670 Native men were well equipped with firearms, iron edged weapons, and brass-tipped arrows. They were not only skilled in the operation, repair, and care of firearms but were expert marksmen. Native men were very familiar with English military technology and understood English military training and tactics from years of working and residing in English communities. Some Native men may have even been enlisted in Massachusetts Bay trainbands as the General Council ordered that all Native men who either acted as English servants or resided in English towns were required to attend training days.²⁴⁹

Native enemy and allied forces were equipped with flintlock muskets, pistols, bows, short spears, knives, hatchets and powder horns or pouches in which to carry shot and powder. Native people had steadily acquired firearms in increasing numbers by the mid sixteenth century and were well armed when hostilities commenced in 1675.²⁵⁰ There appears to have been a buildup of arms and ammunition by many Native communities in the years leading up to the war. The English observed an “accumulation of powder, shot, and arrows” by the Wampanoag who

²⁴⁸ Blackmore, *Arms & Armour of the English Civil Wars*. Pp. 32-38.

²⁴⁹ Patrick M. Malone, *The Skulking Way of War: Technology and Tactics Among the New England Indians* (Lanham, MD: Madison Books, 1991). Pp. 50, 67-68.

²⁵⁰ Malone, *The Skulking Way of War*. Pp.48-49.

claimed that it was “a preparation against the Mohawks, but actually it was aimed at the English.”²⁵¹ Native men were not only very experienced with firearms on the eve of the war, but many communities had blacksmiths who had the tools and knowledge to maintain and repair firearms.²⁵² Native blacksmiths also made bullet molds and cast lead balls into shot of various diameters but were not able to make gunpowder (nor could the Colonists, powder had to be imported from Europe). However, Native forces faced constant shortages of powder and shot throughout the war. Native allies of the English were either supplied by Colonial forces or took powder and ammunition from enemies killed on the battlefield. Enemy forces relied on the Dutch, French or Native middlemen for their supplies or took them from English soldiers killed on the battlefield.

Native men also used bows and arrows throughout the war either as a weapon of stealth and surprise, to shoot fire arrows, or because they did not have enough firearms to arm every Native soldier. From various accounts it appears that most enemy Native forces had sufficient firearms to arm only one-third to one-half of their forces. Native arrow points were generally made from brass cut from brass kettles and while they could easily penetrate English clothing they could not penetrate English buff coats unless fired at point blank range, and were completely ineffective against armor. Native bows were most effective at a range of 40 yards to better aim and penetrate the weak spots in English armor or buff coats. The maximum range of Native bows was 120-150 yards if shot compass (at an arc) at a 45-degree angle. The bow and arrow may have been carried by all Native men as a secondary weapon when their supplies of powder and shot ran out.²⁵³ A single example of a southern New England bow survives picked up from the Sudbury battlefield during King Philip’s War now in the collections of Harvard University. It is constructed of hickory, is approximately five and a half feet tall, and required about forty to forty-five pounds of strength to draw and fire.²⁵⁴

When King Philip’s War began in the spring of 1675 the Pokanoket, Narragansett, and other tribes were well armed, munitioned, and prepared to counter the English advantages in

²⁵¹ Leach, *Second William Harris Letter*. P. 23.

²⁵² Malone, *The Skulking Way of War*. Pp. 69-71.

²⁵³ Peabody Museum of Archaeology and Ethnology Object Report, PMAE Number 95-20-10/49340; Karen Ordahl Kupperman, *Captain John Smith: A Selected Edition of his Writings* (Chapel Hill, NC; University of North Carolina, 1998). 144

²⁵⁴ Peabody Museum of Archaeology and Ethnology Object Report, PMAE Number 95-20-10/49340; Karen Ordahl Kupperman, *Captain John Smith: A Selected Edition of his Writings* (Chapel Hill, NC; University of North Carolina, 1998). 144

men, armor, and firepower. Native forces often did so by laying ambushes, striking isolated English settlements, and launching coordinated, sustained, and innovative assaults on English towns. Native soldiers often attacked and laid siege to English towns for short periods of time killing or capturing any English who did not quickly retreat to the town's designated fortified house, and would routinely burn all the structures within the town and kill or take the livestock. They relied on the element of surprise and would decimate English units who could not react quickly enough to their tactics designed to separate and overwhelm the English. There were also many instances when Native forces had sufficient men, ammunition, and a tactical advantage to fight a sustained engagement against English soldiers. During the Battle of Great Falls, it appears that the vast majority of Native coalition forces were armed with firearms based on the preponderance of expended lead shot and the lack of projectile points (See Appendix I).

Appendix IV – English Soldiers in the Battle of Great Falls

A History Of William Turner's Marching And Garrison Companies Through Examination Of Military Pay Records

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Introduction and Explanation of the Methodology:

The bedrock of this history is an extensive and intensive examination of military pay accounts originally set down by John M. Hull, Treasurer - at - War of Massachusetts Bay Colony from 1675 to 1678, as transcribed and published at turn of the previous century by a then well-known New England historian named George M. Bodge.²⁵⁵ A veteran of the American Civil War, Bodge took an approach that was commonplace for regimental histories of that war, treating each company history as a separate narrative without consideration of whether the soldiers enrolled had seen previous service in earlier companies. In this new approach the author has substantially reconfigured Bodge's effort in an attempt to consider the military experience of individual soldiers upon the cumulative experience of the company. The core of the analytical process involved realigning Bodge's transcriptions of pay credits and translating each soldier's monetary pay into duration of service within each company, then tying those time ranges into known dates of events in which that company participated (ex.: the departure of MAJ Thomas Savage's Western Army from Marlborough on Feb. 29, 1676). The resulting database provides a considerably more precise estimate of company size at the time of a particular battle or campaign, determination of the company's location on a specific date and its speed of marching between locations, the level and quality of officer experience, and the proportion of veterans versus raw recruits. Those assessments may then be used to examine various aspects of command and control: including the company's probable morale in a particular time period, its steadiness versus fragility under fire, as well as potential for commission of acts that would today be considered war crimes. All of which may, hopefully, provide a fuller and more accurate snapshot of combat operations during King Philip's War. A great debt is owed to George Bodge, not only for the diligence and accuracy of his transcriptions, but more significantly because his own tentative efforts to reconcile monetary payments with broader company histories provided

²⁵⁵ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), v – x.

the direct inspiration for this approach.²⁵⁶ I hope the current effort does some justice to his memory.

On the Battle of the Great Falls detachment roster provided below, each soldier's prior service in other companies or garrisons is listed sequentially under the names of those company commanders or garrison locations. Question marks obviously indicate uncertainties, usually minor in the case of dates. Specific residences are currently unknown for many of the original company, though we can safely assume that the majority were from Boston or its immediate surroundings (ex.: Cambridge, Charlestown, and Dorchester). The large number of soldiers later transferred into the company came from quite literally all over the colony, as their original companies had been raised in all corners of the colony. In most cases the residences of those soldiers are not revealed within records relating to Turner's company, but within records that relate to their service in earlier companies or garrisons. It should be noted that several other rosters of this type were produced in the course of this research effort, each providing a snapshot of company composition at various points in its relatively brief history (ex.: one showing its composition when first raised on Feb. 21, 1676 and another illustrating its composition upon arrival in Northampton 17 days later), but those have not been included here for sake of brevity.

A brief discussion of pay crediting may be useful at this stage. The weekly pay rate of 6 s. to a common soldier (6 days at 10 d. and the 7th day at 1s.) calculates into an awkward per day rate of 10.29 pence.²⁵⁷ Absent some sort of complex algorithm, any effort to determine how many Sunday pays at 1 s. were incorporated into a particular soldier's service would become very long and excruciatingly tedious. It has been found through repeated practice that assuming a rate of 10 d. and rounding up to the nearest full day provides a reasonably accurate estimate for any common soldier's duration of service, though not always his *precise date* of enlistment, transfer, or discharge. Confronted with those obvious challenges relating to pay rate of common soldiers, Bodge never attempted to determine any pay rates for officers, so those have also been estimated through repeated calculations (it should be noted that we do not know if officers also received a pay increase on the 7th day, a question that very likely also troubled the remarkably keen mind of George M. Bodge).

²⁵⁶ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 45.

²⁵⁷ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 45.

In consideration of the above issues, a plus or minus factor of 1-2 days appears advisable for many of the calculated dates of enlistment and discharge, most especially if a soldier served for many months between pay days as the range of error appears to be slightly cumulative. It is hoped that further refinement of the estimating process will clarify the issue. Further research would also seem worthwhile into pay rates of officers, as well as potential differences of pay within troops of horse, versus dragoons, versus companies of foot. Also, the manner and extent of wound and death compensation, and the circumstances under which deductions may have been made for small acts of misbehavior (ex.: dereliction of duty or breaking of the Sabbath) or for lost and broken equipment, all common practice in European armies of the day.

Aside from determination of an individual soldier's duration of service in number of days, the resulting calculation of individual dates for start or end of service has proven extremely useful for discovery of the date on which a company was mustered or discharged (the direct historic record being often elusive as to one, the other, or both). It also helps in tracking a company's location on a specific day when such information is otherwise unrecorded. For example, Turner's date of arrival in Marlborough is not available in direct record but the calculated discharge date for 18 of his original soldiers confirms that the company must have arrived on the evening of Feb. 25, as all 18 of those men were discharged on the following day. Rate of marching can also be estimated through that process, which may in turn determine whether a company was mounted or on foot. Turner is documented as having arrived in Medfield late on Feb. 22 but his date of departure for Marlborough appears to be unrecorded. Taking his calculated date of arrival in Marlborough as Feb. 25, and considering that the minimal road distance between those two villages is 23 miles, we can say with considerable assurance that his company left Medfield on the morning of Feb. 24 and camped for one night on the road. Looking more broadly at mileages versus arrival and departure dates on the Bay Path, we find that the company's rate of travel ranged from a low of ca. 9 miles per day to a high of only 12 miles. On that basis, we can safely assume that Turner's soldiers were marching on foot during their entire journey from Boston to Hadley, also that most of the remainder of MAJ Savage's Western Army was also travelling on foot. That information, in turn helps to explain why Turner discharged 18 newly enlisted conscripts after only two days of marching. Most or all of them were probably unfit to march any further.

A Brief Biographical Sketch of William Turner

William Turner was born in Devonshire England in 1623, apparently emigrating at age 19 in 1642. A tailor by trade, he initially settled in Dorchester, married three times, was widowed twice, and produced several sons and daughters. In 1664 the family moved to Boston, where his business appears to have improved. A commonplace tale of 17th century middle class prosperity; but Turner's life would soon change in an unusually dramatic way. Despite his initial acceptance into Dorchester's Puritan congregation, and presumably appearing a mainstream Puritan for the following 20 years, in 1665 Turner became a significant figure in establishment of the first Baptist congregation in the city of Boston. Religious conversion from one branch of Protestantism to another would barely attract notice today, but within the orthodox theocracy of Gov. Bellingham the simple act of holding a Baptist meeting was not only considered heresy, but also a form of treason. On July 31st of 1665 Turner and his entire family were legally banished from the colony, but rather than complying with that order he defiantly chose to accept a lengthy sentence to Boston jail. Turner appears to have been an uncomplaining prisoner and his passive acceptance seems to have been mistaken for remorse. As a result, he was released after only three months with expectation that he would now leave the colony. It was soon discovered that he not only had no plans to depart but had also defiantly resumed practice of the Baptist faith, having now become one of the most significant leaders of that congregation. Confronted with such unusual stubbornness and disobedience the Puritan government saw no alternative but to really come down hard. Turner was again arrested on April 29, 1668 and not released until the summer of 1669. Still quietly defiant, Turner was arrested again in November of 1670. By this time, if not earlier, those very personal acts of quiet civil disobedience had inspired several other prominent Anabaptists to choose jail over banishment. Understandably admired and emulated by radical Baptist men and women, his example of personal martyrdom also touched the sympathy of more mainstream colonists. And a number of Puritan theologians on both sides of the Atlantic began to suggest that the Massachusetts Bay government take a more conciliatory approach toward religious dissenters, especially the prisoner William Turner. But Gov. Bellingham and his religiously conservative minority remained firmly against any compromise of any sort. It was not until Bellingham's death in December of 1672, followed by the election of John Leverett in May of 1673, that a slightly more tolerant government chose to release William Turner from

his most recent 2 ½ years in the familiar setting of Boston goal. Most of the previous seven years of Turner's life had been spent in a cold, damp, and vermin infested prison where his religious stand had become an all-consuming passion. It seems somewhat remarkable that in the following years Turner's mental state appears to have remained remarkably stable, his mind keen and his emotions surprisingly calm. But a number of authors suggest that the long terms of repeated imprisonment had caused irrevocable damage to his physical health.²⁵⁸

The United Colonies' Spring Offensive: Failure has Many Recipes

In the weeks following the Dec. 19, 1675 storming of the fortified village in Rhode Island's Great Swamp it soon became clear to all colonial governments that the majority of Narragansett survivors had fled northwest into the ancestral lands of their Nipmuc allies, much as the Wampanoag had done in aftermath of the Pocasset Swamp fight. On Feb. 8, 1676 the War Council of the United Colonies, understandably fearful that spring would bring a renewal of attacks on the Connecticut Valley towns, enthusiastically voted to raise a new army of 600 soldiers, half from Massachusetts and half from Connecticut, with dual intent of engaging those retreating indigenous forces while also protecting the five surviving Massachusetts Bay Colony settlements in the Connecticut River Valley. The entire expedition would be directed by MAJ Thomas Savage, a politically popular officer with a combat record that completely belies his surname. Savage's first campaign experience had been as commander of the Massachusetts Bay contingent in the 1675 Mt. Hope expedition, during which his strategic and tactical decisions may be charitably described as both timidly ineffective and strikingly unimaginative. Now placed in command of an army with the conflicting missions of pursuing and engaging a highly mobile enemy while also protecting five widely dispersed settlements on a very distant frontier, it should be no surprise to discover that the 55-year-old major chose the more defensive mission as his top priority.

