

Cleveland Archaeological Society Summer Internship: 2015
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This summer I was awarded a valuable and unforgettable experience working with the Department of Archaeology at the Cleveland Museum of Natural History as the Cleveland Archaeological Society summer intern. The internship began with four weeks of field work at the Burrell Orchard Site with Dr. Brian Redmond, and concluded with four weeks of laboratory research. Burrell Orchard is located in Sheffield Village, Lorain County, Ohio. The site is located on a ridge which overlooks French Creek River to the north, and is part of the Burrell Homestead property managed by Lorain County Metro Parks. During prior excavations, the Cleveland Museum of Natural History had uncovered clay floors at the site. These floors were determined to be nearly 4000 years old. This season's excavations were intended to expose more of these floors.

During the first week of the internship I worked in unit N496 E512, a 2 meter X 2 meter unit, with Brian Scanlan, Rich Bort, Klansee Stevens, and Joe Spinhirny. The unit was divided into four quads; NE, SE, NW, SW. Each quad was excavated separately, and materials bagged separately. We began excavations by removing the first 10 – 20 centimeters of soil by shovel shaving. As we got deeper, we switched to trowels as this was more efficient. The unit was producing dark, midden soils with bone, flint flakes, and fire cracked rock. Around 30 centimeters down we encountered a large concentration of fire cracked rock in the eastern half of the unit. I was working in this section and gained experience in exposing each of the rocks so we could photograph and map the cluster. Once we lowered the rest of the unit to the same level, and finished exposing the rock cluster, Brian Scanlan taught our group how to properly map each of the zones and features at the level. This intricate task requires precision, patience, and a steady hand. The stone tools were a really exciting find. First a large pitted stone was encountered around 30 centimeters. We worked around this stone for a few days as we didn't want to

just pluck it out of the ground. During this same time we uncovered a long, slender hammerstone underneath the rock cluster in the eastern quads. And finally, a mano stone was found next to the pitted stone. The mano stone and hammerstone were removed first and eventually the pitted stone. The pitted stone was much larger than it initially appeared to be and was covered with four or five perfectly smooth, circular pits. By the end of the week we had lowered the unit to nearly 40 centimeters and recovered a number of bone fragments, flint debitage, and fire cracked rock.

The second week began with some fresh faces to the site. I was asked to leave Bran Scanlan's group and was given a group of my own to supervise. We worked in nit N496 E516 which had been opened up during the first week by a group of volunteers. They had encountered clay floors at 20 centimeters deep. These clay floors were higher up than the floors uncovered in years past. We began the week by mapping the zones and features at this level. In the northeast quad of the unit large pieces of slate were laid down flat. This was really unique; as they had been intentionally placed that way by prehistoric peoples. We began to investigate some of the pit features in the unit. Three dark, circular stains were bisected and the fill removed. Each of the stains turned out to be a pit feature which contained high quantities of charcoal and ash but little artifacts. For each pit feature that we bisected, we mapped the cross-section. This was a great learning experience for me as I had not had the opportunity to learn how to do this the first week.

During the third week I continued to work with the crew in unit N496 E516. We had one or two fresh faces, but most of the people in my group stayed both weeks. We continued examining the features and stains in our unit. Two possible post molds were found and examined. Both turned out to be positive. We also removed the slate layer in the northeast quad. Under the slate was a large, red/orange stain. The red/orange is the result of burning activity; probably a small surface fire. We removed half of the stained soil so we could map the section profile of this zone. We also encountered a small pit adjacent to the red-stained zone. We bisected this as well. Under the burned soil we

encountered a large cluster of rocks. These rocks were rather large. We did not remove them, but just mapped the floor at this depth and continued examining the features and stains. On the east side of the unit we encountered another clay floor underneath the floor above. A pit feature was also found cutting through the lower floor. By the end of the week we had finished examining all of the stains, zones, post molds, and features of the upper layers in the unit. We had mapped each section profile, taken many photographs, and collected a large amount of bone fragments, charcoal, and flint flakes. We also discovered that these clay floors were not simple layers. Pits, posts, and numerous other features cut through the floors. We found that large sections of floor were missing; due to erosion, rodent interference, or other unknown happenings. The complicated floor layers proved difficult to interpret and initiated more questions as we continued excavations.

The final week was rather interesting. Two Libyan archaeologists traveled to the site and worked with us each day. I supervised their work in unit N496 E514. They were visiting various archaeological sites, colleges, and museums in the United States to learn more about field and laboratory techniques. Our unit was made up of two floor layers. In the eastern half of the unit there was a section of floor at 60 centimeters deep. The western half had a floor layer at 20 centimeters deep. The lower floor seemed to run under the upper floor. The lower floor also extended eastward into unit N496 E512, the unit I worked in during the first week. When we first began working in this unit, the lower floor was not entirely exposed yet. We began by removing the midden which was covering the layer. Once the floor was exposed we mapped the various post molds, zones, and features. Several possible post molds were found during mapping. Upon further examination of these, all turned out to be positive. These post molds formed an arcing line with post molds from the adjacent unit and those from previous years. This arcing line would have been the supports for the structure that covered the clay floor.

