

Cleveland Archaeological Society 2009 Summer Internship at the Heckleman Site
Sarah V. Byrd
Anthropology (Archaeology Focus) and History Major at Case Western Reserve University
August 6th, 2009

My eight week Cleveland Archaeological Society sponsored internship provided me the opportunity to work with the Cleveland Museum of Natural History (CMNH) as I spent five weeks in the field and three weeks in the lab. The fieldwork was through the Cleveland Museum of Natural History's Archaeology in Action program, which provided me the opportunity to work with people of various ages and levels of experience. This year's fieldwork took place at the Heckleman site, which is a farm field in Milan, Ohio. My three weeks of lab work took place in the archaeology lab at CMNH. In order to best summarize my eight week internship experience, I am going to break down my experience week-by-week.

On the first day of my first week of fieldwork I was paired with supervisor Jim Bowers and worked with him during all five weeks of my fieldwork experience. The first day I and the other people new to CMNH fieldwork were given an orientation about the site and an overview of the procedures the museum uses in recording the fieldwork data. For example, in my previous fieldwork experience I just gave a supervisor my bags of artifacts at the end of the day to log in, whereas at this field site it was the responsibility of each supervisor and crew to log in their bags of artifacts at the end of the day. This fieldwork experience provided me the opportunity to be more involved in the process of recording the information from the field. The first two days of the first week I dug test units, which are fifty-by-fifty centimeter units that are placed ten meters apart on a grid that encompasses the entire site. Test units on a grid are a type of site survey technique, the data from which can be used to look for concentrations of artifacts at the site, which are then used to determine where to excavate. I analyzed the data from the test units during my three weeks of lab work. On the second day, we found a feature in our test unit and spent the third day expanding the fifty-by-fifty centimeter test unit into a two-by-two meter unit, called N490 E512.25. During the rest of the first week I helped to excavate N490 E512.25. We found a total of 18 possible post molds, or PPMs, some of which formed a line that ran from the southeast corner to the southwest corner on top of feature 09-03. Since this line of posts was on top of feature 09-03, it must post-date the feature. Most of the potential post molds that were in the line were positive. After excavating the post molds, my team began excavating the southern half of feature 09-03. We excavated the southern half of the feature in order to get a profile that we could photograph and map. In my first week I found flint flakes, fire cracked rock, pottery sherds, wood charcoal, a scraper, bladelet fragments, and a complete bladelet.

In my second week of fieldwork I continued to work with Jim on unit N490 E512.25, but spent the first day of the week digging more test units. Within feature 09-03, there were two darker zones, A and B. These zones were excavated independently of feature 09-03, but seemed to be just patches of darker fill dirt and not different features. A complete bladelet was recovered from zone B. Several large pieces of pottery were recovered from the south half of feature 09-03 between 75 and 90 centimeters in depth. The pottery that I excavated was thick and cord-marked, possibly Leimbach series. I excavated the south half of feature 09-03 to a depth of 120cm in order to insure that I was below the feature and well into the subsoil. While I completed the excavation of the south half of feature 09-03 and then mapped the profile, the other members of my crew opened up a new two-by-two meter unit at N490 E510. In N490

E510, at least 21 PPMs were found, but about two-thirds of which were negative. There were several dark soil zones within this new feature, one of which we believe is an old test unit of Dr. Shane, who excavated the site in the 1970s.

Like the first two weeks, my third week of fieldwork began by digging test units on Monday before I returned to N490 E512.25. Since I completed the excavation, profile drawing, and photographing of the south half of feature 09-03 in the second week, this week I excavated the north half of the feature in arbitrary levels. A twenty-five centimeter bulk existed between N490 E510 and N490 E512.25. Since the western most end of feature 09-03 was not visible within unit N490 E510, the twenty-five centimeter bulk between the two units was removed in the hope of finding the western most end of feature 09-03. The western most end of feature 09-03 was found within this twenty-five centimeter bulk. The northern half of feature 09-03 and the westward extension contained pottery sherds, flint, fire cracked rock, wood charcoal, and bone fragments. Feature 09-03 was a deep pit that consisted of very mixed layers of soil and contained some artifacts. After finishing both N490 E510 and N490 E512.25, my crew and I opened up a two-by-two meter unit at N510 E508.5. We placed this new unit on top of a magnetic anomaly which we believe was the oval trench enclosure. After digging this unit past the plow zone, we saw that the dark oval stain in the unit ended in the west, but continued east. So we decided to dig a two-by-one meter extension to the east, thus creating a two-by-three meter unit.

