What Technology Is Being Used at Camp Security?

With our ever increasing use of technology in everyday lives, it is often asked, “What technology is being used in the archaeological investigation at the Camp Security site?” At this point in time, several technological resources have been utilized.

One technological device that has become commonplace in this day and age is the global positioning system (GPS). Using satellite information, GPS can accurately plot locations and elevations on the ground. It also provides precise mapping for future archaeological explorations. This is an important way to keep accurate record of artifact concentrations when working in an area that is not controlled by an investigation grid.

Another of the technological devices that has been employed is the metal detector. In the 2014, 2015, and 2016 digs, metal detecting was completed in the initial phases of investigation. Our metal detector volunteers have been responsible for finding a variety of metal objects. In addition to many metal farm implements, some of the period objects found include: copper coins, Spanish coins, tombac buttons, brass buttons, lead musket balls, pieces of lead shot, wrought nails, and brass buckles. Metal detecting has proven quite effective at locating 18th century artifacts.
A third form of technology used in 2012 was remote sensing. What is remote sensing? Simply stated, remote sensing involves the use of electronic equipment to look below the earth’s surface in search of irregularities. These irregularities, also known as anomalies, may be natural or cultural (the result of past human activity). Excavation is almost always required to determine the nature and age of detected anomalies. Based on a 2012 remote sensing study that focused on magnetism, the 2014 dig site was chosen. Although areas of unusual magnetic readings were found, they did not prove to be indicators of Camp Security features.

In addition, drones are now being used in archaeological research. Drones can be helpful in mapping landscapes and identifying features. FOCS has used a drone to investigate landscape features.

Ground-penetrating radar (GPR) is currently being considered. What is GPR? A remote sensing device used in subsurface detection that transmits a radar pulse into the soil and records differential reflection of the pulses from buried strata and features. When a discontinuity is encountered, an echo returns to the radar receiving unit, where it is recorded. (Archaeology Wordsmith: [http://www.archaeologywordsmith.com/](http://www.archaeologywordsmith.com/))
GPR is quite expensive, and the costs can be prohibitive; hence, we continue to raise funds to secure such a study. A caveat for many of these technological advances is that, they are not foolproof. Much of the success of their use depends on the type of soil being investigated. The soil at the Camp Security site is a clay-laden soil. This is not as conducive to accurate readings. Deciding to use a particular technology must be based on the effectiveness and overall cost.

In conclusion, FOCS has used GPS, metal detecting, remote sensing, and drone technological methods and is committed to using all available advanced technologies. Going forward, FOCS will continue to utilize technology whenever it is appropriate to our site environment and as financial resources permit.

**Ground Penetrating Radar**

In the last newsletter, the use of ground penetrating radar was listed as a goal. We are presently researching colleges, universities, and other institutions that might provide this service for free, so we can keep our costs down and concentrate on raising funds for our next dig. An annual dig costs approximately $25,000, and the next dig is our primary goal. Ground penetrating radar might help us more effectively choose our next dig site. This year we'll concentrate on raising funds to conduct our next archaeological dig.

**Where Is She Now?**

For those who participated in the 2013 and 2014 archaeological digs, you will remember Amanda Snyder. Amanda was the assistant archaeologist during those two years. In addition to her knowledge, experience, and expertise, her welcoming
personality made our site a much happier place. All of the volunteers became quite fond of Amanda, and many have asked the question, "What Amanda is doing now?"

Amanda Snyder is a lifetime resident of Pennsylvania. She was raised in Linglestown, and graduated from Central Dauphin High School. Always interested in science and history, she received her B.A. in anthropology from Millersville University, and her M.A. in applied archaeology from Indiana University of Pennsylvania.

Most of Amanda's archaeological survey experience has been related to state and federal infrastructure projects, so getting to work with Steve Warfel and the volunteers at Camp Security was a welcome change of pace. Currently, she works as an archaeologist for RETTEW, an engineering firm based in Lancaster, PA.

Amanda and her fiance, Hans

Amanda, on behalf of the FOCS members, we think of you fondly and thank you for all you have done for our Camp Security research. We wish you and Hans all the best!

Membership Drive

Please help us reach the goal even faster by donating at www.campsecurity.org or https://www.gofundme.com/finding-camp-security.

Please direct any comments or questions to: campsecurity@campsecurity.org