

Finding Purpose in Finding Battlefields: The Veterans Archaeology Program at Fort Ligonier

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Thank you for joining us this afternoon as I have the opportunity to discuss something that is of great significance to me: the Veterans Archaeology Program. This program has been a collaborative effort with Fort Ligonier in Westmoreland County, and we have been dedicated to it for several years.

Discovering purpose through the Veterans Archaeology Program at Fort Ligonier is a journey still in the making. This initiative continues to grow as a grassroots program with its primary objective to engage military veterans in archaeological undertakings, with a particular focus on battlefield-related projects. Our efforts are intended to support veterans with training as they consider their career options after their military service. Adapting to civilian life can be challenging, especially in their quest to enter or complete a degree program. Fortunately, our geographical location places us in the heart of colonial-era battlefields, including those from the French and Indian War and the Revolutionary War, making central Pennsylvania a historical hot spot. During our sessions with the Veterans, we provide comprehensive training in metal detection and conduct surveys with the participants, and we have a soil scientist on hand to teach field soil description techniques, trainings that enhance the veterans' readiness for the archaeological digs. Our methodological approach extends beyond the terrestrial realm and includes aerial perspectives captured by drones as well as subsurface geophysics. The training that the veteran participants receive is entirely free to them, and 2022 was the second year in which we had a dedicated budget, allowing us to acquire essential equipment. Among the acquisitions were three high-performance metal detectors, handheld pointers, and shovels. This expansion in equipment capacity enabled us to accommodate up to twelve students, supported by a team of at least four instructors, each equipped with several detectors. For over a decade, I have also introduced students, including Juniata College field school participants, to Fort Ligonier (Figure 1). It is no ordinary place as it represents a meticulous reconstruction of the fort dating to 1758. This world class museum serves as a living historic site where reenactors, knowledgeable staff, an exceptional educational program, and a complete British Royal Artillery Battery await its visitors.



Figure 1. Drone image of reconstructed Fort Ligonier (adjacent to U.S. Route 30) taken during the 2021 field season. Photo Credit: Isaac Fisher.

It can be challenging for military veterans to adapt to civilian life, with its lack of structure, distinct sense of purpose, and the absence of the close-knit team dynamics they experienced during their service. These are aspects that we strive to recreate in the field during our projects, as we recognize their significance in the reintegration process. As an anthropologist, one of my primary concerns is to facilitate an emic perspective, or an insider's view – one rooted in the personal experiences of those who have served on fire bases while deployed in combat zones, for instance. This perspective is invaluable in our efforts to interpret historic battlefields through archaeology. It is no secret that most college professors lack a military background, apart from institutions like The Citadel and other military academies, and I knew that we needed some way bridge the gap. We realized the importance of creating an environment where veterans with preexisting skills could assume leadership and training roles. This approach ensures that the initiative is not solely rooted in academia but also draws from the unique expertise of those who have served.

The veterans' military training and experience undoubtedly prepared them well for archeological fieldwork (Figure 2). Not once did they complain about the hard work, bugs, or the scorching heat. This realization led me to the decision that we could undertake these efforts independently, to make advances in conflict archaeology in Pennsylvania. We could provide the necessary cutting-edge training, as I had fully embraced archaeological metal detecting techniques. I saw an opportunity to offer training to veterans, making use of Fort Ligonier as our dedicated support location. In 2021, we expanded our operations beyond the fort. Crossing U.S. Route 30, we targeted a field owned by the local golf club. They graciously allowed us to utilize the area for training where veterans could join us in the search for artifacts. The three-day training and hotel stay were funded through generous donations to the program. The instructors graciously volunteered their time and expertise and made the most of the training and experience. It was our way of thanking veterans for their service.



Figure 2. U.S. Military Veteran Jeremy Severn metal detecting at the Friendly Fire Site near Ligonier, Pennsylvania in 2023. Photo Credit: Jonathan A. Burns.

