

Commerce and Conflict on Central Pennsylvania's Colonial Frontier: Archaeology at Forts Shirley and Lyttelton

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I'm excited to share Pennsylvania's rich colonial history and the work I've been doing through the Penn State archaeological field school as well as an archaeology survey class we've started here at Juniata College. One of the things I'd like to point out about archaeology is that it's not just the duty of one person to see all this data through the process of discovery and make all the interpretations; rather, it takes an interdisciplinary team of people working together with different specialties and understandings to make this all come together and to understand the material culture and the context from which it is recovered.

I want to highlight significant local archaeological sites. We have right here in our backyard, in this county and surrounding counties, excellent archaeological sites dating from ten thousand years ago, all the way through the colonial era and into the 1800s and the Industrial Revolution. It really just depends on what your interests happen to be as to where to start looking for material evidence here in the Commonwealth. Throughout my career, I've been interested in Native Americans and the effects that European colonization had on them—so this first site is one that I'm very fortunate to have investigated. The Fort Shirley site here in Huntingdon County lies just about half an hour south of campus, in the town of Shirleysburg.

First, I'm going to describe to you how archaeology gets done in the academic and nonprofit spheres, as opposed to archaeology that gets done in conjunction with construction and development projects. The second goal is to demonstrate how the investigation of material culture is an interdisciplinary endeavor. We archaeologists need to work with specialized researchers who can identify things like broken bones, charred seeds, and aboriginal pottery types—fragments of things that we as field archaeologists don't necessarily understand or know everything about. We take our different samples and specimens to people who are experts in macro-botanical remains or pollen or tree identification.

Basically, we have mountains of fragmented material culture, and it's not always blatantly obvious what we are looking at so we need to call on the expertise of other scholars. The third goal is to showcase the Penn State and Juniata College field schools, because we've been doing a lot of significant work over the past six years. The Penn State field school is about to enter its fifth year, and the Juniata survey course we've run two times to date. Hopefully, we'll have enough folks enroll for a third round this summer. And then finally, I'm trying to get faculty members involved with the field work and this research, either indirectly through sending students my way, or maybe some of you in the audience are interested in colonization, globalization, and some of the other topics that we're going to be bringing up. So those are the goals of this presentation.

We were just recently featured in the magazine *American Archaeology*. It's still on the shelf over in the library, I believe. "Commerce and Conflict on the 18th-Century Frontier" is the title of the article.¹ They did about five pages on our work showing many of the artifacts and giving some background on the projects. We didn't make the front cover, unfortunately, but an equally interesting topic, drinking vessels, made the front page. The reason these drinking vessels beat out our images and story for the cover is that these were George Washington's drinking vessels. Yes, they might trump a little bit of the importance that I'm going to explain to you, but that's a shame because the individuals that I'm going to bring to light were every bit as important as George Washington, brushed shoulders with George Washington, and some might even say that they had better sensibilities than George Washington. At any rate, the caption from the feature reads, "The investigation of Fort Shirley is revealing the story of a successful Irish trader, his Native American allies, and the threats they faced during the French and Indian War." So, there's one pivotal individual for this fort, as well as the other fort that I'm going to introduce here in a little while, and that's George Croghan.

Croghan was an Irishman who came here on the vanguard of (and was the point man for) the British Empire in Pennsylvania. Just as the Industrial Revolution was starting to ramp up in 1750, George Croghan was already here in the New World, doing things like land speculation, as well as setting up these networks of trade for merchants to get their goods out into the Native Americans' hands and then to get other goods, furs, and hides back from the natives. So he really pieced the wheels of trade together and was a rough-and-tumble individual who was best suited for that task. George Croghan was actually involved with Fort Necessity with George Washington, and ultimately, Washington tried to say that it was Croghan's fault that there was such debacle at the Great Meadows. This was because Croghan was supplying his army column, so he was the easiest scapegoat on which to pin his defeat. At any rate, he was still brushing shoulders with George Washington on a regular basis throughout colonial history.

Our work also focuses on Croghan's relationship with Britain's Native American allies. Essentially, the Mingo Seneca, who used to live out near Pittsburgh by the forks of the Ohio, were

important because they were the only pro-British Native Americans left in Pennsylvania. And one of the pivotal figures (one of their head men)—Tanacharison, also referred to as the “Half King”—was actually the individual responsible for starting the French and Indian War in George Washington’s presence. The way it went down at Jumonville Glen was that George Washington had surprised a French outpost and ambushed a force of thirty-five Canadians under the command of Joseph Coulon de Villiers de Jumonville. They were about to let the French sign the papers to surrender, but these Native Americans had been setting up this altercation for years. They wanted to pit the French against the British because they were interested in access to trade and the best deal they could get. Long story short—the Half King killed the French officer, precipitating the “War for Empire.”

Going back to the goals of this talk, there are three realms in which professional archaeology may be conducted. First, the academic sphere, involving teaching field schools and setting up programs that are funded by departments and through student tuition. Second, there is the business end of archaeology, which is called contract resource management (CRM). That is how the majority of archaeology gets funded because it’s in conjunction with products like road construction, bridge replacement, or any sort of infrastructural development that uses state or federal funds. The artifacts are protected by law and are threatened by those endeavors, and the need to protect cultural resources has created a business of being the stewards of archaeological sites and artifacts while allowing progress to happen. We can’t stop progress every time someone encounters an archaeological site. That’s not going to fly, especially here in America. So there exists this delicate balance between trying to preserve archaeological sites and determining what we’ve seen enough of and allowing them to fall victim to the heavy machinery. Finally, the third way that professional archaeology is done in the state is through nonprofits. For example, I am involved with a local nonprofit organization, AXIS Research, Inc., that is specifically geared toward providing students the proper kind of training and networking they need to be successful—pairing them with the right projects and giving them that valuable hands-on experience. So, I’m telling you all this because the site we’re digging, the Fort Shirley site, is an extremely large undertaking. It’s being funded by the Penn State Anthropology department as well as by the university outreach program, but is facilitated by the coordinating efforts of the nonprofit organization.

After some document research, we started looking for Fort Shirley in 2010, and we found it on our first attempt! We were very lucky. Archaeology doesn’t always work like that. We were extremely lucky to locate this fort immediately upon trying, and then we have been returning each summer since. Five years of data have been piling up, and now we’re trying to make sense of this site by integrating the artifacts into the context. We are trying to understand what we can about early colonial life and the interactions of Native Americans, colonists, British soldiers, French soldiers, and others.