The War Council's fears of a renewed indigenous campaign quickly proved valid when the frontier town of Lancaster was hit by a very strong attack on Feb. 10, only two days after the army's mobilization order had been issued. Following an all too familiar pattern of "too little and too late" LT Edward Oakes' Troop of Horse was quickly sent to scout the frontier between

²⁵⁸ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 232-234, & 254.

Lancaster and Medfield, where he of course found no sign of the enemy. On Feb. 15 CPT Samuel Mosley was ordered to re-raise his Company of Dragoons (4th in service since start of the war but now dominated by recently pressed men rather than veterans) and move to protect the equally vulnerable town of Sudbury. After less than a week in Sudbury Mosley's company was ordered to Marlborough, to become the initial combat unit of MAJ Savage's army. Most other units of the Massachusetts contingent appear to have not assembled until Feb. 21: a new Company of Foot nominally under MAJ Savage (commanded in practice by his son in law LT Benjamin Gillam, an officer with no prior campaign experience), and a new Troop of Horse under CPT John Whipple (who was later shown to be both incompetent and cowardly). The army also included six indigenous scouts accompanied by translator John Curtis. Despite having been specifically requested by MAJ Savage, the mere presence of a handful of Indians in an army sent to fight 'rebellious' Indians so aroused the xenophobic racism of CPT Mosley that he publicly disputed with his commander regarding their loyalty. One more newly raised Company of Foot would also be added before the end of that week. That final company, mostly composed of raw militiamen rounded up by the Boston area press gangs, would be under the significantly inexperienced command of a former militia Sergeant named William Turner.²⁵⁹

The Raising of Turner's Marching Company and a Chronology of its Campaign: Feb. 21 – April 12, 1676

Feb. 20, 1676: Despite his many years of mistreatment by the Puritan theocracy of Massachusetts Bay, at start of the war Turner proposed to raise an entire company of Anabaptists in proof of his own loyalty and that of others in the Boston congregation. That offer was declined, most likely because of the company's proposed composition, but by February of 1676 the winds of war had turned into a significant firestorm. Despite considerable reluctance, as most of his earlier volunteers had either become 'scattered' or far less enthusiastic, Turner was persuaded to accept a captain's commission in the army being raised by Major Thomas Savage for service in the Connecticut River Valley. Turner appears to have received that commission on Feb. 20. He was now 53 years old, a few years younger than most other militia captains, but had never held any higher rank than sergeant. His two eldest sons were at that time "common

²⁵⁹ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 97, 235, & 282 – 283; Douglas E. Leach, *Flintlock and Tomahawk: New England in King Philip's War* (New York, NY: W. W. Norton & Co., Inc., 1966), 161 -162.

soldiers” in the Marlborough garrison. William, Jr., the younger of the two, left that garrison to enlist in his father’s company.²⁶⁰

Feb. 21: Fate struck with a violent hand on the morning of Feb. 21 when a courier arrived in Boston with the frantic announcement that the frontier town of Medfield was under very serious attack. Turner’s company was urgently assembled with the 64 soldiers who had so far been raised, and sent to relief of that village. The company appears to have arrived in Dedham around sunset of the same day, still 10 miles short of Medfield after having marched approximately 11 miles.²⁶¹

In his attachment to a letter dated April 25, 1676 Turner provided a complete roster of those 64 soldiers who “came out of Boston.” Aside from a very serious shortage of what were simply called “soldiers,” and possible absence of a drummer, the organizational structure is entirely typical for a 100-man Company of Foot: ten ‘officers’ in parlance of the time: captain (CPT), lieutenant (LT), ensign (ENS), 2 sergeants (SGT), 4 corporals (CPL), and a clerk (CLK). Aside from Turner himself the most senior of those officers was a Baptist of Turner’s own congregation: LT Edward Drinker, a personal friend who had also endured imprisonment for his faith. There were probably a few other Baptist volunteers; and at least two servants of the Turner household (most likely employed in his tailor shop). One particular soldier, Ephraim Roper, appears likely to have volunteered out of a mix of personal revenge coupled with survivor guilt. Less than two weeks earlier he had been the sole person to escape from the famous attack on Lancaster’s Rowlandson garrison house. His young wife and infant daughter had both been with him in that burning house and both of them had died there.²⁶²

Despite the above scattering of known or suspected volunteers, the majority of Turner’s “common soldiers” (what we would now call privates) appear to have been pressed men from the county militia, the principal source of soldiers for nearly every company of that war. A significant factor affecting the morale of pressed soldiers was that they resented being conscripted into long and dangerous campaigns while other men in their militia company remained in garrison at home. Much of that unequal treatment was based on economic and

²⁶⁰ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 232-234, 237, & 254 -256.

²⁶¹ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 234.

²⁶² George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 234 & 237.

social disparity; at least one of Turner's original soldiers was an indentured servant forced to substitute for his master. It is unclear whether Turner's own servants freely volunteered or were forced to serve, though they probably felt little choice. Repeated impressment into multiple campaigns was another issue that created serious and understandable resentment. A rather shocking number of soldiers are recorded as serving in a succession of companies for more than a year, and considering the dangers and privations of warfare in that age it seems very unlikely that all of that service was voluntary. In fact, it was not at all uncommon for a discharged soldier to experience only a few days of freedom before the local press gang forced him into some other company. Soon after most of Turner's original company was disbanded in Boston (Turner and a minority remaining in frontier garrison) two of his recently discharged soldiers are reliably recorded as having fled the colony to avoid being pressed into some other company for yet another campaign. It seems probable that there were actually more than two.²⁶³

Feb. 22: Turner's company left Dedham early in the morning and immediately fell victim to an opportunistic ambush, probably set by the same indigenous force that had attacked Medfield. No further details are provided in historic record, indicating that the exchange of fire was very brief, but one soldier named Robert Bryant was wounded so severely that he was immediately discharged and sent back to Dedham. Bryant's pay credits are of some interest as they reflect unusual governmental compensation for the wound he received on his very first day of service. In most cases a wounded soldier was only compensated through his last day of active duty, but on rare occasions we find wounded soldiers compensated as though they had served until the day their company disbanded. The rationale for such exceptional compensation remains unclear. Perhaps it was only applied when a wound was considered permanently disabling. Robert Bryant was paid all the way through April 14, the day on which Turner's original company appears to have been disbanded, a full 53 days after he was wounded. The fact that he performed no later military service may be some reflection of the seriousness of his injury.²⁶⁴

Once it became clear that the enemy had gone, the company regrouped and cautiously marched onward to Medfield, where a soldier named Nathan Adams was also discharged, having somehow become very seriously ill. Another man named John Newton was also discharged in

²⁶³ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 238-239.

²⁶⁴ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 239 & 248,

Medfield, having been “cleared” by a direct order sent from the Governor’s Council.²⁶⁵ Given the urgency of that action, the order presumably being delivered by fast courier, some political influence may have been in play.

Feb. 24: Turner’s company appears to have departed Medfield on the morning of February 24. It then marched for a total of approximately 23 miles, camping for one night along the Bay Path, and arrived in Marlborough on the evening of Feb. 25. Turner’s company was last to arrive at the rendezvous, on the same day in which MAJ Savage was officially placed in command of the Army.

Feb. 26: On its first full day in Marlborough Turner’s company shed an additional 18 “cleared” men, reducing it to a temporary strength of only 44 soldiers. Bodge assumes that all of those “cleared” were pressed men who had suddenly and inconveniently completed their required term of service, but that appears very unlikely as Turner’s original ensign was included in that group and more than half of the others appear to have seen no prior service of any sort. Most or all of them must have been released for some other reason, perhaps being found physically unfit after only six days of marching (a not uncommon situation for men who had been pressed into service). Most of those discharged soldiers were presumably from Boston or the towns that now constitute its immediate suburbs, but one man was from a part of Dedham that later became Walpole and two appear to have been from Sudbury. As both of those villages were then on the sharp edge of the frontier it may be understandable that the town governments offered up their least fit residents for colony-wide service, retaining the healthiest young men for local garrison duty. None of Turner’s “cleared” soldiers saw any later service in any Massachusetts Bay Colony company, though they may perhaps have resumed duty in their county militia.²⁶⁶

Sometime during Turner’s three days in Marlborough his most experienced combat officer, ENS Henry Timberlake, was unaccountably replaced by Edward Creek, an officer of militia artillery without any campaign experience. To bring his company up to strength, Turner was also provided with 47 “common soldiers” from the companies of CPT Samuel Wadsworth and LT Nathaniel Reynolds. Wadsworth’s company was one of several mustered on Jan. 5,

²⁶⁵ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 239 & 248.

²⁶⁶ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 239.

1676 on Dedham Plain, thereafter serving in an entirely fruitless and logistically difficult campaign known as “The Hungry March.” It joined the Marlborough garrison on Feb. 5 and on Feb. 10 had marched to the relief of Lancaster, successfully dispersing the attack in which Mary Rowlandson had been captured. Reynolds’ company had spent the winter in garrison at Chelmsford. Despite that town’s frontier location, it appears to have never experienced combat.²⁶⁷ Those company histories may, however, be insignificant as it appears that the large number of their transferred soldiers had been pressed only 15 days before finding themselves in Turner’s company. Considering that all of those men were so remarkably inexperienced, it is unclear whether they were selected for transfer because they were the most physically fit or because they may have been considered the most expendable.

Feb. 29: On this date the total force of Major Savage’s Western Army, including Turner’s considerably strengthened marching company, departed Marlborough for Brookfield (then known by the indigenous name of Quaboag). Turner’s company now contained 89 soldiers, so was near to full strength and included the full complement of officers for a foot company of the period, now definitely including a drummer.

March 3: After marching for four days and ca. 38 miles the army arrived at the Brookfield garrison where it rendezvoused with MAJ Robert Treat’s forces from Connecticut, totaling ca. 300 men including a substantial contingent of Mohegan and Pequot scouts.

March 4: The entire army now marched northwest in a very clumsy attempt to surprise the Nipmuc village of Wenimessit, approximately 10 miles away in the modern town of New Braintree. Turner now had 78 men, having left 11 “common soldiers” to strengthen the Brookfield garrison. Bodge’s totals on p. 235 unaccountably omit these soldiers and his transcription of Turner’s list on p. 240 fails to include John Glide among them.²⁶⁸ Through context in Turner’s April 25 letter it can be safely assumed that all of the 11 soldiers Turner left in Brookfield were transfers from either Reynolds’ or Wadsworth’s company. They may have

²⁶⁷ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 219 – 220, 239 – 240, & 291.

²⁶⁸ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 97-98, 118, 235, 240, & 357.

been found unfit to march further, comparably to the 18 soldiers left in Marlborough, but it was also very important to maintain strength in that garrison, as Quaboag was considerably the most vulnerable point on the entire Post Road between Boston and Hadley. In any case, we do not later see any of these 11 soldiers returned to Turner's company. Given the remarkably large size of his force, and probable noise associated with its movements, it should be no surprise that MAJ Savage found none of the enemy at Wenimessit. The indigenous scouts easily picked up their trail and mounted forces pursued the fleeing Indians for several miles northward, but gave up when they reached the south bank of the Miller's River.²⁶⁹

March 5: After apparently camping for the night at Wenimessit, the entire army departed for the village of Hadley, ca. 35 miles to the west.