The type of archaeology that we are engaged in, often referred to as *conflict archaeology*, focuses on fortifications and battlefields; however, there has been a paucity of attention to colonial America before the Revolutionary War. Specifically, the stage was set during the French and Indian War, with a focal point on the capture of Fort Duquesne, located in present-day Pittsburgh, Pennsylvania. Allow me to

provide you with some historical context. As we surveyed the theater of war, we focused on Westmoreland County in southwestern Pennsylvania. Fort Ligonier was envisioned as the final fort on the path to Duquesne, serving as the forward base for the Forbes expedition. Over the course of several years, we collaborated with undergraduate students diligently searching for additional archaeological traces that would contribute to the fort's historical reconstruction. We eventually abandoned that search for less-disturbed ground. The original plans included two additional artillery batteries, but as you can observe from aerial view in Figure 1, the modern town has since encroached upon the archaeological site. One of the things that the non-profit organization does is purchase modern structures and attempt to return the landscape back to its 1758 appearance. In the fall of 1758, this location was a bustling epicenter, effectively becoming the largest settlement west of Philadelphia. It accommodated a multitude of troops, including British, provincial, and camp followers, as well as the local settlers. This constellation of activity made it a nationally significant historical site and thus an interesting location for archaeological exploration.

HISTORICAL BACKGROUND

Because the Veterans Archaeology Program is intertwined with a captivating historical backdrop, notably the French and Indian War, I want to focus on the year 1758 when the Forbes Expedition began. Before that pivotal year were some key moments that impacted the outcome of the War. Beginning in 1753, the French commenced their movement into the Allegheny Valley, prompting a young George Washington to embark on a diplomatic mission on behalf of the Virginia Colony. With two Native American emissaries by his side, Washington approached the French and politely requested their departure. Much to his surprise, the French responded by offering hospitality but ultimately declined to leave. A few months later, they launched an invasion of the entire watershed and established Fort Duquesne. Once the fort was erected, the French effectively blocked westward expansion by English settlers.

They strategically encircled and caused great anxiety among the English settlers largely due to their strong alignment with Native American tribes that extended into the Mississippi Valley and the Great Lakes regions. These Native American allies could swiftly assemble formidable forces of warriors, motivated by the prospect of acquiring scalps and war bounties, and they were often willing to embark on journeys spanning over hundreds of miles. This was completely different from the French approach to Native American relations, as the French maintained positive interactions with many indigenous groups, fostering alliances that extended beyond conflict and land speculation. They also engaged in trade, providing valuable goods to these tribes. Nonetheless, the Native Americans had their own ideas about

what was going on in their neighborhood, and they deftly played both European powers against one another with their own survival in mind. The Virginians recognized the need for decisive action, prompting the directive for Washington to take the fight to the French. The subsequent year, in 1754, George Washington advanced on the French at Fort Duquesne, effectively bringing England and France into direct conflict on American soil.

This event led to the Fort Necessity engagement, which is considered by historians to be the official starting point of the French and Indian War, setting the western theater of the conflict. It was at this juncture that Washington unexpectedly encountered an advance guard. A victim of circumstance unable to speak French, Washington was falsely blamed for the death of the French officer, Joseph Coulon de Villiers, Sieur de Jumonville. This occurred when a Native American, who was accompanying Washington, realized that surrender his was imminent. Tanaghrisson, referred to as the “Half King” of the Mingo Seneca, used his tomahawk to ensure they would not escape the situation without significant conflict, delivering a killing blow to Jumonville. The surrender negotiations and actions taken by the Europeans did not sit well with the Indigenous Peoples, who believed that the only way to precipitate the war was by killing the French officer, knowing that Washington would bear the blame.

Clearly, Great Britain found itself in an uncomfortable position after the infamous loss at Fort Necessity when the French caught up to Washington’s forces. In response, they dispatched General Edward Braddock, who interestingly had been stationed in Gibraltar before being redirected to North America. Braddock's mission was to land in Maryland, assemble at Fort Cumberland, and proceed to Fort Duquesne, with the goal of ousting the French from the fort. He intended to continue through the Allegheny region, eliminating other French-held forts, effectively concluding the campaign in a single attempt. Braddock assembled a substantial army and was made commander in chief of a huge military apparatus. The troops began the arduous task of clearing a path to Fort Duquesne, but their progress was impeded when they found themselves entangled in battle about eleven miles away from the fort when they were discovered by scouts. At this point, the French and their Native American allies emerged from the fort and engaged in battle, skillfully using the terrain in a manner unfamiliar to the British, who were accustomed to the open fields and traditional combat tactics of Europe.