The French and Indian War, if you're a little rusty on your history, started about 1754 and lasted to 1763 when Great Britain basically expelled the French from the frontier. Two of the largest superpowers on earth at that time were duking it out over North America. Great Britain was saturating the eastern Atlantic seaboard, trying to move inland, and the French were occupying Louisiana and Quebec, wanting to control the Ohio and Mississippi valleys to connect their colonies. The French knew that if they were to just let the British keep plowing right on through Pennsylvania, the French colonies would no longer be as strong because they wouldn't be able to communicate and travel as easily. This is what some call the first global or world war, when France and England began colliding on foreign soil. But there were other individuals involved here other than just the British and the French.

There were colonists, who came either from England or France as well as other places like Spain and Holland. Then there were the Native Americans who were caught in the middle of all this. They changed their allegiances from time to time, because they were really looking out for themselves. They didn't really care which colonial empire won this fight. They were just worried about whether the ones that they were allied with were going to win. So, different Native American groups had different reasons for going with the French or going with the British, although most groups did align themselves with the French. The Ohio Indians, who had already been dispossessed from Pennsylvania—like the Delaware and the Shawnee—were already aggravated with the British. They knew the British *modus operandi* so they were more likely to help the French and fight against British colonists. They actually started to conduct raids from the Ohio Country back this direction in order to try to dissuade any of the British settlers from prospering. That's how an empire actually controls land: by having its subjects there farming or making a living. So now you know that central Pennsylvania was ground zero from the start of the French and Indian War.

Let me define four important terms that I take for granted but that you might not know. An “artifact” is any portable, human-made or modified object. Yes, that is a very large group of items. It's basically everything we can pick up that's been modified or used by human beings. We're searching for artifacts in archaeology, but we're also searching for context. Just finding an artifact means little to us without context. If you don't know where it came from, and you don't know its relationship to other artifacts and features, then you're really missing out on the information that's available to an archaeologist. The next term, “feature,” is any non-portable context representing a human activity. Things like a fire pit, a storage facility, a privy—those are all features. You can't pick them up and take them with you, but when we encounter them, we know what they are and we take the time to excavate them properly. We remove the artifacts from the context but we also draw it, we determine the shape, the volume, the content of these anomalies that indicate what past activities were conducted. And after you've done archaeology long enough on a site, you can start to put all this together in a spatial map.

There's a spatial component to all of these data, and their associations inform archaeologists. The third term, "bastion," is a projection from the curtain walls of a fort, enabling a garrison to better defend itself against an attack. That goes along with the term "palisade," which is a defensive structure made from large wooden posts, set in the ground in a trench, and then racked together for protection. I'll be using these terms again, so realize that they are elements of forts from this era. Remember the British and the French were all used to building forts from the medieval era. They colonized America with a fort mindset. Building forts goes hand-in-hand with trade as well. All the traders who were making inroads with Native Americans liked to have fortified outposts so that their gear and goods would be protected against attack and raids.

Fort Shirley became such a bustling cosmos of trade and intercultural interaction because of George Croghan. There are no known images of Croghan, but his grave is located at the Pine Street Cemetery in Philadelphia (Figure 1).



Figure 1: Grave of George Croghan

He emigrated from Ireland to Pennsylvania in 1741 and learned his trade in Lancaster. By 1744, he was a licensed Pennsylvania trader, so that meant that he started to take his own pack teams into the wilds of central Pennsylvania and the Ohio Country with other people's goods and commodities. He was responsible for them, and he came back with raw materials and alliances. So he was taking a risk; if he ever got attacked or robbed, he would have gone into the red immediately. In other words, he owed his creditors everything that he lost on the trail. He was a rough-and-tumble individual, and he wasn't the only one in Pennsylvania, but he was the most prominent and the most important. He was a voracious land speculator as well. That goes along with being the first European person on the scene on the frontier. In addition to trading goods he was after land. In fact, George Croghan owned the land that we're

standing on right now. He was the first person to obtain this land from the Native Americans. The same is true with the tracts of land down in Shirleysburg and over in Alexandria. This entire region was influenced by George Croghan's dealings.

By 1753, Croghan was doing quite well for himself. He was trading his wares and making his inroads past modern-day Pittsburgh, all the way out into the Ohio Country when he started undercutting the French trade. The French started to realize that Croghan was providing cheaper goods and better deals. The Native Americans began moving from the French hubs to be closer to George Croghan's trading posts. The French were already angry because the British Navy was preventing new French goods from coming in, and the traders didn't have as much to trade. The British were starting to pull ahead in that sense. Croghan was seen as the main competitor for them, so they put a price on his head. They wanted him dead or at least out of their territory. Once that happened, Croghan had enough sense to move back from the French frontier area. He moved to the banks of Aughwick Creek in southern Huntingdon County where he knew he would be safe. He knew this area well as he used the nearby paths to move his goods from eastern Pennsylvania. He knew that it was well watered, knew he could make fields there, so that's where he went. He brought his whole entourage with him: traders, pack teams, slaves, indentured servants. Croghan had a multitude of people following and working for him. In 1756, he left Fort Shirley and became Sir William Johnson's deputy Indian agent in upstate New York. But that doesn't mean that Croghan's influence left this region; he was still very much involved in the commerce that went on here. In 1782, he died with a bad case of gout. He was relatively penniless and was buried in Pine Street cemetery down in Philadelphia. I think they have just gussied up his grave, so you can go down there and check it out. And that's George Croghan's biography in a nutshell.

As an archaeologist, I'm so excited to continue this project because it dovetails with a lot of interests that I have. The first of these is nonprofit education and outreach. I'm trying to figure out how to take significant archaeology sites and pair them with students who want to get research experience. The only way you can really get into this discipline is to start to get experience somewhere. I've found that you can't rely on academic programs to keep a site or a field school running all the time because they run out of money for support. You have a budget to work with, and there is really nothing keeping the research going on behind the scenes. That's where a nonprofit research group comes into play, as we try to keep these research projects moving and pair them with interested individuals. The other topics that I'm involved in teaching at Juniata College are globalization and world regional geography. This project allows me to study the roots of globalization. This is where it all started, and that's very interesting to me. On top of that, there is a culture contact aspect where the Native Americans were changing their behavior, changing their material culture, and changing their policies due to this interaction.