The final few days of the last week were a rush of activity as we were trying to finish up excavations while gathering as much information as possible before the end of the season. The rather rainy conditions proved to be a challenge as several days were too wet to work in certain units. Work in these units was put on hold until they dried out. An associate of one of the other field supervisors, Meghan Marley, came out to the site with a drone. He used the drone to take photographs and gather data which he used to create a 3-D image of the site. This was really interesting to see. We finished up the final week by gathering as much information as we could in the time left.

During the first week in the lab I was taught the various lab procedures carried out by the department's staff and volunteers. Wednesday of this first week a few of us went to the site because reporters were interested in doing a story on it. We spent the day in a couple of the units that we did not have time to finish the week before. We removed the rest of the midden that was covering the floor in unit N494 E514. In the process, we uncovered a deer mandible with teeth intact; an exciting find. The rest of the week was spent in the laboratory preparing for the research project I was to do. Because artifacts from the Burrell Orchard site would not be cleaned or inventoried for a few weeks, I was to work with artifacts from the Heckleman Site. This site was excavated over the course of five years, starting in 2009. During the end of the first week and the beginning of the second I spent time familiarizing myself with the site reports and other publications. I was also looking for aspects of the site that interested me and could use further analysis. In 2009, Feature 09-04 was excavated and turned out to be a pit structure. I decided to spend the remainder of my lab time doing analysis of the material found in the pit structure. My goal was to identify materials associated with use of the house and materials which filled up the house's basin after it was abandoned.

In order to do this research I gathered field notes from 2009, feature forms, floor plans, the 2009 report, and the 2009 inventory sheet. I began by examining the layers and organizing the inventory sheet by these layers. I eventually was able to identify a division in the depths between the

upper midden layers and the lower floor layers of the structure. From here I analyzed the dispersal of artifacts within each of these layers. Once I had the data organized I took a sample of the flint flakes from each layer and measured the maximum length of each complete flake. I was hoping to find variation between the length of the upper layers and length of the lower layers. This would indicate the stages of flint knapping at each layer. My hypothesis was that the individuals living in the structure only participated in the final stages of flint-knapping, retouching flakes and points. The upper midden layers would contain flint debitage from all stages of flint knapping. Flake size and type is an indicator of these stages; however, the flake lengths were the same for both layers. A larger sample size would better indicate any variation that existed between the layers.

By the end of the four weeks in the laboratory I had gathered enough data regarding material dispersal within the pit structure to make some general conclusions. Firstly, the Late Prehistoric pit structure was home to a small, nuclear family during fall/winter months. A limited amount of domestic activity was carried out inside the dwelling; most of these activities occurred outside. The house was primarily used as a sleeping quarters. However, domestic activities that did occur inside the structure took place in the eastern half of the house, near the entranceway. Sleeping probably was done in the western half. A small fire hearth was uncovered in the center of the house. This hearth was primarily used as a heat source rather than for cooking. Three distinctive artifacts were intentionally left behind; a shell bear claw pendant, a deer bone awl, and a stemmed Adena point. The Adena point largely predates the structure, so we conclude that this was picked up by these later people and carried as an heirloom. The point was placed pointing southeast in the entranceway of the structure. The bear claw effigy and bone awl were located together on the western side of the house. Perhaps these two items were placed there to protect the dwelling and its inhabitants. The point may have been placed in the entranceway upon final abandonment of the structure.

Overall, this once in a lifetime opportunity to work with the Cleveland Museum of Natural History has allowed me to learn and grow as an archaeologist. I feel that this experience has been crucial for my future growth in the field of archaeology. My experience this summer is not something that can be learned in a classroom. Working with a variety of people this summer allowed me to gain insight into several different perspectives and techniques. None of my previous lab or field experiences had been as professional, precise, complete, and detailed as this internship was. Due to this experience, I feel a greater confidence in myself as a student of archaeology. I will bring what I have learned this summer forward with me as I finish out my undergrad career and apply to graduate schools this fall.

I am thoroughly grateful to the Cleveland Archaeological Society for allowing me this experience. I would especially like to thank the Cleveland Museum of Natural History for allowing me to work with them this summer. Finally, I would like to thank the Department of Archaeology; Dr. Brian Redmond, Ann DuFresne, Brian Scanlan, Meghan Marley, the lab and field volunteers, and field school participants for teaching me and allowing me to learn and grow with them this summer.