The reality that unfolded for Braddock's March was starkly different from what was envisioned. His campaign came to an abrupt halt as soon as the troops engaged with the French and their Native American allies. These adversaries skillfully positioned themselves on elevated ridges, entrapping the British forces in the narrow ravines and inflicting a devastating defeat. This significant loss not only served as a harsh lesson for the British but also opened the floodgates for Native American war parties to raid the Appalachian borderlands. Such raids, coupled with the constant threat of violence, effectively

depopulated the Pennsylvania frontier, striking fear into the settlers and causing them to abandon their homes. The tactic of burning them out was proven to be very effective, and it was a common occurrence between 1756 and 1757. Fast forward to 1758 and the Forbes Expedition, which was a much different approach from Braddock's. With the help of Virginians and Marylanders, Forbes decided to forge a new road through Pennsylvania's formidable and rugged terrain. The journey was a logistical nightmare, with the officers writing of frequent losses of wagons and horses. However, what set Forbes' strategy apart was his creation of garrisoned forts along the way, ensuring a steady supply line and providing secure fallback positions for his troops. These forts included Fort Lyttelton (modern Fort Littleton), Fort Bedford, and Fort Ligonier, which marked the advanced post for the imminent attack on Fort Duquesne.

To prepare for our project near Ligonier, we convened a group of highly knowledgeable individuals and historians who are particularly passionate about the Forbes Expedition to pinpoint the major spots of violent engagements. Among them were Scott Stevenson, a Juniata College alumnus and the Executive Director of the Museum of the American Revolution, and David Preston, distinguished historian at The Citadel in Charleston, South Carolina. We also had a separate call with Fred Anderson, renowned for his comprehensive work, *The Crucible of War: The Seven Years' War and the Fate of Empire in British North America, 1754-1766*.¹ During these conversations, we collectively examined Google Earth images, studying the area closely. After discussing various reputable historical accounts, we concluded that Colonel Mercer had stationed a group of Virginians about two miles away from Fort Ligonier due to recurring raids by the French and their Native American allies. This situation persisted for a month, with similar threats to the post occurring as winter approached—the hope being that they could force Forbes' army into winter quarters without an attack.

The French and Native American allies relentlessly targeted horses and cattle, pillaging livestock in the process, a task made easier because grazing such a sizable herd necessitated moving away from the protective confines of the fort. These men were scattered across several valleys, and as they headed home, they encountered heavy resistance from Mercer's group in the very location where our archeological work is taking place. In this initial clash on November 12, 1758, Mercer and his men managed to repel the marauders and force them back over a hill toward Fort Duquesne. Mercer then took control of the landform that had been serving as their forward post. They apprehended three individuals who provided valuable intelligence about the state of Fort Duquesne. Meanwhile, Washington, without their knowledge, had convinced Forbes to dispatch him with an additional 500 soldiers, aiming to catch up to the action.

Instead of following the established road, Washington went up Two Mile Run and descended from an alternative direction, all in the hope of catching the French and their Native American allies by surprise. Unfortunately, he was unaware that Mercer's men had already taken advantage of this action and

pushed them off. This resulted in engaging with one another as opposed to the enemy. In the confusion, the two Virginia Regiments ended up firing upon each other, resulting in a chaotic confrontation between 500 men on each side, all within the confines of a small valley. Once Washington grasped the unfolding situation, he recognized the “friendly fire incident.” An artwork, painted by Charles Fagan III (the son of longstanding board member of Fort Ligonier, Charles Fagan II) has recently brought this history to light (Figure 3). Following the historical accounts, he created a depiction of what he believed this friendly fire incident might have looked like. Fort Ligonier now proudly showcases this painting alongside original memoirs authored by Washington, where he mentions this event in his “Remarks” years after it took place.