Since we found Fort Shirley, I've become a bit of an expert in colonial fortifications. We know what they look like and how to identify them. There are many other French and Indian War fort sites out there where people would like to locate the same type of physical evidence, but they are in the formative stages, saying "Wouldn't it be nice if we could find these forts." Well, we have two forts nearby that are examples of how to go about that—making this happen by involving students and using input from the local community. We are not relying on the fact that most archaeology is done in the contract world, since it is not always conducted on the sites that we're interested in or want to see. Then lastly, geography and spatial analysis come into play in these projects. As we excavate this site, we are "sniping" for the palisade walls and trenches. We can get a little bit stressed about maintaining our spatial grid and keeping track of all our finds, but we can continue to return to this site and always be able to account for where artifacts are found and how they're related to one another. So this is where spatial analysis comes into play. On the larger spatial scale, geography helps explain why forts are located where they are and their importance to life on the colonial frontier.

All right, let's get to the good stuff—images of the artifacts. What we're finding here in central Pennsylvania are goods originating out of Great Britain, and they entered the archaeological record here in Huntingdon County because they were part of this trade network. There were goods coming from England and passing through Philadelphia, where creditors and businessmen bought up the goods, and then people like George Croghan took them through the frontier. So those are the roots of globalization! Some of the things that we find at the site are easily datable. Archaeologists want things that are diagnostic of specific dates, for obvious reasons. A coin is useful because it's got an exact date on it (if it is not too worn). Some of the production styles of pottery are more diagnostic than others, but they have production windows and you can use these to help you figure out whether you're in the vicinity of an archaeological site. For example, white salt-glazed stoneware: the median date on this is 1762, and since we're looking for artifacts dating from 1754 to 1756, that is a good time marker. The same is true with tin glazed earthenware, or "Delftware" if it's Dutch. (It's just tin glazed earthenware if it's English.) It is very recognizable, and its median date is 1750. That's an effective time-marker. Then there are Jackfield ceramics. We have to be able not only to say "Oh, that's a piece of pottery," but we have to be able to identify what kind of pottery it is, what kind of clay body it is, and then we can start to get a lot more information about its context and to when it dates.

These are glass trade beads (Figure 2). We have the largest glass trade bead collection of any archaeological site in this county, and it's probably one of the largest collections of trade beads from a fort site in the state, I would hazard to say. There are various styles represented, from wire-wound varieties to press-molded to tiny glass seed varieties and even Native American wampum made from shell. The glass beads were being produced in Venice and Eastern Europe specifically for trade. They

were produced at these locations, and then the British bought these in bulk and shipped them overseas because they knew the natives wanted these items of personal adornment. George Croghan was at Fort Shirley from 1753-1756. This is nice for archaeologists, because we're looking for a needle in a haystack, and we only have a short period of time for the actors to be dropping the artifacts and constructing the features. So, this is a highly datable site.



Figure 2: Glass beads from Fort Shirley

You can see Fort Shirley on this map from J. Simpson Africa's *History of Huntingdon and Blair Counties* (Figure 3). By the way, this map is one of the things that interested us in the site in the first place. If you show an archaeologist a map with something drawn on it that we're looking for, they start wondering, "Could this map be correct? Could this fort really be located where it's indicated on this drawing, and what is its origin?" So that map was the impetus for the archaeological investigation of this fort site. The last thing I wanted to say about George Croghan here is that he was on the council of the Oneida and other Iroquois tribes, but then he was also called into service several times by the British crown: in 1754 at Fort Necessity and then a year later in 1755, when Edward Braddock came to try to dislodge the French from Fort Duquesne at the forks of the Ohio. Croghan was definitely at the vanguard of these operations, and he also usually had the Half King by his side. Since Tanacharison hated the French so much, he was hoping to help Croghan and the British gain the upper hand.

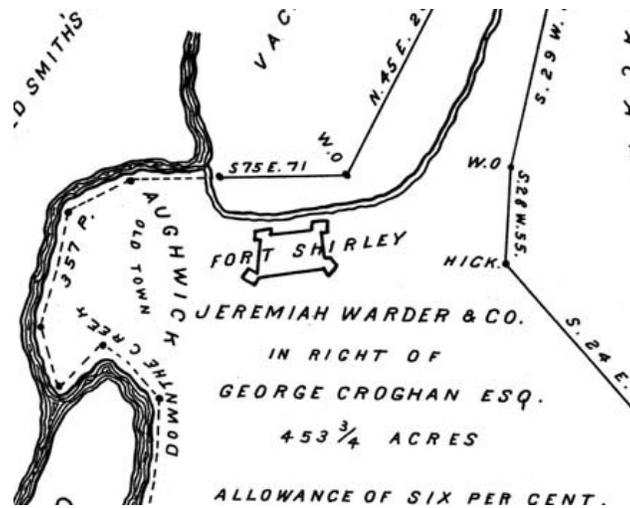


Figure 3: Fort Shirley's location. (J. Simpson Africa, *History of Huntingdon and Blair Counties, Pennsylvania*, (Louis H. Everts, 1883)).

If you know anything about the geography of Pennsylvania, you know that we have ridges that trend from southwest to northeast, and you can see this line of forts that cropped up in the Great Valley, kind of at the eastern margin in the Appalachians. Other things that are pictured on maps of the era are French forts near Erie, and then there are also Native American towns or villages listed as well. Why did they build these forts in the first place? I said it was for protection, but researchers have laid out a few more reasons, such as lodging for soldiers and rangers. They needed lodging and a base of operations, but what was more important was keeping their powder dry and their stores protected. The majority of the army would not be inside these palisades, just officers and certain individuals, but it was a place to keep the gear safe. Second, to protect settlers. When attacks and raids were coming into the region, they could run to these positions and be huddled inside the protected walls. Third, for trade and diplomatic contact with the Indians. You build these forts to protect your trade goods and the Indians come and interact with you at these places. Fort Shirley and Fort Lyttelton are very important because there were settlers, military folk, and Native Americans interacting on the same piece of real estate. Lastly, the lodestone principle, meaning that if you build a fort, the enemy will hopefully be more apt to attack the fort rather than the settlers who are scattered about in the valleys. It didn't always work like that, but that was the logic.