March 8: The army arrived in Hadley on this date and Turner's company was immediately sent across the river to defend the palisaded settlement of Northampton. Trumbull's History of Northampton appears perfectly accurate in saying that Turner's company had 89 soldiers when leaving Marlborough and left 11 in Brookfield so had 78 when it arrived there. On March 13 the Northampton garrison was further strengthened by Major Treat and two companies of Connecticut soldiers. The timing of their arrival turned out to be remarkably fortuitous.²⁷⁰

March 14: In a dawn attack that unaccountably surprised the entire garrison, a large number of indigenous warriors managed to penetrate Northampton's flimsy palisade and began burning houses and barns before any general alarm could be raised. The table below conveys an accurate snapshot of Turner's original marching company at this moment in time. Of Turner's eleven officers only Sergeants Gilman and Knott had ever been in combat, both as veterans of the successful but costly and murderous Narragansett Fort campaign. Twenty -one "common soldiers" (27 percent of the company) appear to have also seen previous combat, though not

²⁶⁹ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 97.

²⁷⁰ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 235; James R. Trumbull, *History of Northampton, Massachusetts, from its settlement in 1654: Vol. 1* (Northampton, Ma: Gazette Printing Co., 1898) 305

always with positive results. Five are known to have run from a small ambush the previous November and several others were survivors of greater disasters that year.²⁷¹

Considering the strength of Northampton's garrison, it is no surprise that the attacking force was quickly driven out, but the soldiers and settlers lost a total of 5 people killed. Only two of the dead were soldiers: James "Machrenell" of Turner's company (a Reynolds' company transfer of Scots birth or ancestry) and another named Increase Whetstone who was apparently in one of MAJ Treat's Connecticut companies. Five additional people are known to have been wounded during the attack, one probably being CPL Philip Squire of Turner's company. On March 17 Turner promoted a Marlborough transfer named John Newman to the rank of corporal, and Squire is the only one of the original four corporals to be discharged in this time period. The remaining four wounded were presumably militiamen, Connecticut soldiers, or civilian non-combatants.²⁷²

Turner's Marching Company at the Defense of Northampton: March 14, 1676

RANK	IN TURNER'S ORIGINAL COMPANY	MARLBOROUGH TRANSFERS	TOTALS
CAPTAIN	William Turner		1
LIEUTENANT	Edward Drinker		1
ENSIGN		Edward Creeke/Crick	1
SERGEANTS	Ezekiel Gilman, William Parsons		2
CORPORALS	Thomas Barnard, Thomas Elliot, James Knott, Philip Squire (wounded)		4
DRUMMER		John Chapple	1
CLERK	Thomas Skinner		1
COMMON SOLDIERS	32	35 (James Machrenell killed)	67
TOTALS	41	37	78

Despite nine months of continuous warfare, combat experience was still surprisingly rare in the army of Massachusetts Bay, largely due to severe attrition that in turn required successive rounds of impressment. By late autumn of 1675 all the marching companies contained a small core of veterans, but with each successive campaign those veterans, if they survived and remained in good health, would immediately find themselves in an entirely new company filled

²⁷¹ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 55

²⁷² George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 235 – 236

up with newly impressed men (Samuel Mosley appears to have been the only commander who managed to retain a significant number from one campaign to the next). As result of those conditions Turner's company was now the most combat experienced of the four that had marched out from Marlborough, not because it had any significant number of veterans but simply because it was the only one that had yet seen any combat. Turner would soon receive a bitter reward for his successful defense of the Northampton palisade. In less than a month the company that he had personally raised, marched with for 100 miles, and now directed into combat would be thoroughly destroyed, not in battle with the indigenous enemy but because of a strategic decision made in Boston.

"Thus Committing You To God..." Abandonment of the spring campaign and Turner's effort to defend the settlements

Meanwhile, the already fragile situation along the eastern Massachusetts frontier had gone from bad to worse. The town of Groton was attacked three times in one week, resulting in its abandonment on March 18. On March 26 a raid on Marlborough led to that town's effective abandonment, though in light of its role as a supply base a small garrison was maintained through the remainder of the war. Lancaster was finally abandoned after a second attack on the same day as Marlborough's. A considerable number of additional towns and garrisons were also attacked further east and south in Norfolk County, Plymouth Colony, and the mainland parts of Rhode Island. Perhaps most disturbingly, on the same fateful day of March 26 a full company of Plymouth Colony soldiers under CPT Michael Pierce was expertly ambushed and completely destroyed despite the experimental inclusion of 20 indigenous soldiers. With tales of defeat and disaster on every front, the general state of affairs in March of 1676 must have felt just like September of 1675.²⁷³

On the same date as Pierce's death and the Marlborough and Lancaster raids MAJ Savage received a pair of letters from the Governor's War Council. The first, dated March 14, conveyed that in light of the recent attacks to eastern towns an anticipated reinforcement of 150 mounted soldiers would no longer be provided. The second letter, dated March 20, went so far as to suggest that the towns of Hatfield, Northampton, and Westfield should be completely

²⁷³ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 98 – 101; Douglas E. Leach, *Flintlock and Tomahawk: New England in King Philip's War* (New York, NY: W. W. Norton & Co., Inc., 1966) 165 – 168.

abandoned; their settlers to be somehow lodged as refugees in Hadley and Springfield. A much more tangible blow fell on the same day as arrival of the War Council's letter. A party of 18 men, including a substantial detachment of Whipple's Horse, and a considerable number of women and children on their way to Sunday religious service was ambushed by only 7 – 8 raiders near the present town of Longmeadow. Rather than acting to protect the settlers CPT Whipple and all of his soldiers fled in equally blind panic, an act of cowardice that resulted in the capture of two young mothers carrying infant children. A remarkably botched rescue attempt by the same troop of horsemen resulted in deliberate and very public murder of both infants and one of the women, the other surviving a hatchet blow to her head.²⁷⁴

Stung by the War Council's advice the Westfield settlers discussed evacuating to Connecticut rather than Springfield, as that colony seemed willing and able to provide better protection. Northampton's settlers not only asked for the 150-man reinforcement to be reconsidered but offered to pay and victual those additional soldiers, an offer that fell on deaf ears. The Connecticut government first advised the Westfield settlers to stay where they were, but then produced an order for MAJ Treat's companies to march back to Hartford. By the end of March, the Valley's settlers had good reason to feel that they were being completely abandoned to a terrifying fate.²⁷⁵

The inevitable next step fell with a War Council letter that was perhaps appropriately dated April 1, though there was certainly nothing humorous in its content. It began by chiding the recalcitrance of the Hatfield, Northampton, and Westfield settlers for not abandoning their towns. It also dismissed Northampton's offer and reconfirmed that there would be no reinforcements. And concluded with the real bombshell: a very firm order directing MAJ Savage to immediately collect his army and march it eastward, after providing "soldiers to assist those townes not exceeding 150 men choosing such as are fittest for that service & and as neare as you can All single men Leaving Capt. Turner in Capt. Poole place." Though actually directed toward the well-being of MAJ Savage, the piously formulaic closing words of the Council's

²⁷⁴ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 282 – 283.

²⁷⁵ Douglas E. Leach *Flintlock and Tomahawk: New England in King Philip's War* (New York, NY: W. W. Norton & Co., Inc., 1966), 169 – 170.

letter sound today like the pronouncement of a death sentence: “Thus committing you to God...”²⁷⁶

The letter further ordered MAJ Savage to “endeav’r in ye returne to visit ye enemy about Bacquake (the vicinity of present-day Athol, MA where a strong indigenous army was rumored to be gathering) & bee careful not to bee Deserved by ye lapwing stratagems: by drawing you of from yr nest to follow some men” (a very convoluted way of saying: “Don’t let yourself be decoyed into an ambush!”). The letter went on to advise that if MAJ Treat’s Connecticut companies miraculously returned he could instead attack the other indigenous force already known to be camped at the Falls above Deerfield. It then turned round and re-advised “but if ye Conetect men returne not or after a returne draw of [off] again then or [our] expresse order is to bee upon yor march homewards & in ye returne to endeavor to visit the enemy as in or passed (our previous directive) was expressed” (so back again to “Backquake”). The finale of all those alternative instructions reads: “If you should not meet with the enemy then we order you to retreat to Marlborow and wait there for further orders.” Presented with that long series of very explicit and highly detailed alternatives, also reluctant to march his still inexperienced soldiers into either of those two unmapped wildernesses, it should be no surprise that the ever - cautious major simply marched his army straight back to Marlborough. He there explained that his soldiers were too sick and ill supplied to have detoured toward “Backqake,” nor to accomplish anything further. MAJ Savage was then politely discharged from further duty, along with all the rest his army. Neither LT Drinker nor any of the other 44 soldiers from Turner’s marching company would ever see any further service in the remainder of the war. Those left behind in the Valley would have a very different experience.²⁷⁷

The Formation and Composition of Turner’s Garrison Company: April 7, 1676 (Total = 220 men) = CPT, 6 SGTS, 4 CPLS, Drummer, Clerk, & 207 Common Soldiers dispersed among five different garrison towns

On the morning of April 7, 1676 MAJ Savage’s army departed for Marlborough, taking with it LT Drinker and 44 other soldiers of Turner’s marching company. In the few days prior to the army’s departure, Turner had been charged with command of a new garrison company

²⁷⁶ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 98.

²⁷⁷ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 98 – 99.

composed of his own 31 remaining soldiers together with a much larger number who had either previously been in other companies of Savage's force or else spent the winter in local garrisons under the command of CPT Jonathan Poole. On basis of a roster written in Turner's own hand on April 7, 1676, George Bodge made an understandable but false assumption that the newly formed Garrison Company contained a total complement of 153 soldiers: 50 in Hadley, 9 at the North Hadley Mill, 43 in Northampton, 41 in Hatfield, and 10 "sent to Springfield." Elsewhere in his text, Bodge unaccountably contradicted the details of his own transcription, saying there were only 151 soldiers in total: 51 in Hadley rather than 59 including those at the mill, 46 rather than 43 in Northampton, 41 rather than 45 in Hatfield, and 9 rather than 10 sent to Springfield.²⁷⁸ In actuality those minor discrepancies are of little significance, as the record of pay credits firmly documents that Turner had a total of not 150 but 220 soldiers in garrison. The 70 additional soldiers *not* reported on his April 7 roster were all stationed in the towns of Springfield and Westfield. Their absence from Turner's roster is best explained by his use of the words "Sent to..." in describing ten soldiers added to Springfield's garrison, while the other 140 on that roster were consistently listed as "Soldjers at" Hadley, Hatfield, or Northampton. It may appear baffling that Turner would neglect to report the presence of those 70 additional soldiers. He certainly would not have forgotten that he had any soldiers in Westfield, and it would have been very strange to have stationed no more than ten soldiers in the important settlement of Springfield. The best explanation, unlikely as it may seem, was that CPT Turner and MAJ Savage colluded in deliberately concealing the presence of those 70 additional soldiers, a number that they both felt necessary for defense of the Valley but also the sort of number that the Governor's Council was firmly on record as considering excessive. Turner also neglected to report the presence of any garrison in the significantly vulnerable settlement of Westfield. Both CPT Turner and MAJ Savage may have feared that the War Council would order Turner to immediately remove that garrison, as the March 20 Council letter had recommended complete abandonment of that town. This seems to be one of many situations throughout history in which commanders on scene willfully ignored direct commands from some distant war council,

²⁷⁸ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 101, 237-238, and 240-241.

sincerely believing they better understood the strategic situation within their own theatre of operations.²⁷⁹

The Commissioning of New Officers:

That letter ordering MAJ Savage's army to return east was signed on April 1, the minimal road distance between Boston and Hadley is at least 90 miles. A fast courier with change of horses would have needed at least two days, more likely three, to cover that distance. The most significant result of that passage of time was that it left Turner with only three to four days in which to organize a new company before his trusted lieutenant would march away, taking with him nearly 2/3 of his old company and almost all its other officers. It seems unlikely that Turner had any control over which officers stayed and which ones left, as the only ones who remained with him on April 7 were two Marlborough transfers: his drummer John Chapple, and a soldier named John Newman whom he had promoted to corporal on March 17. He also had SGT John Lamb in the Westfield garrison, a man who had soldiered under CPT Poole since the previous autumn. Aside from Turner himself, one sergeant, one corporal, and a drummer were clearly not enough to provide command and control for a company at twice the maximum strength of a marching company and scattered among five garrisons divided by a broad and unbridged river. Turner understandably promoted CPL Newman to sergeant; perhaps his first and easiest decision, Newman very likely having distinguished himself in the defense of Northampton. He also "took in exchange" a sergeant from one of the other companies that would soon march homeward: John Throp (variously spelled; probably Throope or Thrope in modern orthography). Throp was also an excellent choice as he had been a closely trusted sergeant and courier in the company of Major Samuel Appleton during both his western campaign of the previous year and in the subsequent Narragansett campaign. The soldier that Turner exchanged out was another Marlborough transfer, a "common soldier" named Philip Matoon who soon returned to the company and was present at The Falls Fight.²⁸⁰

Turner also promoted eight common soldiers, actually having little choice but to do so! One was from the remains of his old company and the other seven were soldiers that had been serving in other companies and were now left behind. That total still gave him only 13 officers

²⁷⁹ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 98.