Figure 3. Charles Fagan Charles Fagan III, “Flash Point,” 2019, oil on canvas. Fort Ligonier. Photo Credit: Fort Ligonier.

Upon realizing the dire situation, Washington's first reaction was to position himself in front of his men and use his sword to knock and deflect their musket barrels up – at least, that is what he says he did. We do not know whether Washington was on horseback; this is where the myth might take root when someone paints an image. In fact, the location depicted in the painting pertains to the location of Mercer's men, not Washington's, but we can afford some artistic license here. One detail worth noting is the figure below, depicted as waving his hat. This is intended to represent Thomas Bullitt, one of Mercer's men, who

witnessed the events as a combatant and provided a more damning account of Washington's performance that day. The circumstances were compounded by the challenging conditions, with darkness and fog settling in and obscuring the terrain, as shown here. Additionally, the Virginia Regiment, under Washington's command, was wearing worn and tattered uniforms, which rendered them almost indistinguishable from the French and their Native American allies. In the end, we are led to believe that Washington's intervention successfully halted the firing.

However, Bullitt's account, which emerged from family memoirs, conveyed a perspective in which Washington bore the brunt of the blame for the misstep, describing it as a flawed decision. Bullitt contended that it was he who intervened by running between the parties, waving, and shouting to cease fire and alerting them that they were shooting at one another. He noted that Washington "did not discover his usual activity and presence of mind upon this occasion" as it was a tactical blunder.² It was not that Washington was necessarily a bad officer, although there were doubts growing about his capabilities at this point.

At any rate, they quickly became aware of what was going on when it became apparent that nearly forty casualties had occurred in the field, including two Virginia officers killed in action. Strangely, Washington made no substantive action report of the incident, but he did return to Fort Ligonier and entered concise instructions in his orderly book.³ These instructions outlined the plan to bury those men who had fallen that day. In his brevity, it appears as if he was attempting to move past the recent loss of those soldiers, perhaps by trying to focus on taking Fort Duquesne. Nonetheless, Washington included a list of officers and men who were to assemble the next morning at a location near where the skirmish had occurred. They were instructed to bring along a quantity of spades, with the intention of interring the fallen bodies. This information from Washington's incident report led us to speculate not only about the existence of a battlefield at the site but also the potential presence of mass graves.

What transpired next that day was of great consequence. Among the three prisoners taken during the engagement, one was an English deserter who had spent some years as a captive of the Delaware tribe before being captured by the Virginians. Threatened with torture, he divulged crucial information about Fort Duquesne, revealing that it was weak and that the French were running out of food and supplies.⁴ This information served as the linchpin for Forbes, who had initially intended to remain in winter quarters, but he swiftly reversed his orders. On the day following the "friendly fire incident," Forbes and his troops departed Fort Ligonier with the renewed objective of capturing Fort Duquesne.

Mercer's second Virginia regiment engaged in battle as they advanced. The initial contact signaled the commencement of the conflict. In response, news of the exchange and the capture of

prisoners reached their ears. The French eventually withdrew to a more secure location. This marked the site of the first encounter, where Mercer's men successfully pushed the adversaries off the landform. Following this encounter, they proceeded with processing the prisoners. Meanwhile, Washington approached from the north following the course of Two-Mile Run. We surmise that as soon as Mercer's men caught sight of Washington's troops, they opened fire. Washington's men charged out of the stream bed, as they had been traveling along it as a column. This enabled them to ascend the slope and return fire at Mercer's men. We were interested in pinpointing these locations archeologically, and we looked at the areas marked by patterns of impacted and dropped lead ammunition from the exchanged gunfire as we began our search.

ARCHAEOLOGICAL DISCOVERY

As you might imagine, when 500 armed combatants fight with another 500 combatants with similar weaponry, it generates a substantial number of artifacts, including lead bullets and spill, as well as buttons, buckles, and various personal belongings that tend to become lost for a variety of reasons. Each point on the site map represents an item discovered through metal detection. A major component of the site context is the old Forbes Road, which intersects with Two-Mile Run before continuing up through a little gully that runs parallel to the old road. This is precisely where we uncovered evidence of the action that transpired on November 12, 1758. These findings extend beyond lead artifacts. We have also unearthed remarkable European relics including a French sword scabbard clip discovered on the elevated hill where the retreat occurred during the initial battle (Figure 4). A pocket watch key with a *fleur-de-lis* and lion embellishment might very well indicate the location of the French listening post. The scattered remnants vividly help to narrate the events of the past as they comprise the forensic evidence of the materials for reconstructing the scene.