Pictured here are forts of the central Pennsylvania frontier in the mid-1750s (Figure 4). Fort Shirley, Fort Lyttelton, and Fort Granville are visible. Granville (present-day Lewistown) was attacked, burned down, and totally destroyed in 1756. Its footprint happened to be in the path of the

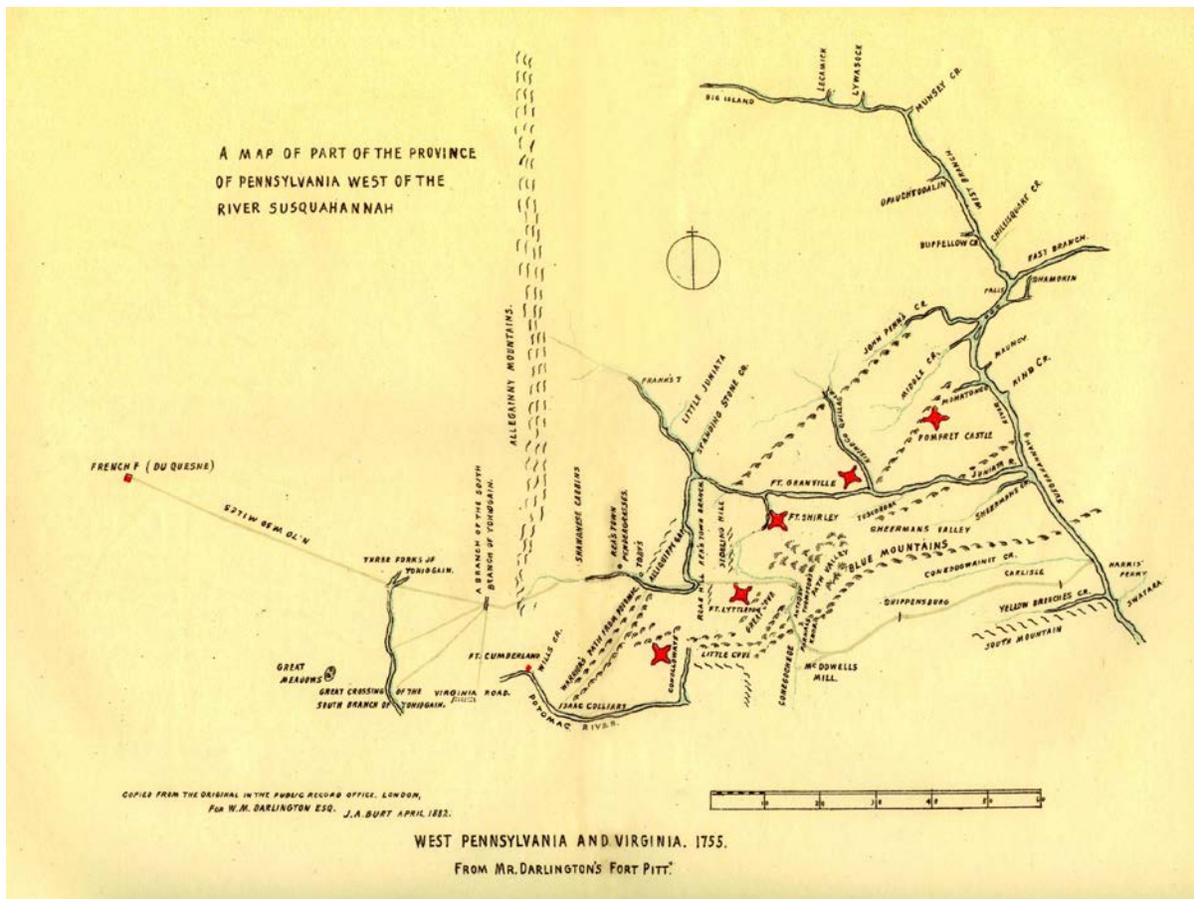


Figure 4: The forts of central Pennsylvania. (“Map of part of the province of Pennsylvania west of the River Susquahannah.” Manuscript Map. Copied by James A. Burt from the original in the Public Record Office, London [Board of Trade Maps Vol. 11, No. 20] for W. M. Darlington Esq., April 1882. Darlington Digital Library, Special Collections, University Library System, University of Pittsburgh. <http://images.library.pitt.edu/cgi-bin/i/image/image-idx?c=darlmeps;view=entry;cc=darlmeps;entryid=x-darmap0348;viewid=DARMAP0348.TIF>).

Pennsylvania canals, so there’s almost no hope of finding much physical evidence of that fort. But we have these other two sister forts to study. George Croghan built all three of these. He helped out at Fort Necessity and got blamed for the debacle. He helped Braddock, who traveled to western Pennsylvania and got shot right off the bat, which was bad news for the British colonies. Croghan realized that the British were not going to get the foothold or get the easy win that they expected. He returned to Aughwick with all the Native Americans refugees and his crew, all his stock teams, and they started to build a stockade in October of 1755. In 1756, it became an official commissioned garrison of Pennsylvania called Fort Shirley (previously it was referred to as Croghan’s Fort). It was used for one extremely important military operation, the Kittanning Raid, also known as the Armstrong Expedition. They left from Fort Shirley and returned to Fort Lyttelton. After that, the gate was removed and Fort Shirley was abandoned as a post in the fall of 1756.

We found an original document here in Huntingdon at the mapping office of Africa Engineers and Land Surveyors (Figure 5). We asked them if they had anything that might be helpful to our research, and they produced this original survey map drafted in 1761 by John Armstrong, the individual who led the Kittanning Expedition from this spot. He came back and purchased some ground here, because you can see John Armstrong's name on the third parcel. George Rolf's name is listed, as is Jeremiah Warder (a creditor from Philadelphia) by right of George Croghan. You can see that these land parcels were subdivided out of the larger tract. What got my attention was a prominent meander bend in Aughwick Creek. Pictured are perch marks that surveyors use, and I started to think that maybe this isn't a cartoon or a doodle, maybe this is an actual survey map with distances we can believe. And if that is the case, the fort should be located right on the bend of a little tributary stream called Fort Run. So we studied this map and decided that it was accurate enough that we could start putting shovels in the ground to try to find this fort.



Figure 5: Map of land parcels near Aughwick Creek. (John Armstrong, Survey map (1761). Used with permission by Africa Engineers, Huntingdon, PA).