After spending Monday morning digging test units, I returned to N490 E508.5 with Jim and the new crew to begin the fourth week. We photographed and mapped the floor of the unit and interpreted the unit as containing an oval pit feature that bisected the oval trench feature. The purpose of digging N490 E508.5 and its two-by-one meter extension was to catch the oval trench enclosure alone in order to look for diagnostic artifacts within it. Since N490 E508.5 did not contain the oval trench enclosure alone, it was decided that we should open up a two-by-two meter unit directly north, at N512 E508.5, leaving no bulk in between the two units. We found flint and some pottery while preparing the floor for photographing and mapping. Like unit N510 E508.5, for unit N512 E508.5 we split it up into four one-by-one meter sections and excavated each to a depth of 40 centimeters below datum. We did this because the floor was too mixed to interpret at 33 centimeters, but we were below the plow zone and wanted to have some record of the approximate area from which the recovered artifacts came. After reaching a depth of 40cm, we cleaned and mapped the floor of N512 E508.5. It was then that we realized that the oval trench feature extended into the western wall of our unit, so we opened up a two-by-one meter extension west, at N512 E507.5. This made a new two-by-three meter unit at N512 E507.5. The oval trench enclosure segment that was contained in N512 E507.8 was given the feature number 09-18. We began our excavations by investigating PPMs, including a line of PPMs running from the north wall to the west wall in the two-by-one meter extension. The six post molds in a line proved positive and were approximately equal in diameter and depth. We began excavating feature 09-18 by removing the western half in arbitrary ten centimeter levels. On the last day of week four, I was given the opportunity to supervise Mary Lou Maguire's unit in her absence.

Mary Lou Maguire's unit is N491 E520 and I supervised the excavation of Feature 09-20 by finishing the excavation of the eastern half and then the excavation of the western half. From the eastern half, we found a large section of a mammal long bone that we piece-plotted. In the profile of the western half of feature 09-20, I saw a biface fragment, which turned out to be one

of four pieces that all fit together to make a biface that lacked both the base and tip. The size and the fact that the four pieces fit back together made this quite an exciting find. A soil sample was taken from the western half of feature 09-20. I also took a soil sample during week two from feature 09-03. Soil samples are processed in water and involve very fine screens that pick up small seeds and other botanicals that would be lost in a one-quarter inch field screen. I also took a sample of the charcoal layer within feature 09-20. Several pieces of pottery were also recovered from the western half of feature 09-20, including a rim sherd. I was unable to finish excavating the western half of feature 09-20. My crew at N512 E507.5 continued excavating the west half of feature 09-18 in my absence with supervisor Jim and found some pottery.

My final week of fieldwork involved a whirlwind of work in order to finish excavating for the season so that the units could be backfilled. I spent Monday morning completing the excavation of the western half of feature 09-20 with the help of Mary Lou Maguire. We found wood charcoal, more nutshell, fire cracked rock, some bone, and some flint. I returned to my unit N512 E507.5 and we finished excavation of the western half of feature 09-18. Then we mapped the profile and took some photographs of the eastern half of feature 09-18. It then became more apparent that a darker zone of soil, zone A, was actually a pit feature within the oval trench feature and this pit feature was given the feature number 09-28. Pit feature 09-28 had Late Woodland or early Late Prehistoric period pottery; postdating the oval trench feature. We kept the excavation of feature 09-18 separate from the dirt excavated from pit feature 09-28. Zone D turned out to be more than just darker soil; it was a shallow pit feature that contained fire cracked rock and lots of charcoal. On the Tuesday of the last week I was given another supervisory role. I got to supervise a group of Future Scientist students as they excavated the plow zone of unit N510 E515. This was a great opportunity for me to practice my teaching skills, as I was able to teach the kids how to begin an excavation, shovel shave, use hoes, and even how to trowel. I had to utilize many of the skills that I had developed the previous four weeks in order to explain not only how to properly excavate but also why we use those techniques. Wednesday and Thursday I helped to finish unit N512 E507.5. We excavated the east half of feature 09-18, the eastern half of feature 09-28, and removed soil so that we could draw profiles of both the south and the east walls of the unit. On the last day of excavation, I excavated several PPMs and zones in Unit N510 E512 and removed the half meter bulk between N510 E512 and N510 E508.5. We ended the day by cleaning the equipment, loading the van, and watching the farmer begin backfilling the units with his tractor.