Figure 4. Clockwise from upper left: watch key, scabbard clip, ramrod guide, harness buckle, and shoe buckle chape. 18th century, copper, artifacts recovered from Fort Ligonier battlefield site in 2023. Photo credit: Jonathan A. Burns.

While I thoroughly enjoy instructing undergraduate students, the Veterans Archaeology Program represents the culmination of my vision. I want to go beyond simply interpreting historic sites using archaeology. My mission, as mentioned previously, is to incorporate an emic perspective, offering an insider's viewpoint of what it is like to be stationed on a fire base or deployed to foreign soil in hostile territory with limited information on the enemy. It only makes sense that the participants in this program come from the U.S. armed services. What better eyes and ears to search for battlefields if not combat veterans? It is important to note that our program is not focused on veteran disabilities or post-traumatic stress; we welcome everyone, regardless of any challenges. We are committed to finding ways to involve all participants, irrespective of any handicaps. We do not claim to be offering treatment through our activities; but we believe that therapeutic benefits are a natural byproduct of our approach. Such a grassroots perspective ensures that everyone is actively involved in the process of discovery, rather than having information handed down to them. I help to prepare them for the challenges they will encounter, emphasizing the potential frustrations they may face. Then, I send them onto the battlefield area, encouraging them to try to uncover items that date to the 18th century. Often, their discoveries include nails and various iron relics, which may seem mundane but require specific excavation techniques. The anticipation of finding diagnostic artifacts like buttons or bullets serves as a driving force that motivates

people to endure the demanding conditions, including the scorching heat and the physical toil that is involved in doing this type of work.

Our core team of instructors is comprised of cultural resource professionals—individuals with extensive experience in the fields of archaeology and historic preservation. Colonel Mark Beckler, for example, is a retired Army brigade commander with leadership experience over more than 2,000 soldiers. He has been a valuable mentor that has imparted essential organizational skills, and he challenged me to clarify our program’s mission, purpose, and long-term goals. He even established an LLC for producing documentaries about this type of work. Our journey began at Fort Ligonier, and currently we find ourselves exploring an associated site situated on a privately-owned farmstead two miles west of the fort. Fort Ligonier is eager to take on the responsibility of managing and interpreting this new site, effectively bridging the gap between landowners and our archaeological mission. When we inform people that we are bringing service veterans to participate, their interest is piqued, and they want to know how they can support the landowner through our efforts. At the culmination of the summer 2023 program, they hosted a grand picnic, fostering a sense of community and shared purpose.

Figure 5 shows our team, including myself, while in the midst of talking; below me is Scott Shaffer, a PennDOT archaeologist and an expert in colonial firearms, proficient in identifying lead by caliber and providing insights into the historical use of these items. Scott Padamonsky, shown kneeling, is a professional archaeologist who plays a crucial role in using GPS to map the locations of the artifacts we discover. Our system entails veterans conducting surveys and locating artifacts, but before bringing these items back to the lab, we map their precise locations. Additionally, we are fortunate to work with Dr. John Wah, a soil scientist, who provided an insightful crash course on soil profiles and how to navigate them as an archaeologist. In addition to these team members, there are two other outstanding veteran instructors, Dave Williams and Jeremy Severn, who excel in using metal detectors. They both have displayed exceptional skill, often unearthing remarkable finds, including copper buttons, watch keys, and other items of personal adornment.



Figure 5. The 2023 Veterans Archaeology Project team (clockwise from upper left: Dr. Jonathan Burns, Dr. John Wah, Scott Padamonsky, and Scott Shaffer). Photo Credit: Jonathan A. Burns.