During the PSU field school, we take approximately fifteen students who don't know which end of the trowel to hold when they come on site, and we turn them into field technicians—workers we can trust to excavate, to do the paper work, to record the context, and to do everything else that we need them to do. The research questions for Fort Shirley: We're trying to figure out where Croghan's trading post was located before they built the fort. So within this field where we're finding the fort, we're trying also to find the earliest part that was occupied, and then the balance of this military installation. What made

Fort Shirley unique among the Pennsylvania forts? One answer is the heavy Native American presence. Usually forts were constructed to keep Native Americans out, and this one wholeheartedly allowed them to be inside the palisade, drop their material goods, come and go as they pleased. Located 100 meters to the east, Aughwick Old Town was the refugee village of these 250 or so Mingo Seneca that moved to be next to George Croghan. Can we find that? I think we have. Can we locate structures and activity areas within the palisade? We have started to do that, and we are going to continue to do that this summer, specifically the buildings and barracks that would have existed within this protected enclosure. What can we learn about the diet of the occupants? This is something that happened 250 years ago, so we're finding not only items that are going to stick around forever like stone and lead, but we're also finding perishable remains, and they can indicate what their diet looked like at this point in time. How much of it was domestic? How much of it was wild? We actually have a bone assemblage, which is being looked at by graduate students at Penn State, and they are going to determine whether that bone assemblage came from hunted or domesticated animals. So that's good to know. Lastly, what distinct cultures can be linked to the artifacts that we find on this site?



Figure 6: Excavating the palisade

Notice in viewing these images, you'll see students excavating these strange dark trenches (Figure 6). Those were the positions where upright logs formed the palisade. We choose our locations

carefully by extrapolating from what we already know, and we try to bring students right down on top of the feature so that we can excavate the soil around it and then also the posts that were inset into a builder's trench. As people struggled to erect the fort, they were constantly dropping and losing things from their clothes and other items of personal adornment. We find what they drop very close to where they dropped it. It is very exciting but there is a lot of note taking involved. It's stressful and constantly tests the students' mettle. They're working in the sun, they're sweating, they're dripping all over their paper work, and they have to learn how to do this effectively—and do it with consistency to maintain scientific control. We want them to collect data in the same manner, and we want everyone to do it at the same caliber and with the same eye for detail.



Figure 7: Jephy and his projectile point.

No student forgets when they find their first projectile point. Pictured here is Jephy (Figure 7). He's from Philadelphia, originally from Kenya, and this is a shot of him finding one of several stone projectile points. These, by the way, have nothing to do with colonial Fort Shirley; in fact, some of these stone tools are 8,000 years old, and different technological expressions from every millennium thereafter are represented in various quantities. It's a landscape cluttered with pottery, spear points, and the remains of other Native American encampments before the fort was constructed. You can also see the landowner and the landowner's son in the background. It's very important to cultivate those relationships with the locals, because they allow us to disrupt their lives and dig up their property. They can show us things that they've found, or they can keep information from us. So it's important to make sure that you're talking to and including them in the process.

This is a copper triangle (Figure 8). Metal artifacts were being traded to the natives in the form of copper and brass kettles, and then the settlers realized that the natives would take these kettles and chop them up and make different things out of the material. After realizing this, the traders stopped giving kettles and started trading sheets of copper and letting the natives make things that they wanted out of them—like projectile points and ornaments. This triangle would have gone on to be a projectile point. They also sometimes wore them on ear dangles as well. Here is that culture contact aspect of the work. Natives never had this resource, and suddenly they got it in their hands and abandoned what they were using out of preference for this new material—visible technological change.



Figure 8: Copper triangle from Fort Shirley

This is another piece of the same kind of material rolled into a conical form and it is called a tinkle cone (Figure 9). These adorned the fringes and seams of their outfits, and each had dyed deer hair hanging out through it like a little tassel—representing elements of decorative ornamentation. So while these individuals were out there toiling and digging the trenches to erect this fort, they were constantly losing items off their clothes, and these are the artifacts that we encounter as we excavate. These are some of the rich artifacts that really let us understand more about what life was like in the mid-eighteenth century.

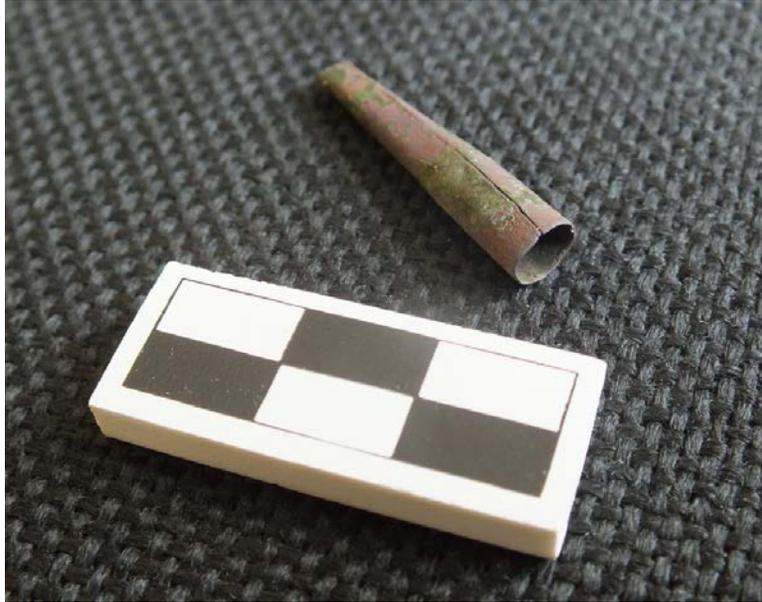


Figure 9: Copper tinkle cone from Fort Shirley

Pictured here is an ear clip, a kind of clip-on earring—a very delicate, rolled piece of copper—and a charm of some sort made out of the same material (Figures 10 and 11). We don't know whether a Native American had this or whether this was one of Croghan's men, because these guys had one foot in each world as well. They probably dressed in buckskins and had a certain amount of these types of materials in their possession as well. But on closer examination, our lab director discovered that there is actually something etched on that little copper disk. It appears to read "ZH." Now, we need to go dig into the written records and see if Croghan had anyone on his rosters with those initials, and we might actually be able to link this item back to a particular individual. That's just one potential thing we could investigate to bring history back to life.



Figures 10 and 11: Native ear clip and charm from Fort Shirley

Pictured here is an extremely rare and important artifact (Figure 12). In fact, I can't find these things on the Internet or from other archaeological contexts for comparison. It is an embossed Muslim



Figure 12: Embossed Muslim charm from Fort Shirley

charm. I was told it says something in Arabic script to the effect of, "no god but god." These would have been given to indentured servants or slaves, anyone coming from Africa or the Caribbean who might have accepted the Muslim religion. This charm acted as a connection between its owner and his or her religion, from what I can tell. It's very tiny, the size of my little fingernail, a delicate, beautiful item. We haven't found anything else like this, of course, but this does hint at the fact that Croghan did have ethnically diverse people with him—indentured servants who could have been from Ireland or from the Caribbean, and he likely had a few slaves who are mentioned in the written record. The neat thing about this type of site is that you can explore the written record and find pertinent information. You can either confirm or refute certain "facts" because there is information recorded about them.