²⁸⁰ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 151, 152, 236, & 239.

to control a garrison company of 207 soldiers, just two more officers than ordinarily prescribed for a marching company of 100 men. Turner chose not to promote anyone to lieutenant, second in command of a normally constituted company, probably thinking that too high a position for any available candidate. He instead provided himself with four additional sergeants, one of whom would soon be promoted to ensign. That remarkably unusual company organization of a single senior officer directing six sergeants made excellent sense for a garrison company intended to be split into ‘penny packets’ in defense of five widely separated settlements. A company organization that would have been disastrous for a marching company intended to campaign aggressively. The first of the newly promoted “common soldiers” had been serving with Turner ever since his company was raised, so may have been an easy choice. But it must have been difficult to decide who among the many others of equivalent rank to select for the other seven positions, a decision that could only have been based on recommendations by the three departing company commanders. Turner had no choice, and no choice but to act quickly.

CPT Poole appears likely to have played a significant advisory role at this time. Not just because the Governor’s War Council explicitly stated that Turner was to replace Poole as garrison commander, nor because most of Turner’s promotions would turn out to be from Poole’s company, but also because he and Turner had significant commonality of experience. In mid - November of 1675 Poole had been the least experienced company commander in MAJ Appleton’s Western Army, having arrived more than a month after all the other commanders and having also been just recently promoted from lieutenant. As the Narragansett Swamp campaign was already being planned, and all the other commanders were both of longer service and more knowledgeable of woodcraft, Poole’s recent promotion and lack of field experience best explains his being left to command all of the five surviving Connecticut Valley garrisons. In April of 1676 it was now Turner who had the least time in rank and least experience. And he was also now being placed in exactly the same situation as CPT Poole five months earlier. In those frantic few days prior to accepting his new command it is tempting to imagine that Turner consulted Poole more than any other colleague.

Turner’s first and easiest promotion was probably his new clerk, a man named Richard Francis who had been transferred to his company as a ‘common soldier’ on February 29. Presumably gifted with decent penmanship and some sort of accounting background, a company clerk was routinely exempted from patrol or guard duties and not ordinarily expected to serve in

combat. Turner's second promotion was probably SGT Isaiah Tay (Toy, or Toye), as he had been an original "common soldier" of Turner's own company. Tay appears to have had no prior combat experience but may have been promoted due to some act of bravery in the defense of Northampton. Disregarding any such speculation, Turner certainly must have considered Tay a soldier of exceptional ability as on some date between April 25 and May 18 he was further promoted to the rank of ensign, bypassing the considerable seniority of Throp and lesser seniority of Newman. Tay's startlingly rapid elevation in rank placed him second in command of Turner's company and third in command at the Falls Fight, quite a jump in responsibility for a "common soldier" who prior to the first week of April had presumably shown little potential to become any sort of officer. Aside from his command responsibilities an ensign was also charged with carrying and protecting the company colors (a flag typically measuring 5 - 6 feet on each side), which made bravery a prerequisite as the carrier became an exceptionally conspicuous target. There is no specific record that the colors were carried into battle at The Falls, but in context of 17th century military tradition it seems very probable. Adding to the mystery of his promotion, ENS Tay's personal actions during the Falls Fight remain entirely unrecorded.

Newly promoted SGT Roger Procer was considerably the most combat - experienced officer in Turner's new company. Procer had been a "common soldier" under CPT Daniel Henchman at the very start of the war, then under CPT James Oliver at the horrific storming of the Narragansett fort (another battle that may be considered a "massacre" from any reasonable viewpoint). His most recent service had been under the command of a violently racist, remarkably insubordinate, perhaps even sociopathic dragoon commander named CPT Samuel Mosley (usually spelled Mosely, though Mosley is more accurate phonetically), whose recommendation might have felt like a mixed blessing to a man such as Turner. In light of Procer's substantial combat experience it is mildly surprising that he did not take part in the expedition to The Falls, either voluntarily or under an order from Turner.

The final man among the three "common soldiers" appointed to sergeant was Robert Bardwell, who had been left behind by Poole's company. Although he may have somehow distinguished himself at either the defense of Hatfield in October, Bardwell was not nearly as combat experienced as Procer. And as a recent immigrant from the urban environment of London his knowledge of landscape and any sort of woodcraft was probably negligible. He had probably volunteered to stay behind, having already formed strong connections with Hatfield

residents while serving in defense of that settlement. Bardwell settled there after the company was disbanded, married into one of its families, and became a very prominent citizen. Those personal connections with Valley settlers may best explain why he was the only sergeant who went to the Falls Fight, almost certainly volunteering for the mission. The four new corporals were more of a mixed bag, though three of them had also wintered in garrison under Poole. Joseph Hartshorn had begun his service in CPT Richard Beers' destroyed company and Robert Simpson and John Wildes under MAJ Samuel Appleton. The fourth corporal, Samuel Lane, had arrived in some other company of Savage's army and appears to have had no significant experience of combat. It is somewhat surprising that none of those four corporals went to the Falls, as command and control of the garrison company detachment might have benefitted by having just one more officer there.

GARRISON TOWN	CAPTAIN	SERGEANTS	CORPORALS	DRUMMER	CLERK	COMMON SOLDIERS	TOTAL
Hadley	Turner	Thrope & Newman	Hartshorn & Simpson	Chapple		51	57 (25 %)
Hatfield		Bardwell	Lane			39	41 (19 %)
Northampton		Tay	Wildes			41	43 (20 %)
Springfield		Prosser			Francis	35	37 (17 %)
Westfield		Lamb				14	15 (7 %)
Springfield or Westfield						27 (7 in Springfield?) (20 in Westfield?)	27 (12 %)
TOTAL	1	6	4	1	1	207	220

The result of all those promotions left Turner's Garrison Company with the following configuration on April 7, 1676:

Although we know specifically that there were at least 37 soldiers stationed in Springfield and at least 15 more in Westfield, there are 27 additional soldiers who may have served in either garrison. During the previous winter CPT Poole had stationed 41 soldiers in Springfield and 31 in Westfield. If the proportions remained similar on April 7, Turner would have placed approximately 44 soldiers (20 percent of his total) in Springfield on April 7, 1676 and 35 (16 percent) in Westfield. As the strategic relationship between Springfield and Westfield were essentially unchanged, those estimates may be fairly close to the reality. In any case, the estimated 35 soldiers in Westfield seems a reasonable minimum for any garrison at that time.²⁸¹

Despite being very differently officered than a standard marching company, and still insufficiently officered for a force of double the usual size, the garrison company that William

²⁸¹ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 152.

Turner constructed and staffed within the course of only 2 -3 days was very well suited for its purely defensive role: a sergeant to command each of the five garrisons and four corporals to assist in the largest garrisons. It seems probable that very soon after April 7 either Hartshorn or Simpson was sent to assist SGT Prosser in Springfield, though we have no direct evidence of that. The company clerk was in safe quarters at the least threatened settlement. And SGT Thrope and Drummer Chapple were stationed at Turner's headquarters in Hadley, well posted to directly assist Turner as he made his rounds of inspection within the defensive perimeter. That configuration provides the strongest direct evidence that through the first week of April there was not yet any plan to attack the indigenous encampment at The Falls, nor to take any other sort of aggressive action. All of which is unsurprising in light of Turner's stated mission: the defense of five small settlements having negligible fortifications and also divided by a wide and unbridged river.

Night Of The Planting Moon: "Now is the time to distress the enemy" - Rev. John Russell

The Valley became surprisingly peaceful throughout the month of April and into the first half of May, partly due to a sudden flurry of hostage and peace negotiations, but mostly due to more urgent priorities. Planting season had begun; an essential part of the annual round for most families on both sides of the war. The colonists in the Connecticut Valley began warily tilling their fields, a few here and there being ambushed and killed in the process. The indigenous nations also began to plant the traditional "three sisters" (maize, beans, and squashes) in more secluded locations, often very far from their traditional homelands. Many of them, mostly Narragansett and Nipmuc war refugees, had collected around the 'Upper Falls' of the Connecticut River (also known to local settlers as Deerfield Falls or simply "the Falls"), partly because it was close to the fertile plains of abandoned Northfield and Deerfield, but more especially for the ancient purpose of catching and drying anadromous fish. With most of both New England populations briefly engaged in peaceful activity, a path to peace could perhaps also have been found, but local events intervened.

On the indigenous side a remarkable number of 70 cattle and horses were stolen from Hatfield meadow and driven to the abandoned meadow in Deerfield for later consumption at the Falls. Earlier in the war the theft of that much livestock would have only caused the settlers to hunker down in fearful defense, but at this point in its blood - filled history they had quite

enough of indigenous harassment, not just harassment but a continuing cycle of arson and murder that continued to plague every community. In modern context the indigenous forces may with some justice be viewed as guerilla rebels fighting desperately against an oppressive colonial power, but the view from colonist side was quite the opposite. The contrast may be best summed up with a well - known phrase: “One man’s freedom fighter is another man’s terrorist.”

A second trigger to action was provided by the sequential arrival of two young settlers and a soldier, each of whom had been individually captured and individually escaped from the fishing encampment at the Falls. The soldier and one of the settlers both conveyed that the encampment included a large number of women, children, and old men but relatively few warriors. The other settler more disturbingly, but less precisely, conveyed that there was a very large encampment and the young men there were planning more attacks. Guerrilla warfare by definition invariably produces civilian casualties, and counter- insurgency is frequently an excuse for genocide. From the perspective of those colonists, they hoped to strike a single blow that might put an end to their families’ continual suffering. From indigenous perspective they were about to embark on the sort of military action that could very easily slip into a textbook example of military genocide, as would soon prove to be the case.²⁸²

An April 29 letter to the General Court fully outlines the plan of attack, the first solid evidence that any sort of attack was being contemplated. Though co-signed by Turner and a number of militia officers, its frequent invocation of religious metaphor reveals the principal author as Rev. John Russell of Hadley, a Puritan clergyman especially known for his strong opinions on not only religion and politics but also military tactics and strategy. The letter conveys a strong impression of both the nearness and supposed weakness of the enemy encampment, also specifically proposing a night march and pre-dawn attack. It further dwells at length upon the great local enthusiasm for such an attack. And it accurately suggested that driving the indigenous families from their fishing spot would deprive them of needed food supplies, also dividing the indigenous army and its supporting civilians into smaller groups that could be more easily attacked in the future. No reply of any sort is recorded from the Governor’s War Council, and no reply appears to have been expected.²⁸³

²⁸² George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 238 & 244

²⁸³ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 242

Despite being a co-signatory of the letter there are several indications that CPT Turner was a reluctant participant in the plan, as he suggested in writing that the number of warriors at The Falls was probably being underestimated. Turner was also in such ill health that he had requested his own replacement in a letter dated only four days earlier, further suggesting that a considerable number of his soldiers had been in such long service that they also deserved to be sent home. He also pointed out that his soldiers were woefully short of clothing including shoes, an item essential to any military force in those days. Nonetheless, all the militia commanders appear to have been very keen on their attack plan. Despite being commander of all garrison forces in the Valley, Turner was in no position to veto such a substantial militia action. He was also obviously expected to contribute soldiers to the enterprise, and it would have been militarily dishonorable to not himself lead the expedition. Having co-signed the letter, Turner now had several important decisions to make: deciding how many of his officers, and which ones, should accompany him on the expedition, how many soldiers could be safely drawn out of each garrison, and whether to have those men handpicked by their garrison commanders or instead ask for volunteers (he appears to have taken the latter approach). But he still had plenty of planning time as there would not be a full moon until the night of May 18th, and a full moon would be essential for the long march along narrow trails. By cruel irony the full moon of May was then traditionally, and still remains for Algonkian nations, a time of joyful feasting in anticipation of a fruitful new year – the Night of the Corn Planting Moon. This year’s Planting Moon would be very different.²⁸⁴

The Distribution And Fate Of Turner’s Forces On May 18 - 19, 1676

As the total attack force consisted of two military units under CPT Turner’s overall direction (a detachment of his Garrison Company and a company strength detachment of the Hampshire County Militia Regiment), the presence of ENS Tay and at least one sergeant was essential for command and control of the Garrison Company detachment. Tay was probably not given the choice of volunteering or declining to go on the expedition, though in light of promotion history he almost undoubtedly volunteered. Turner did have a choice among five sergeants of roughly similar campaign experience, so may have asked for a volunteer rather than simply selecting one of them. In any case, it is unsurprising to see Bardwell as the sergeant for

²⁸⁴ George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 238

this expedition. He was a landless immigrant who over the course of the preceding seven months had formed strong emotional connections with the frontier settlers of Hatfield, while Turner's other four sergeants were established Massachusetts Bay residents who had families awaiting their return. In light of personal history, it seems very likely that Bardwell volunteered; also understandable that the other four sergeants would not have considered volunteering.