Now in its third year (2023), the Veterans Archaeology Program is experiencing significant growth. It has successfully trained and mentored over thirty participants from all corners of the country. Our network is intricately connected to veterans who are exploring potential career pathways in archaeology, historic preservation, or museum work. The National Park Service, renowned for its commitment to hiring veterans, especially values individuals with cultural resources expertise. Our primary aim is to facilitate a pathway for these veterans to connect, receive training, and establish valuable mentorship. Funding for this initiative is sourced from private donations to Fort Ligonier, which then sponsors our efforts. A significant portion of these funds is allocated to providing hotel accommodations for the veterans. The Cultural Resource Institute at Juniata College also plays a pivotal role by supporting scientific processing and interpretation in our archaeological endeavors. Additionally, I have involved at least one or two undergraduate students in the process, providing them with valuable teaching and field experience. We are committed to supporting veterans who have already expressed their interest in history and archaeology or that might be exploring their options. Many of these individuals have completed training through the Veterans Curation Program (VCP), securing employment opportunities with agencies such as the Army Corps and private sector cultural resource management. We've designed this program to be flexible and adaptable to various project locations.

We initially adopted metal detecting technology, which became an important tool in our archaeological endeavors. I attended a training session on metal detection at Fort Necessity, organized by the American Metal Detector Association (AMDA), and it was there that I developed a passion for

pursuing archaeological efforts with metal detectors. Until that moment, I had adhered to the belief that archaeologists should refrain from using metal detectors, often humorously dubbed “the devil sticks,” due to the potential risk of attracting unwelcome visitors and looters. However, my perspective shifted when I joined the AMDA program, led by experts like Doug Scott, Chris Espenshade, and other battlefield archaeologists. They perfected the techniques for locating the pertinent artifacts, mapping them, and then doing the forensics of the battlefield. In addition to metal detectors, our arsenal of tools expanded to encompass advanced technologies, including drones, GPS, aerial imagery, and other high-tech devices. These resources allowed us to remotely sense and explore underground for additional archaeological features, enriching our archaeological pursuits.

In another image is my good friend, “Ranger” Dave Williams, with whom I have had the pleasure of working for about four years; he is extremely talented in operating a metal detector, and his expertise has continued to grow (Figure 6). He has become one of our core veteran instructors, contributing to our efforts in various capacities such as metal detecting, laser mapping, remote sensing, and terrain analysis. These technologies resonate especially well with military veterans, many of whom already have experience with similar equipment and tools.



Figure 6. U.S. Military Veteran David Williams (a.k.a. Ranger Dave) poses with a metal detector find at Fort Halifax in 2023. Photo Credit: Jonathan A. Burns.

Our journey into involving veterans in these projects began while conducting field schools for undergraduates at Fort Ligonier. During this time, we became aware of Operation Nightingale, a British initiative that has been diligently collaborating with veterans, specifically those with disabilities, in archeological undertakings. Their projects often involve the search for missing personnel, historical artifacts, and remnants from other battlefields in Europe.⁵

“Upskilling” is a term used to describe the technical training of veterans to complement their existing strengths and experience. Metal detecting, laser mapping, remote sensing, and terrain analysis are just some of the technologies that translate well. For well over a decade in England, Operation Nightingale has been conducting archeological projects, recognizing the therapeutic value of engaging veterans in fieldwork for a variety of compelling reasons. Archeological fieldwork fosters a sense of teamwork, instills a clear sense of purpose, and provides an opportunity to shift one's focus away from personal concerns. The act of searching for artifacts and collaborating within a team setting carries therapeutic benefits that extend to everyone involved. In a bid to expand their reach in 2017, Operation Nightingale USA sought to partner with projects specializing in military archeological sites. Recognizing the potential and the alignment with our own work, we embraced the opportunity to work with veterans. The initial connection to Operation Nightingale was made through one of the organizers, as well as a graduate student who has since ventured to England, ostensibly to rejoin Operation Nightingale. Three veterans were introduced to us, and they spent nearly a full week in the field actively participating in our fieldwork.