To recover as much physical evidence as possible, we're carefully screening and looking through the soil and finding everything about two millimeters in size, by using forensic mesh water screens. Here's a view looking down at the screen while we're looking for small items like glass trade beads and lead shot (Figure 13). We can literally find a needle in a haystack. Pictured here is a brass pin, and you can see those extremely small seed beads for comparison (Figure 14). Those are the types of artifacts that we find in our screens.



Figure 13: Archaeology students screening the soil at Fort Shirley



Figure 14: Brass pin and seed beads from Fort Shirley

Certain military artifacts indicate that there was a fort in the vicinity. For example, lead balls. You can see they still have that little sprue, or remnant from the casting process (Figure 15). There's one that's already been trimmed up, because you can't put these things down the barrel of a long rifle until they're perfectly round, but that's part of the manufacturing process. So after these are cast, each round has to be extracted from the mold, trimmed, and then filed.



Figure 15: Lead balls from Fort Shirley

This is an English chalk gun flint from the Cliffs of Dover (Figure 16). There were two different styles. These were what provided the spark to ignite the powder.



Figure 16: Gun flint from Fort Shirley

We know Croghan had all these pack teams and these horses, and he was moving goods. We're finding lots of harness buckles and other tack items (Figure 17). They're not like the ornate buckles that we find on clothing; they're more functional, rugged items. We found twenty-two of those not counting last season's haul. Here are forged nails (Figure 18). These are the oldest style of hand-wrought nails. We found at least 151 of those in the first three seasons.



Figures 17 and 18: Harness buckle and nails from Fort Shirley

Think about what's on your clothing right now or in your pockets; those are all the things that have the potential to fall out of your possession and be found by archaeologists. Waistcoats had many buttons, not to mention all of the buttons on breeches. There are many items to lose. This is a cabochon cuff link, a stone in a metal setting (Figure 19). Flintlock rifles and muskets have many components that



Figure 19: Cuff link from Fort Shirley

can be lost, broken, or discarded. Shoes have buckles. These are civilian buttons that we found on site (Figure 20). Remember, the military did not occupy Fort Shirley, but they were at Fort Lyttelton. These are beautiful buttons. The one on the far right is a plain tombac, which is an alloy they were starting to use back then. But it is a plain button, and you can see that this item's owner tried to gussy up his plain button because everyone else had fancy buttons. You can see that it was actually etched during downtime or prior to coming to the fort. That's pretty neat in my opinion.



Figure 20: Buttons from Fort Shirley

These are wooden pegs—likely for tents (Figure 21). Remember they are 250 years old; we’re still finding materials that will eventually disappear. We are also getting a view of what they were



Figure 21: Wood pegs from Fort Shirley

eating at Fort Shirley. We were pulling a lot of food remains right out of cooking features. Features were either roasting pits, or bake ovens, or hearths. There’s a pig snout (Figure 22), so we know that they weren’t just hunting wild game, but that they did definitely have domesticated animals as well, and we have some written records to verify that. These are not the giant hybridized ears of corn that we eat today; this is eight-row dent corn (Figure 23). That’s the form that corn had evolved to in the 1750s—small, not as many grains, and with a very discernable shape. We’re recovering these directly from features used



Figures 22 and 23: Pig snout and corn ears from Fort Shirley

to produce smoke. Right by these two streams we see evidence of fishing: fish bones and fish scales. Here's one of these cooking features, the first bake oven we found (Figure 24). You can see that this is a feature that was dug down into the ground, about a meter square in plan, the clay very red from firing.



Figures 24 and 25: Bake oven and base of rum bottle, both from Fort Shirley

The only items we found in here as far as artifacts were one beautiful gun flint and a case bottle fragment which is highly datable because of the shape of the base (Figure 25). Both of these are dead ringers for the mid-1750s.

This site map shows our progress after four years of toil (Figure 26). The first year we found the first wall and a bake oven. Then we knew that we had one line of the fort. We had to start strategizing. Which way does this thing run and what part of it do we really have? Anywhere you see a little square or a little number is a spot that we were hunting and pecking with our excavation style until we actually found this wall. Once we found this wall, we did the logical thing and said, “Let’s see how far we can take it in both directions. Let’s see just how large Fort Shirley is.” There was speculation in the written record that the fort was fifty by fifty feet, which is tiny. There were various dimensions cited, so we had