Summary Tables Of The Detachment Of Turner's Company At The Falls Fight: May 19, 1676

GARRISON TOWN	CAPTAIN	ENSIGN	SERGEANT	GUIDE	COMMON SOLDIERS	TOTALS & TOTALS OF CASUALTIES
Hadley	William Turner (Killed)			Thomas Read	16 men (5 killed & 2 wounded)	18 (27 %) (26 % of total casualties, 39 % of garrison contingent)
Hatfield			Robert Bardwell		4 men (1 killed & 2 wounded)	5 (8 %) (10 % of total casualties, 60 % of garrison contingent)
Northampton		Isaiah Tay			16 men (10 killed)	17 (26 %) (32 % of total casualties; 59 % of garrison contingent)
Springfield & Westfield					26 men (6 killed & 4 wounded)	26 (39 %) (32 % of total casualties, 39 % of garrison contingent)
TOTAL & TOTAL OF CASUALTIES	1 killed	1	1	1	62 men (22 killed, 8 wounded)	66 (47 % casualties for the entire detachment)

In the above table it becomes clear that the percentage of casualties in Hadley and Hatfield garrisons reflects their proportional contribution to the detachment. That seems fairly unsurprising as the detachment began retreat as a single formation rather than groups of separated garrison units. But the percentage of casualties in the Northampton garrison is noticeably greater than its percentage of the total, and the casualty percentage in Springfield and Westfield garrisons is somewhat less than their contribution to the total (the relative numbers of soldiers in those two garrisons are not discoverable in record, only the total of both together).

The within-garrison casualty rate for Hadley and Springfield/Westfield garrisons are identical despite the difference in actual numbers of soldiers, which also makes sense. But Northampton's within-garrison rate is surprisingly high, as is Hatfield's (though there is little statistical significance to the loss of three soldiers in a five-man contingent). It can be reasonably assumed that soldiers of the same garrison advanced side by side in the attack and also tried to maintain group cohesion thereafter. In that light, the apparent difference between Northampton and

Springfield/Westfield garrison contingents may reflect especially heavy fire against the Northampton contingent at some brief moment in the retreat, the Springfield/Westfield garrison soldiers coincidentally escaping such a fate. Differential combat experience and/or variations in group cohesion may have also played some role, and effectiveness of command and control probably played the greatest role. The former may be a worthwhile subject for further investigation, but the latter would be difficult in light of the overall shortage of officers. We really do not know which garrison contingents were nearest to Turner, Tay, or Bardwell at any time during the retreat. It would seem intuitive that the Hadley garrison's soldiers would have sought proximity to Turner, the Northampton soldiers to Tay, and the Hatfield soldiers to Bardwell. And all three contingents may have started out that way by plan. But by the time their retreat reached Green River ford any such cohesion may have completely broken down and all three of those officers may have moved around quite a bit.

ENLISTMENT ORIGIN	CAPTAIN	ENSIGN	SERGEANT	GUIDE	COMMON SOLDIERS	TOTALS & TOTALS OF CASUALTIES
Original company & Marlborough transfers	William Turner (killed)	Isaiah Tay			8 men (3 killed, 3 wounded)	10 (15 %) (23 % of casualties, 70 % of this enlistment category)
Transfers from CPT Poole's winter garrisons			Robert Bardwell		21 men (7 killed, 2 wounded)	22 (33 %) (29 % of casualties, 41 % of this enlistment category)
Transfers from MAJ Savage's spring army				Thomas Read	33 men (12 killed, 3 wounded)	34 (52 %) (48 % of casualties, 44 % of this enlistment category)
TOTAL & TOTAL OF CASUALTIES	1 (killed)	1	1	1	62 men (22 killed, 8 wounded)	66 (47 % casualties for the entire detachment)

The percentage of casualties for the two broad categories of Poole and Savage transfers appear to have little bearing overall, as both are very close to their percentage of the detachment. And the percentage of casualties within each of those two categories is also very similar, despite considerable difference in the numbers of soldiers both present and killed. That is a somewhat surprising result as the majority of Poole veterans had significantly more combat experience than most of the Savage transfers. Put simply though: a veteran has no advantage over a raw recruit

when both are simply fleeing the enemy. And from that man's perspective they are equal opportunity targets.

The proportion of casualties from Turner's old company is also not dramatically higher than its small proportion of the detachment. But the casualty rate *within* that smaller and narrower group is remarkably high. That 70 percent rate may simply reflect small sample size, but might also reflect the probability that those 8 – 10 soldiers formed a sub-group of long-serving comrades that at some moment came under especially devastating musketry (and if Turner or Tay were near or among the remaining eight they would doubtless have drawn a significant amount of fire). A worthwhile future effort would be to examine the possibility that some of the soldiers in the "Poole" and "Savage" groups shared similar affinity and also retreated as identifiable sub - groups (ex: neighbors and relations enlisted from the same town or veterans of a previous company who were stationed in the same garrison). It might also be informative to look more closely at the character of combat experience throughout the detachment (experiences that ranged all the way from cowardice in an ambush to storming of a fortified village) in search of more finely grained patterns relating to individual death or survival.

A Complete Roster Of The Detachment Of Turner's Garrison Company At The Falls Fight: May 19, 1676 (Total = 66 men) = CPT (killed), ENS, SGT, & 63 Common Soldiers including ex-captive Thomas Read (23 killed & 8 confirmed wounded, probably a few more)

Note: Soldiers on this roster are shown in **bold red italics** if killed and **bold purple italics** if wounded.

NAME & ENLISTMENT SITUATION	GARRISON on April 7, 1676	PAY CREDITS (in £/s./d.) & SOURCE	DAYS PAID	PROBABLE DATES OF ALL SERVICE	RECORDED PAY DATE & SEQUENCE OF SERVICE	RESIDENCE
6 Men of Turner's Original Co. = 9 % (2 killed & 3 wounded)						
<i>Turner, William CPT</i>	<i>Hadley</i>	<i>Turner = 06/06/06 (partial payment)</i>	<i>43</i>	<i>2/21 - 4/3/1676 + 4/4 - 5/19/76 Killed</i>	<i>Turner - 8/24/1676</i>	<i>Boston</i>
<i>Mann, Josiah (fled an ambush on 11/9/1675. See note)</i>	<i>Hadley</i>	<i>Henchman = 00/17/02 Turner = 03/13/08</i>	<i>21 89</i>	<i>11/2 - 11/22/75 2/21 - 5/19/76 Killed</i>	<i>Henchman - 11/30/75 Turner - 8/24/1676</i>	<i>Boston</i>
<i>Jessop, Phillip (with Henchman in Mt. Hope. See note re. identification of the wounded)</i>	<i>Hadley</i>	<i>Henchman = 01/06/06 Turner = 03/13/08</i>	<i>32 89</i>	<i>6/24 - 7/25/1675 2/21 - 5/19/76 Discharged wounded</i>	<i>Henchman - 8/27/1675 Turner - 8/24/1676</i>	<i>Boston vicinity?</i>
<i>Roper, Ephraim (a refugee from</i>	<i>Hadley</i>	<i>Turner =</i>	<i>109</i>	<i>2/21 -</i>	<i>Turner -</i>	<i>Charlestown, was</i>

<i>Lancaster. See note)</i>		<i>04/10/10</i>		<i>6/8/1676</i>	<i>6/24/1676</i>	<i>in Lancaster</i>
Tay/Toy, Isaiah ENS (a Dutch surname; promoted to SGT by Turner on 4/7, & then to ENS sometime after 4/25/1676)	Northampton	Turner = 02 04 06 Hadley = 05/11/00	46 40? 32?	2/21 – 4/6/1676 4/7 – 5/17?/1676 SGT 5/18? – 6/18?/76 ENS	Turner – 6/24/1676 Hadley – 7/24/1676	Boston
<i>Cheevers/Cheever, Richard</i>	<i>Springfield or Westfield</i>	<i>Turner = 03/12/10</i>	<i>88</i>	<i>2/21 – 5/18/1676 Discharged wounded</i>	<i>Turner – 6/24/1676</i>	<i>Probably Cambridge</i>
4 Marlborough transfers = 6 % (2 killed)						
Griffin, Joseph (his dates in garrison are unclear; his spring service <u>may</u> have begun on or before 1/5/76. See note)	Hadley	Mendon = 02/04/06 & 04/07/09 Hadley = 07/16/00	54 106 188	7/15? = 9/6/1675 9/7 – 12/20?/1675 2/15? – 2/28/1676 2/29 – 8/20?/1676	Mendon garrison -10/19 & 12/20/1675 Reynolds or Wadsworth Hadley – 9/23/1676	Roxbury
<i>Veazy/Veze, Samuel (with Henchman in Mt. Hope, then with Mosley in Nipmuc country)</i>	<i>Northampton</i>	<i>Henchman = 02/07/09 (includes Mosley) R or W = roster Turner = roster</i>	<i>58</i>	<i>6/24 – 8/7/1675 8/8 - 8/20/1675 2/15? – 2/28/1676 2/29 - 5/19/76 Killed</i>	<i>Henchman – 8/21/1675 Mosley Reynolds or Wadsworth Turner</i>	<i>Braintree</i>
<i>Walker, John (Initially in a supply train under LT Cutler, with Watson & John Jones. See note for Watson)</i>	<i>Northampton</i>	<i>Cutler = 00/09/04 Sill = 01/10/10 R or W = roster Turner = roster</i>	<i>12 37</i>	<i>10/12 - 10/23/75 10/24 – 11/29/1675 2/15? – 2/28/1676 2/29 - 5/19/76 Killed</i>	<i>Cutler = 9/23/1676 Sill - 8/24/1676 Reynolds or Wadsworth Turner</i>	<i>Charlestown</i>
Mattoon/Mattoon, Philip (age 24, Scots Huguenot; in autumn & Narragansett with Appleton, then R or W, & finally Turner)	Northampton	Appleton = 02/10/06 & 02/15/08 Northampton = 08/02/00	61 67 194	9/21 – 11/20/1675 & 11/21/75 - 1/26/1676 1/27 – 2/28/1676 2/29 – 8/7/1676	Appleton – 12/10/1675 & 6/24/1676 Northampton – 9/23/76	? (later of Springfield & perhaps Hadley)
22 Who wintered with Poole = 33 % (7 killed & 2 wounded)						
Newbury, Tryall (See note re. his service sequence and credits)	Hadley	Hadley = 14/08/00	346	8/5/75 - 7/16/1676	Hadley - 7/24/1676 (includes Beers/Sill)	Boston
<i>Watson, John (see note)</i>	<i>Hadley</i>	<i>Cutler = 00/14/00 Poole = equipment Turner = roster</i>	<i>17</i>	<i>10/7 - 10/23/1675 10/24/75 – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Cutler – 6/24/1676 Poole – 12/10/1675</i>	<i>Cambridge</i>
Chamberlain, Benjamin	Hadley	Poole =	89	9/20? –	Poole -	Hingham? (Later of