Some of our participants came from the Veterans Curation Program where they engaged in the meticulous processing of orphaned artifact collections from various Army Corps of Engineers projects spanning approximately three decades. These collections had been stashed away in boxes and never underwent proper documentation, analysis, or curation. The VCP's current efforts encompass activities including the long-neglected tasks of photographing the artifacts, curating them, and adding appropriate labels. Concurrently, the team is acquiring the specialized laboratory skills required for this work. An apprenticeship with VCP generally spans around a year and a half, during which time the veterans garner essential experience and expertise. Upon completing the apprenticeship, they often venture into the job market, seeking employment opportunities. Some may find positions with engineering firms that maintain in-house archeologists, while others might explore various roles within state and federal agencies that involve archeological work. Our program takes a similar approach to the VCP, but with fieldwork opportunities and technology training.

The coolest and most interesting part of our work is where the archeological record intersects with the historic record! For instance, my team was stationed by the roadside in July 2023 when they found this iron spade (Figure 7).



Figure 7. Iron spade, c. late 18th-early 19th century, recovered in 2023 near the Forbes Road at the Fort Ligonier Friendly Fire Site. Photo Credit: Jonathan A. Burns.

Typically, iron artifacts may not seem particularly eye-catching, but this one was certainly of interest. The artifact was highly fragmented when we dug it up, but thankfully we were able to reassemble it revealing

it as an 18th century spade. We hypothesized that it could have been one of the spades George Washington wrote about in his orderly book. Using our resources at the lab, we plan to use a 3-dimensional scanner to help put the object back together virtually. After thoroughly researching the iron spade, like other objects we find in the field, we place them in historical context, ensure their stability, and appropriately package them. Among the other types of objects that we have found, buckles and buttons are relatively common. There are so many of these smaller items of personal adornment because during that era, zippers and Velcro had yet to be invented, and everything relied on these fasteners. Ultimately, the artifacts we recover are destined to return to Fort Ligonier where they can better contribute to the storytelling and interpretation of this history.

Overall, we have recovered fascinating finds, including the forensic evidence of shot ammunition (Figure 8). For instance, we found a piece that was deformed, or “pancaked,” displaying distinct fabric impressions from being forcefully rammed down the barrel due to its less malleable nature.



Figure 8. Artifacts recovered at Fort Ligonier in 2021, spill, pulled ball, impacted ball c. 18th century, lead. Photo Credit: Jonathan A. Burns.

Another interesting find was a misfired round that had to be extracted using a “worm” to pull it from the barrel. We have also uncovered molten lead, indicating that individuals at the site were involved in casting their own ammunition, possibly as part of their camp activities rather than during the battle. Deformed pieces of lead suggests that they had been fired; these pieces can then be marked as classic evidence of battle. In connection with camp-related discoveries closer to Fort Ligonier, we found an intriguing lead object that resembles a bottle cap but served as a game piece from that era. As you might imagine, the archaeological patterning of combat is distinct from that of camp life. Archaeologists are

focused on the artifacts; but, just as important is their spatial relation to one another—we are trained to interpret such distinct activity signatures.

Locating buttons and coins are some of the most popular things that get the participants excited. Avocational detectorists often overlook valuable iron finds, much like inexperienced anglers miss out on catches. Our program ensures that participants spend two and a half days in the field (twenty hours) with us, encountering moments of frustration, getting their hands dirty, and honing their skills to master the technology. They learn how to adjust the sensitivity of the devices and understand their depth and discrimination capabilities. Typically, metal detectors can detect items up to nearly a meter and a half deep, although the actual effective depth varies depending on the soil composition and nature of the targets. Most of the sites we explore are relatively shallow, often in plowed fields and pastures. If any archaeological remnants are preserved, they tend to be below the “plow zone,” and we have even uncovered features like fire pits and middens. The upper plow zone, where most of the artifacts can be found, provides valuable insights despite being slightly disturbed. It retains important clues about the location of past events. When program participants see experienced individuals like Jeremy and Dave unearthing remarkable finds, it fuels their enthusiasm and motivates them to join in and learn from the experts.