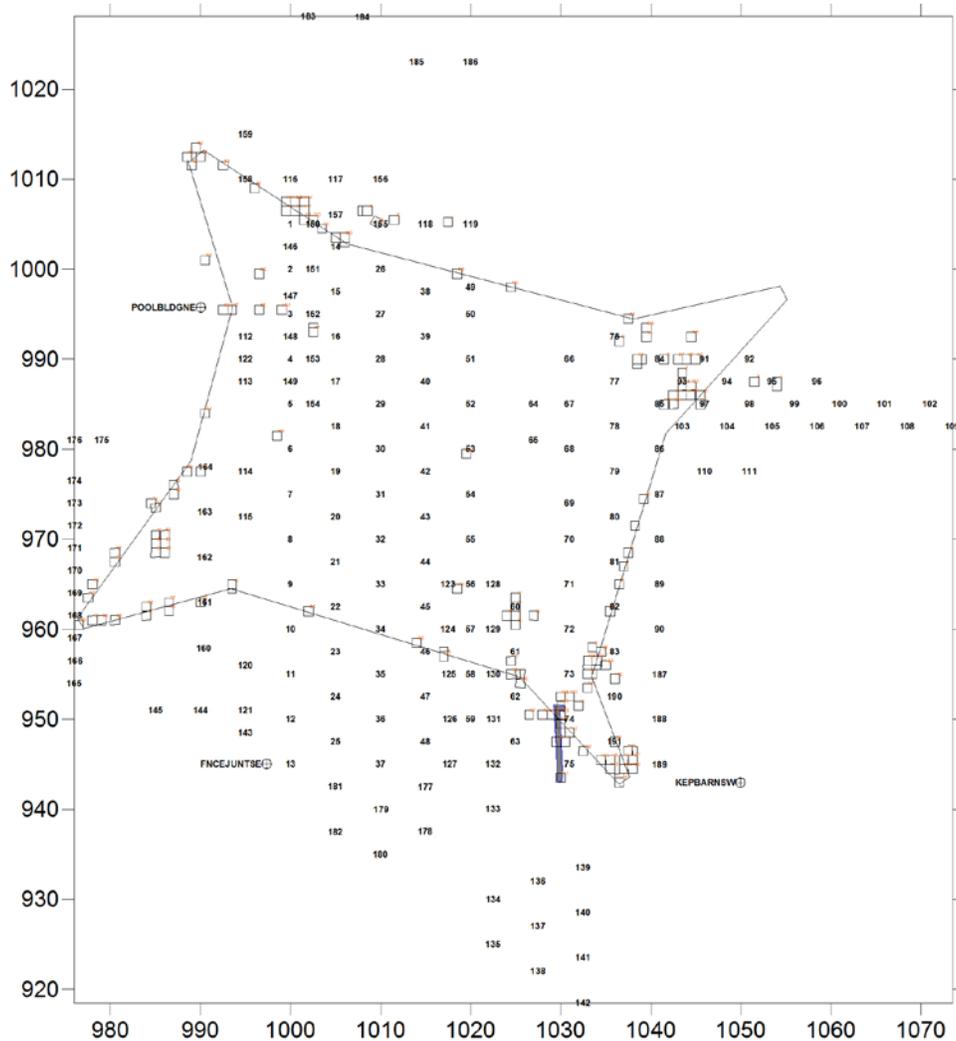


Figure 26: Site map of Fort Shirley

to figure out the actual facts, not what people guessed or thought they saw. We also found what is probably the privy, not too far from the north palisade wall; they wanted to be able to get out, go to the bathroom, and come right back, so it had to be directly outside the wall. We spent the last two summers uncovering these beautiful bastion projections. If someone runs up against the wall, you can lean over

from that projection and shoot them. If the fort were a perfect square, you would have blind spots. Not many of these forts have been excavated or documented to this extent, so the value of Fort Shirley is definitely ramping up for researchers all over the region. People who want to know more about it or who want to visit the site frequently contact us. We collect various forms of data because we're destroying the original archaeological context as we excavate. One thing we found this past summer was that Croghan had his laborers dig the trench to fortify the area, and when they came out to the edge it was right near the bedrock. I was wondering how he dealt with this, but was surprised to find that he had them dig straight through it!

Here's another spectacular find from last summer (Figure 27). This is a gigantic cooking feature. Can you see the darker stain? It measures two meters by one meter by fifty centimeters deep. It was chock full of ash, animal bone, and beads—Native American wampum beads made from whelk shells. So that hints at the fact that natives were inside the fort, were actually doing some of the cooking, were interacting with these folks a lot more than at other forts of the era. The "Half King" moved his people to Aughwick to be with Croghan and they helped to fortify his post. These were the only pro- British



Figure 27: Site for cooking located within Fort Shirley

Native Americans in Pennsylvania. The survey map (see Figure 5) has “Aughwick Old Town” written in cursive out in the flood plain. Since we successfully found the fort, I figured why not try to find the Native American refugee village too while we were at it? We went into a triangular zone, started digging shovel tests there, and found items that looked like they could have come right off the fort site. That was enough for me to link these two sites, which are about a hundred yards away from one another. So, those are the two sites we’ve been working on in Shirleysburg.

I’m going to jump to Fort Lyttelton and talk a little bit about what we did with the Juniata College Archaeological Survey class. With respect to this course, other archaeologists have said, “Thank goodness you’re offering this,” because there aren’t many survey classes for undergraduates. Students can attend an undergraduate field school, but they don’t typically get to do the main part of what archaeologists actually engage in, which is surveying and locating sites. Therefore, I created this class and we run it out of the Raystown Field Station. It is worth three anthropology credits, and students get to take part in the survey and excavation of another significant fort site. Before I took the students down to Fort Lyttelton, Steve Warfel, the former state archaeologist, alerted me that he was field walking at McCord’s Fort, another local fort site near Chambersburg. Fort Shirley was first and then all these other ones appeared on the scene as the frontier became plagued by conflict by 1756. I targeted Fort Lyttelton because it’s another well-known fort in the literature. It’s just about twenty miles south of Fort Shirley and was built by George Croghan. I wanted to make some comparisons between these sites and, thankfully, Fort Lyttelton is owned by the Archaeological Conservancy, whose goal is to preserve it forever. They’re not a hundred percent sure that they have the fort, and another concern is that there is a larger footprint of the site beyond what they own. A blacksmith shop and additional buildings are suspected to be associated but are not within their fence line. So I started communicating with the director of the conservancy. Actually, he said to me, “Wouldn’t it be cool if we could do some sort of field school there in the future?” And then I got an e-mail from the landowner who lives next to this fort site, and she said, “I’ve looked online and figured out that you’re the person to talk to about this artifact,” and she sent me a picture thinking that it has something to do with this fort. It was the distal end of a small cannon, or swivel gun, found in their backyard (Figure 28).

The construction of Fort Lyttelton began in 1755 by George Croghan. Just as he was finishing off Fort Shirley, he laid out this fort. The first thing that’s different about Fort Lyttelton is it was British in plan. The Native American interaction was different at this site. There were Cherokee Indians who visited the fort to share intelligence and to collect scalp bounties from the British. So here again, we have the Native American element, and we have George Croghan binding it all together. It’s got the makings of an

excellent research project. By the way, Fort Lyttelton was named for Sir George Lyttelton, the Chancellor of the Exchequer in England at the time, but then over the years they changed the spelling to “Littleton.”



Figure 28: Swivel gun from Fort Lyttelton

American Archaeology is the magazine of The Archaeological Conservancy. They put an issue out in 2005 showing that they had just acquired Fort Lyttelton, and they don't have that many sites across the country.² Their business is buying land that they think contains a site and then preserving it for posterity, keeping bulldozers out. We got a page about the Juniata College survey course in this magazine. We're going to find different artifacts here at this site. Native highland regiments were outfitted totally differently from Native American regiments or from settlers because they had standard issued weapons and gear. Then there were also Cherokee natives who were capitalizing on the fact that the British needed all the help they could get. If they went around and killed French people and brought the scalps back, they could make a decent profit by leading these roaming war parties.