(brother of Joseph; See note)		03/13/08 Hadley = 06/12/00	159	12/20?/1675 12/21?/75 – 6/24?/76	12/20/1675 (may include Beers/Sill) Hadley - 6/24/1576	Hadley & Colchester, CT)
Chamberlain, Joseph (brother of Benjamin. See note)	Hadley (mostly in Westfield)	Poole = 01/04/00 Westfield = 14/08/00	29 346	8/5/75 – 9/3/1675 9/4/75 – 8/14/1676	Poole – 1/25/1676 (actually Beers/Sill pay) Westfield – 8/24/1676	Hingham? (later Hadley, Hatfield, Colchester, CT)
Pratt, John	Hadley	Hadley = 16/15/00	402	8/5/75 - 9/9/1676	Hadley – 9/23/1676 (includes Beers/Sill)	Malden
Poole, Benjamin	Hadley	Hadley = 09/18/00	238	9/24/75 – 5/18/76 Mortally Wounded	Hadley – 8/24/1676	Weymouth
Bardwell, Robert – SGT (age 28) (4/7 promoted to SGT by Turner)	Hatfield (mostly in Hadley)	Upham = 02/02/00 Hadley = 16/07/00	51 145 123	9/24 – 11/13/75 11/14/75 – 4/6/1676 4/7 – 8/6/1676 SGT	Upham – 12/20/1675 Hadley - 9/23/1676	A recent London immigrant (later of Hatfield)
Jones, John (Discharged wounded)	Hatfield	Cutler =00/09/04 Poole = 06/18/00 Turner = roster	12 166	10/12 - 10/23/75 10/24/75 - 4/6/76 4/7 - 5/19/1676	Cutler - 7/24/1676 Poole – 3/24/1676 Turner	Cambridge
Smith, Richard (See note re. his Mt. Hope duty)	Hatfield	Ammunition Guard = 00/03/00 Hatfield = 14/15/00	4 354	Late summer of 1675 8/5/75 – 7/24/76	Commissary - 9/14/75 Hatfield – 9/23/1676 (includes Beers/Sill)	Salisbury (a part of “Almsbury”)
Burton, Jacob	Northampton	Credited to Salem = 10/02/02	243	9/20/75 – 4/6/1676 4/7 - 5/19/1676 Killed	Salem - 8/24/76	Salem (born in Topsfield)
Smith, John	Northampton (mostly in Springfield)	Willard = 02/06/04 Poole = 01/10/10 Springfield = 09/01/06 Turner = 00/10/02	56 37 219 13	8/4 – 9/28/1675 9/29 – 11/4/1675 11/5/75 - 6/23/76	Willard – 1/25/1676 Poole – 8/24/1676 Springfield – 6/24/1676 Turner - 8/24/1676	Salem
Whitteridge/Whiterage/ Witteridge, John (see note)	Northampton	Turner = 11/08/00 (partial payment)	274	8/5/75 – 4/29/1676 + 4/30 - 5/19/76 Killed	Turner - 9/23/1676 (includes Beers/Sill)	Salem
Beers, Elnathan (son of CPT Beers & a SGT in his and Sill's company; reduced to a Common Soldier by Poole or Turner; Bodge: pp. 250, 252. See note)	Northampton	Beers = 00/12/10 & 05/02/09 Sill = 00/14/06 Poole = no direct rec. Turner = roster	10 77 11	8/5 – 8/14/1675 SGT 8/15 - 10/30/75 SGT 10/31 – 11/10/75 SGT	Beers - 10/5/1675 & 11/9/1675 Sill – 12/20/1675 Poole Turner	Watertown

				11/11/75 - 4/6/1676 4/7 – post 5/19/76		
<i>Lyon/Lyons, Thomas</i>	<i>Northampton</i>	<i>Turner = 10/04/00</i>	<i>245</i>	<i>9/19/75 - 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Turner - 9/23/1676</i>	<i>?</i>
<i>Bradshaw, John (Discharged wounded)</i>	<i>Springfield (not on roster)</i>	<i>Sill = 01/05/08 Springfield =10/14/04</i>	<i>31 258</i>	<i>8/5 – 9/4/1675 9/5/75 – 5/19/76</i>	<i>Beers/Sill - 1/25/1676 Springfield - 7/24/1676</i>	<i>Cambridge (later Medford)</i>
<i>Pike, Joseph</i>	<i>Springfield (not on roster)</i>	<i>Springfield =10/01/04</i>	<i>242</i>	<i>9/21/75 – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Springfield – 6/24/1676</i>	<i>Charlestown</i>
Fuller, Joseph (Sheldon: p. 159; Bodge: pp. 251, 252: see note)	Springfield (not on roster)	Beers (includes Sill) = 03/07/08 Turner = Sheldon list	82	8/5 – 10/25/1675 10/26/75 – 4/6/1676 4/7 – post 5/19/1676	Beers/Sill – 11/20/1675 Poole (no direct record) Turner	Newton (then called “Newtown”)
Gleason, Isaac (his recorded pay covers more days than the war; an apparent transcription error)	Springfield (not on roster)	Springfield = 17/04/09 (actually 11/04/09?)	414!! (270?)	9/24/75? – 6/19?/76	Springfield – 6/24/1676	Springfield (ex – Cambridge, newly married)
Peirce/Pierce/Pearse, Nathaniel (Sheldon: p. 159; Bodge: pp. 249, 251)	Springfield (not on roster)	Beers = 03/05/02 Turner = Sheldon list	79	8/5 – 10/22/1675 10/23 – 4/6/1676 4/7 – post 5/19/1676	Beers/Sill - 12/20/1675 Poole (no direct record) Turner	Woburn
White, Henry (autumn with unknown commander, then mostly in Hadley garrison)	Springfield or Westfield	Hadley = 14/14/00	353	10/7?/75 – 9/23?/1676	Hadley – 9/23/1676	Hadley/Deerfieldref ugee
<i>Hadlock, John (autumn with Appleton; then mostly in Hadley garrison)</i>	<i>Springfield or Westfield</i>	<i>Hadley = 11/04/00</i>	<i>269</i>	<i>9/4/75 – 11/24/1675 11/25/75 - 4/6/1676 4/7- 5/19/1676 Killed</i>	<i>Hadley – 8/24/1676 (includes Appleton through 11/24/1675)</i>	<i>Roxbury</i>
Flanders, John (Sheldon: p. 159 Bodge: pp. 250, 253: See note)	Westfield	Poole = 02/14/10 (partial payment) Turner = Sheldon list	66	9/24/75 - 11/27/75 + 4/7 – post 5/19/1676	Poole - 9/23/1676 Turner	Salisbury (part of “Almesbury”) (son in Kingston)
34 Transfers from Savage’s Army = 52 % (12 killed & 3 wounded)						
Read/Reed, Thomas (4/1/1676 captured near Hockanum in Hadley; escaped from The Falls @ 5/11?/1676	Hadley through 4/1/1676	Savage = 01/13/04 (Sheldon: p. 159 Bodge: pp. 251, 253)	40	2/22 - 4/1/1676 4/2 – 5/14/ 1676 5/15 – 5/19/1676	Savage – 6/24/1676 Captured & escaped Turner – acted as a Guide, no pay recorded	Sudbury (later of Westford)
Preston/Presson, John (age 22; Lathrop to Bloody Brook, unknown commander through autumn, Narragansett with Gardiner, unknown sprig)	Hadley	Lathrop = equipment Gardiner = 02/14/00	65	7/23 – 9/18/1675 9/19 - 11/28/1675 12/3/75 –	Lathrop – 8/12/1675 Probably Mosley? Gardiner –	Andover (son John later in Amesbury, a part of ‘Almsbury’)

commander. See note)		Turner = roster (Sheldon: p. 159 Bodge: pp. 251, 253)		2/5/1676 2/15? – 4/6/1676 4/7 – post 5/19/1676	6/24/1676 Probably Mosley? Turner	
Grover, Simon (his dates in garrison are unclear. See note regarding unknown spring commanders)	Hadley	Norton = 02/10/06 Turner = roster (Sheldon: p. 159 Bodge: pp. 250, 253)	61	7/16? – 9/14/1675? 2/21? – 4/6/1676 4/7 – post 5/19/1676	Norton garrison - 9/14/75 Unknown commander Turner	Boston (rel. to Stephen - not at The Falls; 1736 - son in Malden)
Tyley/Tyly/Tily/Tiley, Samuel (first in Northampton garrison)	Hadley	Northampton = 08/02/00	195	2/21? – 9/1?/1676	Northampton – 9/23/76	Boston
<i>Longbury/Langbury, John (with Lathrop to Bloody Brook, Mosley through autumn, spring commander unknown)</i>	<i>Hadley (mostly in Northampton)</i>	<i>Lathrop = 02/08/00 Mosley = 01/10/00 & 01/10/00 Turner = roster</i>	<i>58 36 36</i>	<i>7/23 – 9/18/1675 9/19 – 10/24/1675 10/25 - 11/29/1675 2/15? – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Lathrop - 11/09/1675 Mosley – 12/20/1675 & 1/25/1676 Probably Mosley? Turner</i>	<i>Essex Co.</i>
Arms, William (age 22)	Hadley	Turner = roster (Sheldon: p. 159 Bodge: pp. 250, 252)		2/21? – 4/6/1676 4/7 - post 5/19/1676	Unknown commander Turner	? (later Hatfield Deerfield, & Sunderland)
<i>Forster/Foster, John (initially in Northampton garrison)</i>	<i>Hadley</i>	<i>Turner = roster</i>		<i>2/21? – 4/6/1676 4/7 – 5/19/76 Killed</i>	<i>Unknown commander Turner</i>	<i>?</i>
<i>Lathrop/Lothrop, Benjamin (with Mosley in Mt. Hope, in Nipmuc country in early autumn, & again in spring)</i>	<i>Hatfield (mostly in Hadley)</i>	<i>Mosley = 02/08/00 Hadley = 03/18/00</i>	<i>58 94</i>	<i>6/24 – 8/20/1675 2/15 – 4/6/1676 4/7 - 5/19/1676 Discharged Wounded</i>	<i>Mosley - 8/24/76 Mosley Hadley - 9/23/76</i>	<i>Charlestown</i>
<i>Duncan, Jabez (Worcester was completely abandoned by 1676)</i>	<i>Hatfield</i>	<i>Turner = roster</i>		<i>2/21? – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Unknown commander Turner</i>	<i>A refugee from Worcester</i>
<i>Roberts, Thomas (with Henchman in Mt. Hope, Mosley in Nipmuc country, unknown commander in spring)</i>	<i>Northampton</i>	<i>Henchman = 02/04/06 (includes Mosley) Turner = roster</i>	<i>54</i>	<i>6/24 – 8/7/1675 8/8 - 8/16/1675 2/15? – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Henchman = 8/21/1675 Mosley Probably Mosley? Turner</i>	<i>Boston vicinity</i>
Belcher, John (later hanged for abandoning a comrade in the retreat; dates in garrisons are unclear)	Northampton	Ponkapaug garrison = 00/06/04 Medfield	8 13	1/31? – 2/7/1676? 2/8? –	Ponkapaug garrison - 6/24/76 Medfield	Braintree

		garrison = 00/10/02 Turner = roster		2/20/1676? 2/21? – 4/6/1676 4/7 – post 5/19/1676	garrison – 7/24/76 Unknown commander Turner	
Salter, John (with Mosley in Mt. Hope, with Davenport in Narragansett, unknown spring commander, Turner; Sill in Nipmuc country)	Northampton	Mosley = 01/14/02 Davenport = 02/14/00 Turner = roster Sill = 00/09/04	41 65 12	6/24 – 8/3/1675 12/3/75 – 2/5/1676 2/15? – post 5/19/76 6/27 – 7/16/1676	Mosley – 8/24/1676 Davenport- 6/24/1676 Probably Mosley? Turner Sill - 9/23/1676	Cambridge (later of Charlestown)
<i>Fowler, Joseph (with Waldron/Walderne in ME, dates unclear)</i>	<i>Northampton</i>	<i>Walderne = 03/12/00 Turner = roster</i>	<i>87</i>	<i>9/5? – 11/29?/167 5 2/21? - 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Walderne – 2/29/1676 Unknown commander Turner</i>	<i>Ipswich</i>
Bushrodd, Peter (Trumbull: p. 574, Bodge: pp. 250, 252)	Northampton	Turner = roster		3/9? – 4/6/1676 4/7 - post 5/19/1676	Unknown commander Turner	Northampton
<i>Howard, William (with Scottow in ME, dates unclear)</i>	<i>Northampton</i>	<i>Scottow = 03/12/00 Turner = roster</i>	<i>87</i>	<i>9/5? – 11/29?/167 5 2/21? - 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Scottow – 1/25/1676 Unknown commander Turner</i>	<i>Salem</i>
<i>Ashdown/Ashdowne, John</i>	<i>Northampton</i>	<i>Turner = roster</i>		<i>2/21? - 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Unknown commander Turner</i>	<i>Weymouth</i>
<i>Rainsford, Samuel</i>	<i>Northampton</i>	<i>Turner = roster</i>		<i>2/21? – 4/6/1676 4/7 - 5/19/1676 Killed</i>	<i>Unknown commander Turner</i>	<i>?</i>
Colby/Coleby, John (nephew of Samuel)	Springfield or Westfield	(Sheldon: p. 159 Bodge: p. 251)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Amesbury ("Almesbury")
Colby/Coleby, Samuel (uncle of John)	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 249, 252)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Amesbury ("Almesbury")
Jones, Robert	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 250, 253)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Amesbury ("Almesbury")
<i>James Harwood Discharged wounded (see Roper note; Bodge: pp. 250, 253, 448)</i>	<i>Springfield or Westfield</i>	<i>Credits were all to Chelmsford = 04/11/00</i>	<i>110</i>	<i>2/21? – 4/6/1676 4/7 – 6/9?/1676 Discharged wounded</i>	<i>Chelmsford – 11/24/1676</i>	<i>Chelmsford (son later in Concord)</i>
<i>Buckley (Bulkley?) George (initially in the Northampton</i>	<i>Springfield or Westfield</i>	<i>(Sheldon: p. 159</i>		<i>2/21? – 4/6/1676</i>	<i>Unknown commander</i>	<i>Possibly Concord?</i>