The five weeks of fieldwork provided me with the opportunity to learn many new skills that I will utilize in my future archaeological career. Jim Bowers taught me many new excavation techniques and advised me on the easiest way to do different forms of excavation. For example, he taught me that when beginning the excavation of a unit with a shovel, that you start in the middle and create a hole and work your way out. This allows the dirt that you dig to fall into the hole and makes it easier to dig. This is just one of the many gems of wisdom that Jim passed on to me. Supervisor Mary Lou Maguire helped me to perfect my floor map drawing and profile drawing techniques. She and Jim also taught me how to call out points when drawing a map and how to pin the different colored soils to aid in drawing. Those who attended the Archaeology in Action program taught me that I needed to not only teach them the proper technique, but that it worked best when I also explained why such a technique was used. I also learned that I needed to be patient and not to assume any prior archaeological knowledge.

Overall, I learned an innumerable amount from this field experience and greatly value those skills that I have obtained.

After my wonderful five week fieldwork experience, I was privileged to work for three weeks in the lab analyzing some of the data from the Heckleman site. Based upon my prior analysis experience in the lab and the progress that the lab volunteers had made in cleaning, numbering, and inventorying the artifacts, I decided to analyze the artifacts from the Heckleman test units. I spent the first four days correcting some of the information that had already been entered into the catalog and numbering some of the artifacts that I wanted to examine. Once all of the Heckleman bags had been corrected and had inventory numbers assigned, I pulled the fifty-seven bags from the fifty-two test units that were excavated this year. I then spent seven days examining the artifacts from each bag. I grouped the artifacts into types, counted them, weighed them, measured the flint flakes, and assigned a flint type to all flint tools. I then took this recorded information and entered it into an Excel spreadsheet so that I could look for trends in the data. After I examined the data in Excel, I used the program Surfer to create contour maps of the data, some of which I overlaid on the magnetic survey map to look for correlations.

My Surfer contour maps suggested that the artifacts at the site were concentrated on the eastern side of the two parallel ditch features. The highest artifact concentrations occur west and south of the oval trench feature, not inside of it. The fire cracked rock data also showed higher concentrations outside of the oval trench feature than within it. In general, the numbers of artifacts decreased near the eastern and southern edge of the site, near the edges of the promontory. I also examined fourteen bladelet fragments which were mostly made of Flint Ridge and Pipe Creek flint and were found scattered randomly across the site. One of my conclusions that I drew from my analysis is that the native peoples were manufacturing bladelets at the site. My conclusion is based on the large number of bladelet fragments recovered and their wide distribution across the site. Overall, my analysis of the test unit artifacts and the contour maps that I generated can be used in conjunction with the magnetic survey data to determine where to conduct excavations next field season.

To conclude, I feel very blessed to have had this eight week internship and I learned more than I can describe in this short report. I am very grateful to the Cleveland Archaeological Society who sponsors the internship and to all of those people who contributed to the internship and made it possible. To you, I give my deepest gratitude. I would also like to thank the Cleveland Museum of Natural History, with whom I worked with in my internship. Specifically, I would like to thank Dr. Brian Redmond for providing me the opportunity to learn and develop my archaeological skills. The leadership opportunities I was provided have helped me to grow on both a personal and professional level. I would also like to thank the field supervisors, specifically Jim Bowers and Mary Lou Maguire, each of whom taught me little tricks that I can utilize in my future fieldwork. Last, but most certainly not least, I would like to thank Ann DeFresne and the archaeology lab volunteers, all of whom aided me in my analysis of the test unit data. This internship has taught me an enormous amount about archaeology and myself. It has provided me with the skills to continue my archaeological career, wherever it may lead.