This fort was the point of entry for southern Native American groups, specifically the Cherokee, cultivated by the English colonies as potential auxiliaries. Also, its location made it an ideal base for scalping expeditions. These Cherokee were so important that they were actually put on a boat and taken over to meet the King of England because the British realized how important it was to court these individuals. In this case we have a detailed map of the fort that was drawn by a British royal engineer. It is a schematic of the fort's palisade, gate, buildings, and bastions; we don't have anything like that for Fort Shirley. It shows topography, it has labeled roads, and it follows the standardized British format for a

fort. Just from this map, we know that it was probably shaped differently, of different size, and had different occupants. Now, we can figure out what about this document, found in the British Library, is accurate. It was made in January 1759 by a British engineer. A scholar named Scott Stephenson told me that. He's important because he is the Director of Collections and Interpretation at the Museum of the American Revolution in Philadelphia, and he's also a Juniata alumnus (1987). He contacted me through Facebook and said that he had researched the site years ago when he was writing a book for the Heinz History Center, a book on colonial Pennsylvania and the Forbes Road. He came to visit and told us a lot of useful information that we wouldn't have known. One thing that he told us was that he had seen this map before and he gave us a rough idea of when it was drawn.

Here is part of the research team down in the Beeghly Library, poring through the published colonial records and archives, which we are very lucky to have here on campus (Figure 29). We attempt to find clues that can be extracted from the written record, including maps that show parcels and who owns what. We saw John Burd's house on a map and realized that we had to start researching him (Figure 30). He was a prominent individual, gave his son a large piece of his land, and he opened a tavern there. The property lines as well as the fort and Burd's house are visible on a survey map found during our research.



Figure 29: Researching the history of the forts at Beeghly Library

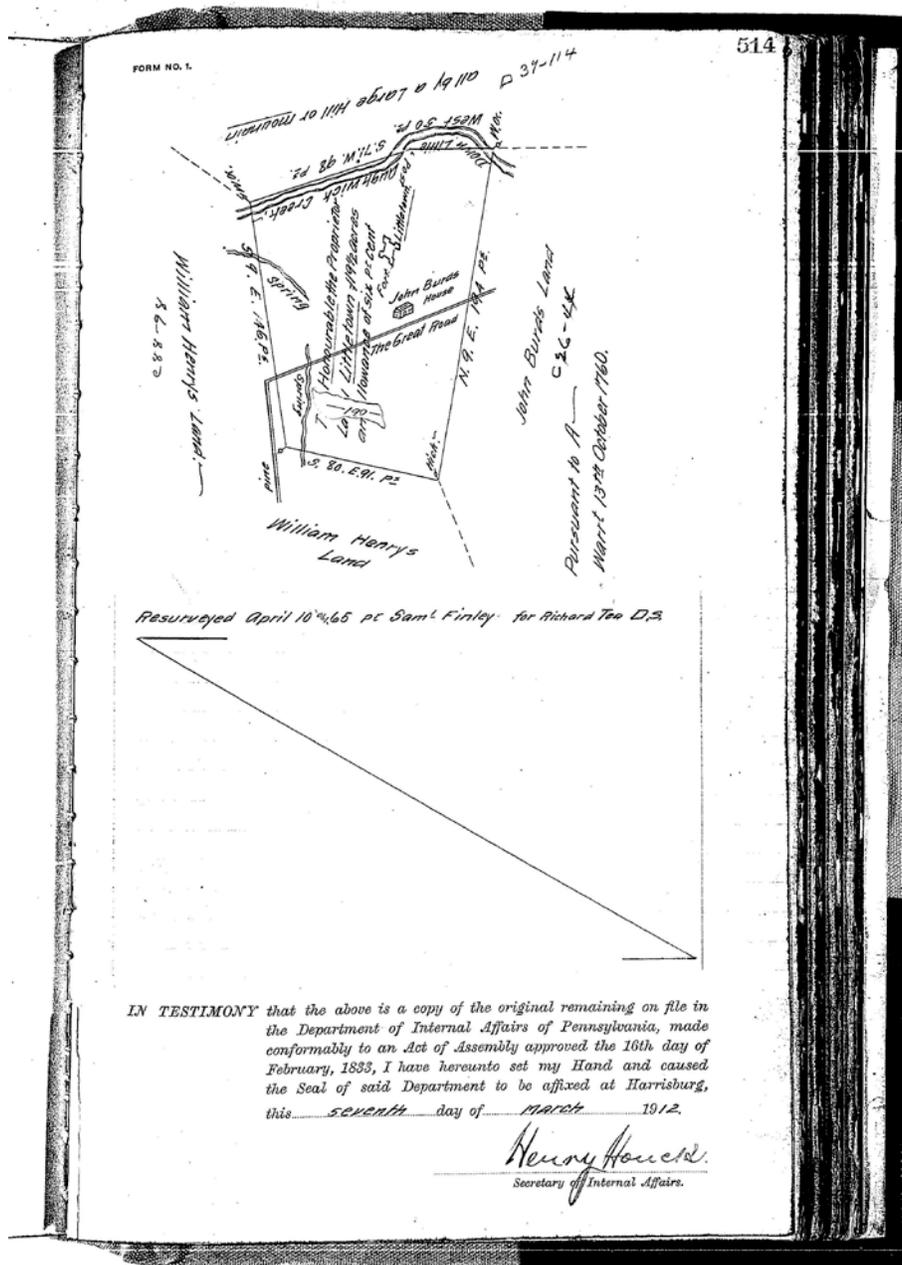


Figure 30: Map locating John Burd's house. (Deed map (1912), Fulton County Courthouse, McConnellsburg, PA).

Each student had to complete a side project on something that had to do with the fort. Some of the larger Fort Lyttelton research project questions include: Can we locate the palisade? Well, we weren't allowed to this last time, but this summer, if we get enough students, we will be able to go back and dig right on the site. How was the Native American presence represented here? How can we help the Archaeological Conservancy manage its property? How did the fort's construction differ from that of Fort Shirley? There was a lot of prescribed geometry and standardized plans regarding the way forts were

supposed to be constructed, but when compared, they did not all follow that format. Fort Shirley is definitely unconventional in shape.

We are contributing to our understanding of the archaeology of the colonial period of these fortifications, and we're trying to clarify the interactions between all these different players. I want to say to students and faculty if anything interests you, there's plenty of opportunity to get involved. It's an interdisciplinary endeavor and there's much material culture to go around. In conclusion, thank you for your interest in the Commonwealth's colonial history, and check us out at axisresearchinc.org or on the Juniata College Archaeology Facebook page, where you can see lots more pictures and follow the action.

NOTES

1. Cristina Rouvalis, "Commerce and Conflict on the 18th-Century Frontier," *American Archaeology*, 17(3) (2013): 32-37.
2. Andy Stout, "French and Indian War Fort Preserved in Pennsylvania," *American Archaeology*, 9(4) (2005): 48-49.