<i>garrison)</i>		<i>Trumbull: p. 575 Bodge: p. 247)</i>		<i>4/7- 5/19/1676 Killed</i>	<i>Turner</i>	
<i>Jones, Samuel</i>	<i>Springfield or Westfield</i>	<i>(Sheldon: p. 159 Bodge: p. 250)</i>		<i>2/21? – 4/6/1676 4/7 – 5/19/76 Killed</i>	<i>Unknown commander Turner</i>	<i>Dorchester (or Yarmouth?)</i>
Leeds, Joseph	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 250, 253)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Dorchester
Hunt, Samuel (with Appleton at Narragansett, unknown spring commander)	Springfield or Westfield	Appleton = roster Credited to Billerica = 08/04/00	197	12/3/75 – 2/5/1676 2/6 – 4/6/1676 4/7 – 6/16?/1676	Appleton in the Narragansett campaign Billerica - 12/25/1676	Ipswich, Billerica late 1676 (then Tewkesbury)
<i>Simms/Symms, John</i>	<i>Springfield or Westfield</i>	<i>(Sheldon: p. 159 Bodge: p. 247)</i>		<i>2/21? – 4/6/1676 4/7- 5/19/1676 Killed</i>	<i>Unknown commander Turner</i>	<i>Ipswich</i>
Chase, John	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 249, 251)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Newbury
Burnett/Bennitt/Burnap, John	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 250, 252)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Reading? (later of Windham, CT)
Scott, John (with Johnson in Narragansett, dates of Holbrook service are unclear. See note)	Springfield or Westfield	Johnson = 02/14/00 (Bodge: p. 254 Holbrook = 00/14/06)	65 18	12/3/75 – 2/5/1676 2/21? – 4/6/1676 4/7 – post 5/19/76 6/14? – 6/31?/1676	Johnson - 6/24/1676 Unknown commander Turner Holbrook - 8/24/1676	Roxbury (son in Palmer - then called "Elbows")
Pressey, John	Springfield or Westfield	(Sheldon: p. 159 Bodge: pp. 251, 253)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Salisbury (part of Almsbury")
Price, Robert (age 26)	Springfield or Westfield	(Sheldon: p. 159 Trumbull: p. 574 Bodge: pp. 251, 253)		3/9? – 4/6/1676 4/7 - post 5/19/1676	Unknown commander Turner	Northampton (son later in Glastonbury, CT)
Simonds, John	Springfield or Westfield	(Bodge: p. 251)		2/21? – 4/6/1676 4/7 – post 5/19/1676	Unknown commander Turner	Most likely Woburn?
<i>Guerin/Gerrin/Jerrin/Jerring, Peter (initially in Northampton garrison)</i>	<i>Springfield or Westfield</i>	<i>(Sheldon: p. 159 Trumbull: p. 575 Bodge: pp. 247, 250)</i>		<i>2/21? – 4/6/1676 4/7- 5/19/1676 Killed</i>	<i>Unknown commander Turner</i>	<i>?</i>
<i>Eborne, George (Head wound Sheldon: pp. 159, 160)</i>	<i>Westfield (not on roster)</i>	<i>Poole = 01/04/00 (partial pay)</i>	29	<i>2/1 - 4/6/1676 4/7 - 5/19/1676</i>	<i>Poole – 2/29/1676 Turner</i>	<i>Westfield</i>

FURTHER NOTES ON SPECIFIC INDIVIDUALS:

Josiah Mann was with CPT Daniel Henchman on Nov. 9, 1675 when his small Company of Mounted Foot was ambushed on a scouting mission near Hassanamessit. Henchman complained that almost all of his soldiers immediately fled in panic, including Josiah Mann.²⁸⁵ Several other soldiers in Turner's Garrison Company had also participated in that rout, but Mann is the only one who went to The Falls.

A combined total of 29 wounded are reported from all of Turner's force on May 19, 1676, but only two (**John Jones and George Eborne**) are directly documented within Turner's own contingent. Considering that they were all discharged on or soon after May 19: **Philip Jessop, Ephraim Roper, Richard Cheevers/Cheever, John Bradshaw, Benjamin Lathrop/Lothrop, and James Harwood** also appear very likely to have been wounded on that day. **Cheever/Cheevers** is the only one of those six who is not also confirmed as remaining in the Garrison Company after MAJ Savage's army returned to Boston, but his pay credits provide strong evidence that he stayed behind. Both **Roper** and **Harwood** were discharged a full three weeks after the battle, perhaps having received a wound or injury that did not initially incapacitate them but later became infected. No other soldiers of this detachment are known to have been discharged between May 19 and the arrival of a Massachusetts Bay relief force on June 14. **Ephraim Roper** was a Charlestown resident when enlisted, but is firmly documented as the Lancaster man who alone escaped death or capture in the Rowlandson garrison on Feb. 10, 1676; his wife and infant daughter being among the dead. He was very likely a volunteer.

Joseph Griffin and two other Marlborough transfers are here assumed to have been enlisted on Feb. 15, 1676 as confirmed for **Philip Matoon** and several more. A much smaller number of transfers are known to have been enlisted on Jan 5; some perhaps earlier than that.

In light of Boston residence and August enlistment **Tryall Newbury** appears to have first been enlisted in CPT Richard Beers' Company of Foot, which continued under LT Sill after Beers was ambushed and killed on Sept. 4, 1675. He alternatively may have begun in the second Company of Dragoons raised on Aug. 5 by CPT Samuel Mosley, then becoming one of 26 soldiers transferred to Beers on Aug. 15, 1675. Six other soldiers on this roster (all having starts of 8/5/1675), along with several more who did not go to The Falls, also appear to have begun service with Beers. Four more on this roster are fully confirmed as Beers' veterans, including his

²⁸⁵ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 55.

own son Elnathan who had been a sergeant under his father but reduced to a “common soldier” under either Poole or Turner. In broader sense, despite long service under multiple commanders it is not unusual to find most or all of a soldier’s credits charged against a single garrison rather than itemized by names of commanders. In those instances, the duration of service, date of enlistment or final pay date, and location of the garrison are essential clues to discovery of the soldier’s service history. There appears to be no direct record as to who was present in Beers’ detachment at the time of his death on Sept. 4, 1675 versus the majority of his company who had remained in garrison with LT Sill, but the 11 veterans who went to The Falls seem most likely to have been present at that ambush on the tract of land that has ever since been known as Beers’ Plain.

The identity of *John Watson* was initially complicated by presence of two soldiers having the identical name: one from Cambridge and the other from Roxbury. The solution appears in a seemingly insignificant part of Watson’s record: CPT Poole’s Dec. 10, 1675 payment for a pair of shoes. On Dec. 19, while Poole’s *John Watson* was still breaking in his new shoes, the John Watson from Roxbury was with CPT Johnson attacking the Narragansett Fort. So the Cambridge man, son of a prominent citizen, must have been the soldier who served in Poole’s garrison force throughout the winter and spring. Additionally: that Watson from Cambridge was paid 00/14/00 for 17 days under LT Cutler, who is reported as escorting supply trains throughout the war.²⁸⁶ His service under Poole began after arriving with LT Cutler in a supply train that arrived on Oct. 23, 1675. John Jones and John Walker also arrived with that supply train.

The start of *Benjamin Chamberlain’s* recorded service begins around the same time that Poole’s company appears to have been raised (Sept. 24, 1675 on basis of pay credits). It seems intuitive that he would have been enlisted at the same time as his brother Joseph (below). In that case his credited pay would only extend through April 8, 1676, the remaining record being lost. Assuming that his final pay record has not been lost, he may have voluntarily enlisted with Poole in attempt to reunite with his brother, perhaps after hearing of the disaster that had befallen Beers. Like Robert Bardwell, Benjamin and Joseph Chamberlain both chose to remain and settle in the Valley after the war. It is currently unclear whether they were related to John Chamberlain, a possible Hingham resident who did not go to The Falls.

²⁸⁶George M. Bodge, *Soldiers in King Phillip’s War* (Boston, MA: The Rockwell & Churchill Press, 1906), 285-286

Identically to Tryall Newbury (above), *Joseph Chamberlain* appears to have been first enlisted under Beers, then served under Sill, and was transferred to Poole along with all remaining soldiers when MAJ Appleton's army marched east on November 24. A small part of his Poole service was broken out separately from Westfield garrison, most likely the first month, during which he may have served in a different town.

The only calculation that fits *John Jones'* sequential history is arrival in the October 23, 1675 supply train led by LT Cutler, followed by service under Poole and Turner. *John Watson* and *John Walker* were also in that supply train. All three were assigned to Poole's company on Oct. 24.

The four days of ammunition guarding may have been performed by some other *Richard Smith*, though the only recorded one is of Salisbury.

By great fortune we reliably know that the *John Smith* with Poole and Turner was a soldier from Salem, rather than one of the many alternatives. He also appears to have been the one who was with Willard at the relief of Brookfield, as Poole's company was present there on Sept. 30, 1675.

John Whiteridge/Whittridge's service record only makes sense if he was initially in Beer's company and his recorded credits only reflect part of his service. If so, his heirs were owed a final 20 day's pay, the record of which is now missing.

Elnathan Beers could potentially have gone back to Boston with MAJ Appleton's army on Nov., 24, 1675, but he more likely stayed in the Valley with most or all the other veterans of his father's dissolved company, his winter record under Poole now being lost. *Joseph Fuller* and *Nathaniel Pierce* have similar gaps in their service record. Both are assumed to have been in the Springfield garrison, as that had been the principal garrison for Beers/Sill veterans throughout the winter. Sill himself is known to have been sent east in late October without his company.

John Flanders is assumed to have been stationed in Westfield as that town was garrisoned throughout the previous winter by soldiers from CPT Poole's original company (including men who had arrived with LT Upham); also, a number of soldiers who had been in CPT Mosley's company.

John Preston/Presson was transferred to some other company between destruction of CPT Lathrop's on Sept. 18 and arrival of MAJ Appleton's army back in Boston on Nov. 29,

1675. Most of the few survivors of Bloody Brook appear to have been placed in Mosley's company, though some are recorded under Sill. *John Preston* and *John Langbury* are the only Lathrop survivors who were present at The Falls Fight, but seven more remained in garrison. In contrast with the soldiers of Beers' company, most of those nine men had marched east in autumn and returned again in spring. It is tempting to suggest that they were all personal friends, that their return was voluntary, and that their spring service was in Mosley's fourth Company of Dragoons. In broader context, Preston is one of a disappointingly large number of enlistees whose 1676 pay records were written down in Hull's final book of accounts, which appears to have entirely vanished. Unless a particular soldier in that group was at the Falls Fight we usually only know that he served past the date of Turner's Garrison Company roster (April 7, 1676), though most or all of them can be reasonably assumed to have served through at least mid-June. Some probably remained in garrison until September.

The commanders under which *Simon Grover*, *Samuel Tyley*, and a large number of other soldiers served during MAJ Thomas Savage's spring campaign remain unknown due to loss of record. The three alternatives are CPT Mosley whose fourth Company of Dragoons was raised on Feb. 15, MAJ Savage whose second Company of Foot appears to have been raised between Feb. 21 -23, or CPT Whipple whose Troop of Horse was raised sometime between Feb. 21 – 29, 1676. In this instance and many others "Feb. 21?" has been listed simply because it covers two of those three alternatives.

The precise dates of *John Scott's* service under CPT Holbrook are at this time unknown (as with two other soldiers of the Garrison Company who did not go to The Falls and also served under Holbrook). Bodge only describes Holbrook as commander of a company that began scouting Nipmuc country on April 29, 1676; a date that directly conflicts with the Turner service of every one of those soldiers.²⁸⁷ The only reasonable conclusion is that Holbrook undertook another mission in summer, most likely under CPT Daniel Hinchman who led a force of at least two companies into Hadley on June 14, 1676 and soon afterward marched back into Nipmuc Country.

²⁸⁷ George M. Bodge, *Soldiers in King Phillip's War* (Boston, MA: The Rockwell & Churchill Press, 1906), 280 – 282

The Probable Posting Of Turner's Soldiers Left Behind In The Connecticut Valley Garrisons
(Total = 154 men) = 4 SGTS, 4 CPLS, Drummer, Clerk, & 144 Common Soldiers

All four of Turner's non-local sergeants along with his drummer, clerk, and all four corporals *did not* go to The Falls but were left in five widely dispersed garrisons. Aside from probably relocating one sergeant to cover Northampton in absence of Tay (or perhaps Hatfield in absence of Bardwell) and earlier moving either Hartshorn or Simpson to better cover Springfield, it seems unlikely that Turner moved any of his other soldiers prior to the May 18th expedition. Containing only 14 soldiers less than Poole's winter garrisons, this configuration would probably have been sufficient to protect the five remaining towns for several more weeks even if all of Turner's detachment had been killed at the Falls.