This historic friendly fire incident was a disastrous tactical mishap of national importance, and we wanted to collect data to try and piece together what exactly had occurred. We are also interested in trying to locate the resting place of fallen soldiers or mass graves on the site. In 2023, we brought in an archaeological human remains detection (AHRD) dog to the project and collaborated with a renowned dog handler from Tennessee whose dogs assisted in our survey. Additionally, an Indiana University of Pennsylvania graduate student utilized ground-penetrating radar to further investigate areas where the dogs displayed heightened interest. This combined approach allowed us to explore anomalies in search of potential burial sites.

VETERAN INTEGRATION

Our first veteran participants hailed from Texas, Arkansas, and Oklahoma, and they showed genuine appreciation for the opportunity to travel to Western Pennsylvania and engage in our work.



Figure 10. The 2023 Veterans Archaeology Program participants with Fort Ligonier Education Director, Matt Gault, as Col. George Washington. Photo Credit: Jonathan A. Burns.

Considering the scant and conflicting historic accounts of the incident of November 12, 1758, archaeology allows us to consider new evidence as we define the boundaries of the Friendly Fire Incident Site. It is worth noting that, at this juncture, the location is just an ordinary farmstead with no monument to commemorate the lives of the Virginians who lost their lives. It is my hope that we are doing our part to make archaeology more accessible to U.S. military veterans while ensuring that the place in western Pennsylvania where the soldiers who were killed in action on November 12, 1758, is memorialized, and protected for posterity.¹⁰

NOTES

1. Fred Anderson, *The Crucible of War: The Seven Years' War and the Fate of Empire in British North America, 1754-1766* (New York: Knopf Publishing Group, 2001).
2. Thomas W. Bullitt. *My Life at Oxmoor: Life on a Farm in Kentucky before the War*. (Louisville, KY: John P. Morton and Co., 1911), pg. 4.
3. "Orderly Book, 12 November 1758," *Founders Online*, National Archives, <https://founders.archives.gov/documents/Washington/02-06-02-0106>. [Original source: *The*

Papers of George Washington, Colonial Series, vol. 6, 4 September 1758–26 December 1760, ed. W. W. Abbot. Charlottesville: University Press of Virginia, 1988, pp. 120–123.]

4. For more information, see Douglas R. Cubbison, *The British Defeat of the French in Pennsylvania, 1758: A Military History of the Forbes Campaign Against Fort Duquesne* (Jefferson, NC: McFarland & Company, 2010).
5. “Operation Nightingale,” Wessex Archaeology, November 13, 2017, <https://www.wessexarch.co.uk/our-work/operation-nightingale>.
6. Richard Osgood, *Broken Pots, Mending Lives: The Archeology of Operation Nightingale* (Havertown, PA: Casemate Publishers, 2023).
7. You can examine this document on display at Fort Ligonier, as it was intended to be destroyed but it was not. A handwritten recollection of his years on the Pennsylvania frontier, known as the “Remarks,” was written by George Washington around 1787. He wrote it for his friend and biographer, David Humphreys, who requested that Washington share his memories as a young officer in the French and Indian War. George Washington, “Remarks,” quoted in, *George Washington Remembers: Reflections on the French & Indian War*, ed. Fred Anderson (Lanham, MD: Rowman & Littlefield Publishers, Inc., 2004).
8. Peter Stark, “*Young Washington: How Wilderness and War Forged America's Founding Father*” (New York: Ecco, 2018); Colin G. Calloway, “*The Indian World of George Washington: The First President, the First Americans, and the Birth of the Nation*” (New York: Oxford University Press, 2018).
9. Mark Beckler, “They Met Themselves,” Heritage Broadcasting Service, <https://heritagetac.org/catalog>.
10. For further reading on the subject, see the following Wayne E. Lee, David L. Preston, Anthony E. Carlson, and David Silbey, *The Other Face of Battle: America's Forgotten Wars and the Experience of Combat* (New York: Oxford University Press, 2021); Michael McConnell, *To Risk It All: General Forbes, the Capture of Fort Duquesne, and the Course of Empire in the Ohio Country* (Pittsburgh, PA: University of Pittsburgh Press, 2020); Douglas Scott, Lawrence Babits, and Charles Haecker, *Fields of Conflict: Battlefield Archaeology from the Roman Empire to the Korean War* (Westport, CT: Praeger Security International, 2007).