In sharp contrast to both the militia company and Turner's detachment at the Falls, a remarkable number of these soldiers had seen prior service that included serious combat, often in more than one campaign. It can be safely assumed that they either declined to volunteer for the expedition, volunteered and were told they must stay behind, or had not even been given that opportunity. Leaving all his non-local NCOs and most of his more experienced "common soldiers" in garrison would be an understandable decision on Turner's part (though one must wonder if those experienced "common soldiers" would have freely volunteered). Very few of the soldiers who remained in garrison were at all familiar with the local geography but their substantial combat experience would have been essential to protection of the Valley settlements if Turner's expedition turned into a military disaster. There is some irony that The Falls Fight was strategically a disaster to indigenous nations, and rightly considered a massacre in terms of non-combatant losses, but was also considered a disaster by local settlers in light of CPT Turner's death and the large number of casualties within their own very small population; a visceral response to one generation's personal loss that has colored both popular narrative and memorialization for over 300 years.

GARRISON TOWN	SERGEANTS	CORPORALS	DRUMMER	CLERK	COMMON SOLDIERS	TOTAL
Hadley	Throp or Newman	Hartshorn or Simpson	Chapple		33	36
Hatfield		Lane			35	36
Northampton	Throp or Newman	Wildes			25	27

Springfield	Procer	Hartshorn or Simpson		Francis	30	33
Westfield	Lamb				12	13
Springfield <u>or</u> Westfield					9 likely in Westfield	9 likely in Westfield
TOTAL	4	4	1	1	144	154

A Final Author's Note on Development of the Rosters:

In light of the vagaries of seventeenth century spelling and possibly transcription errors (ex: “h” and “y” for the “k” and final “s” in Sikes), alternative spellings have been provided from period record. Those alternatives are probably not all-inclusive and a few may even be misleading.

Names of the soldiers listed as originally in Turner's marching company, the transfers from Reynolds' and Wadsworth's companies, as well as those specifically recorded in his Turner's garrisons on April 7, 1676 are assumed correct as those lists were written down by Turner himself. I have more broadly assumed that if one of Turner's men has the same name as a soldier in an earlier company or garrison he is probably one and the same, most especially if both names are listed as resident in the identical town. I feel on very solid ground as to unusual names such as Timothy Froggie, Hugh Galloway, and Onesiphorous Stanley; nearly as confident with names that are more common but have been found in association with only one man residing in one particular town (ex.: Thomas Poor/Poore/Pore), but not nearly so confident with a ubiquitous name that appears in multiple companies and resident in multiple towns (ex.: Smith and Jones).

For clarity's sake I have not chosen to clutter the rosters with bibliographical citations, reserving those for the text alone. The alternative approach would require at least one or two “Bodge” citations beside each name, more often five or six, in some cases ten or more. The principal source is Bodge supplemented by published local histories (ex: George Sheldon, 1895) for the 1675-76 residences of Hampshire County militiamen, including those of Deerfield and Northfield settlers who by 1676 were refugees in other local settlements. Two currently unpublished works by Dr. Peter A. Thomas were also significant in that regard. A comparable town history or genealogical volume occasionally provided the place of residence for men whose towns were either not listed by Bodge or for whom he lists a post-1676 residence. Experience shows that 21st century on-line genealogies (especially those found in amateur forums or web

pages) are occasionally misleading and also tend to copy each other without any assessment of veracity. But in a handful of instances they proved to be sole source for a provisional determination of residence.

In the interest of clarity, I have used modern names for towns rather than names that at that time were shared by broader areas of indigenous settlement (ex.: Quaboag and Squakeag), or names went out of use in the next century (ex.: Newton rather than the 17th c. orthography of “Newtown”), but have retained those names when citing original documents. Wherever possible I have tried to confirm residence at time of the war but that has sometimes proved impossible. A minority of men changed their town of residence during or immediately after the war and there are a few instances where someone is listed in early 18th c. record as resident in a town that did not even exist in 1676 (ex. “Elbows,” now the town of Palmer, was not settled by colonists until 1715). In a handful of other cases the residence record names an expansive colonial grant that was later subdivided (ex.: “Almsbury,” which included Amesbury, Newburyport, Salisbury, and several later towns along both sides of the Massachusetts - New Hampshire border).

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Appendix V – KOCOA Analysis

Battlefield landscapes consist of natural features (hills, streams, valleys, etc.) and cultural features (trails, fortifications, villages, etc.) that define the original battlefield landscape and also reflect the evolution of these features over time and their impacts to the original landscape. In order to identify, document, survey and map a battlefield, historians and archeologists must research all available and relevant historical accounts and identify the historic landscape that defined the battlefield in the field through terrain analysis and identification of natural and cultural features associated with the battlefield (Table 2).

Terrain Analysis

Terrain analysis is a critical aspect of battlefield surveys, so much so that the ABPP requires all grant recipients to use KOCOA (**K**ey terrain, **O**bservation, **C**over and concealment, **O**bstacles, **A**venues of approach), a military terrain model the U.S. Army developed to evaluate the military significance of terrain associated with a battlefield. By studying the military applications of the terrain using KOCOA, a battlefield historian or archaeologist can identify the landscape of the battlefield and develop a basis for judging the merits and flaws of battle accounts (See Section V. *Battlefield Landscape and Key Terrain Features*). The components of Terrain Analysis (KOCOA) include:

Observation and Fields of Fire: Observation is the condition of weather and terrain that allows a force to see friendly and enemy forces, and key aspects of the terrain. Fields of Fire is an area that a weapon or group of weapons may cover and fire into from a given position.

Avenues of Approach and Withdrawal: An avenue of approach is the route taken by a force that leads to its objective or to key terrain in its path. An Avenue of Withdrawal is the route taken by a force to withdraw from an objective or key terrain.

Key Terrain and Decisive Terrain: Key Terrain is any ground which, when controlled, affords a marked advantage to either combatant. Two factors can make terrain key: how a

commander wants to use it, and whether his enemy can use it to defeat the commander's forces. Decisive Terrain is ground that must be controlled in order to successfully accomplish the mission.

Obstacles: Obstacles are any features that prevent, restrict, or delay troop movements. Obstacles can be natural, manmade, or a combination of both and fall into two categories: existing (such as swamps, rivers, dense wood, town or village) and reinforcing (placed on a battlefield through military effort).

Cover and Concealment: Cover is protection from enemy's fire (e.g., palisade, stone wall, brow of a hill, wooded swamp), and Concealment is protection from observation and surveillance (e.g., ravines, swamps, intervening hill or wood).

The four steps in this process include: 1) identify battlefield landscapes; 2) conduct battlefield terrain analysis with KOCOA (**K**ey terrain, **O**bservation, **C**over and concealment, **O**bstacles, **A**venues of approach); 3) conduct battlefield survey (research, documentation, analysis, field visits, archeological survey and 4) define Study and Core Area, assess integrity and threats related to battlefield sites and map all relevant cultural and physical features on GIS base maps. The battlefield survey methods focused on the identification of relevant physical and cultural features using USGS 7.5" series Topographic Maps, aerial photographs, historic maps, and archeology – all of which are used to identify site locations and positions of combatants.

Key Terrain Features
Battle of Great Falls/Wissantinnewag-Peskeompskut

Name	Location	Relevance to Battle	Field Comment	KOCOA Analysis	Integrity Assessment	Remarks
Terrain and Topographic Features						
Cheapside Neighborhood	A neck of land on the north bank of the Deerfield River abutted by the CT River to the east and the Green River to the west.	A Native observation outpost and possible fortification was established on this neck of land which forced the English to cross the Deerfield River further to the west. Native forces were alerted to the noise of horses and mobilized on the early morning of May 19, 1676 but did not encounter English forces.	Moderate Residential Development, Wooded, Public Roads	Key Terrain, Observation (Native), Obstacles, Fortified Place	Fair: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area
Cherry Rum Brook	A brook that runs east to west from the White Ash Swamp to the east and empties into the Green River at the site of the Green River Ford to the west.	After crossing the Green River Ford, English forces followed Cherry Rum Brook in an easterly direction towards White Ash Swamp. It was also used as an avenue of retreat by English forces. Native forces may have ambushed the fleeing English at points along Cherry Rum Brook.	Moderate Residential Development, Wooded, Public Roads	Key Terrain, Obstacle (English & Native), Avenue of retreat & approach (English & Native)	Good: Location, setting, feeling, association, material	Battle of Great Falls Study Area & Core Area
Connecticut River	The CT River runs south from the border with Quebec, Canada and discharges at Old Saybrook, CT. The portion relevant to the battle begins: Lat/Long	The portion of the CT River beginning south at Deerfield and running north to Gill served as a major obstacle to English and Native forces	Substantial Industrial development around the towns of Gill and Montague,	Key Terrain, Obstacle (English & Native), Avenue of retreat & approach (Native)	Good: Location, setting, feeling, association, material	Battle of Great Falls Study Area & Core Area

	Points: South <u>42.563015, -72.556390;</u> <u>North</u> 42.601187, - 72.545404		Open Space, Wooded			
Deerfield Plains	Western side of the Connecticut River, approx. 2.5 miles.	English forces traveled north through Deerfield Plains on their approach to the Deerfield River	Moderate Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material	Battle of Great Falls Study Area
Deerfield River & Deerfield River Ford	Forms a boundary between present-day Deerfield and Greenfield. It is a tributary of the Connecticut River.	English forces need to cross the Deerfield River to proceed north to Wissantinnewag- Peskeompskut. There were at least two fords across the river.	Moderate Residential Development, Open Space, Wooded	Key Terrain, Obstacles, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material	Battle of Great Falls Study Area & Core Area
Factory Hollow Neighborhood	A natural terrace and a lower plain bounded to the east by the Fall River.	English forces dismounted and hitched their horses in the vicinity of the present-day Factory Hollow neighborhood. During their retreat following the attack on Peskeompskut Native forces were able to attack the horse guard prior to the arrival of Captain Turner's command. Once English forces mounted their horses they fled up a steep slope to the upper terrace and were able to out distance attacking Native forces.	Moderate Residential Development, Wooded, Public Roads	Key Terrain, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material	Battle of Great Falls Study Area & Core Area
Fall River	A tributary of the Connecticut River	English forces dismounted and left their horses and a small	Moderate Residential	Key Terrain, Obstacles, Avenue of Approach &	Good: Location,	Battle of Great Falls Study

	which empties just below the Great Falls.	guard west of Fall River. The main force crossed Fall River and continued east.	Development, Open Space, Wooded, Public Roads	Retreat (English & Native)	setting, feeling, association, material culture	Area & Core Area
Green River & Green River Ford	A tributary of the Deerfield River that runs north through the Town of Greenfield, MA.	English forces forded the Green River south of Smead Brook. Captain Turner would later be killed in action during the English retreat while leading his men back across the Green River Ford.	Moderate Residential Development, Open Space, Wooded	Key Terrain, Obstacles, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area & Core Area
Petty Plain	Located north of the Deerfield River and west of the Green River	English forces forded the Deerfield River and crossed Petty Plain towards the Green River.	Moderate Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Avenue of Approach & Retreat (English & Native)	Fair: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area & Core Area
Peskeompskut	A 150-acre floodplain along the west bank of the river adjacent to the Great Falls.	The site of the Native encampment attacked and destroyed by English forces on the morning of May 19, 1676.	Moderate Residential & Industrial Development, Open Space, Wooded, Public Roads	Key Terrain, Obstacles, Avenue of Approach & Retreat (English & Native), Cover & Concealment (Native)	Poor: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area & Core Area
Pisgah Mountain, SW Slope	Dominant landform in the area rising 715' (218 m) above the surrounding landscape.	English forces scaled this slope, passing through a series of terraces leading to “the mountain gap” and gathered on the southwestern slope of Pisgah Mountain within site of the Peskeompskut encampment.	Moderate Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Observation (English), Obstacles, Avenue of Approach & Retreat (English & Native)	Good: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area & Core Area

		Later they would retreat through this “mountain gap.”				
White Ash Swamp	White Ash Swamp is fed by Cherry Run Brook and runs contiguous to Route 2. It is approx.5-mile northwest of the Connecticut River.	English forces likely maneuvered north of White Ash Swamp before dismounting from their horses before Fall River. During the English retreat Native forces held the swamp and decimated fleeing English. One group of English attempted to cut through the swamp and were killed or captured.	Low Residential Development, Open Space, Wooded, Public Roads	Key Terrain, Obstacles, Avenue of Approach & Retreat (English & Native), Cover & Concealment (Native)	Fair: Location, setting, feeling, association, material culture	Battle of Great Falls Study Area & Core Area

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