Cleveland Archaeological Society Summer Internship

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In the summer of 2017, I had the pleasure of interning with the Cleveland Museum of Natural History as their Cleveland Archaeological Society intern. During this incredible opportunity, I spent four weeks out in the field helping excavate the Heckelman site (33Er14), a Hopewell site located in Milan, Ohio, and then for an additional four weeks I worked in the laboratory where I received hands-on experience identifying faunal remains.

Our first day in the field, coincidentally in a literal field of soybeans, was spent getting acclimated to the site objectives and daily routine. One of the main goals of the summer was to investigate a 20-meter-across circular anomaly picked up by the previous year’s magnetic survey. Consequently, the first units we triangulated and dug were on the northern arch of the circle. The field crew was largely made up of museum volunteers with prior archaeological experience, in addition to Dr. Brain Redmond, supervisor Brian Scanlan, Kirtlandia intern Hannah Matulek and myself. Each morning we would break off into different excavation teams; for the first week I worked with Brian S., Hannah, Emily, Ron, Don, and Stuart in units 480N 354E and 480N 356E.

Our subsequent week was spent excavating in the aforementioned 2mx2m units. Hannah and I worked hand-troweling a 50cmx50cm test unit in the southwest corner of 480N 354E while everyone else excavated the rest of the units, digging through disturbed sediment with shovels and trowels, down to about 30 cm below datum (BD) to expose a lighter, yellowish undisturbed subsoil. The purpose of excavating test units within larger units allowed for an accelerated
removal of the over-burden while still gleaning information about material in that area. We found flakes, fire cracked rock (FCR), and bladelets in the plow zone and possible bifaces in the baulk wall around our test unit. This was very exciting for me, as I had never been at a site that had produced such a variety of culturally significant materials all in one day. I then helped map the floor of 480N 354E, which revealed 2 possible post molds (PPM), 2 features, and a few zones. One of my other “firsts” I got to experience at Heckelman was excavating my first feature. Features are first bisected and then excavated in profile so that there is one half left in situ. With the help of Hannah, I excavated Feature 17-01, a promising looking rock cluster in the northeast corner of our unit. Unluckily, however, it only yielded charcoal and was thus not evidence of a post mold. The others worked excavating the other features in our unit, and only one (Zone “A” later renamed Feature 17-03) was identified as a post mold. Once we had finished backfilling 480N 354E and 480N 356E, our group moved on to triangulating 472N 352E with a total station and tape measures. This time, Hannah and I worked excavating the main part of the unit while Emily and Don excavate within the test unit. Removing the over-burden uncovered some impressive artifacts; Hannah found the season’s first utilized flake in addition to bone, ceramic, flakes, and a hafted point. Finally, we photographed the exposure of the subsoil before leaving for the weekend.

My second week started back at 472N 352E, where Emily, Brian, Hannah, and I mapped 10 zones (“A” through “J”). Hannah excavated Zones “I,” “H,” and “C” which turned out not to be post molds. Things improved however, I excavated 57 cm BD in Zone “J,” which turned into Feature 17-08 after I found very small fragments of bone, charcoal, and a broken scraper. Hannah likewise excavated 46 cm BD in Zone “D” that became Feature 17-09, finding numerous chert flakes. We then helped each other map Features 17-08 and 17-09. Because Feature 17-08
turned out to be a post mold, after it was mapped and photographed, I was able to take the second half out for a flotation sample. A similar process happened in regard to Zone “F,” which later became Feature 17-13. I excavated 65 cm BD in Feature 17-13, found a large flake right at the bottom of the post mold, and then took out the other half for a flotation sample. At that point, we had some change in the number of volunteers at the site and thus Hannah and I moved over to 472N 354E to start excavating its test unit while other volunteers—Meghan, Katie, and Alison—continued excavating the remaining zones in 472N 352E. Our new unit was intriguing, as we found a hafted point with pot-lids (a sign it’s been heat treated), many flasks, a broken biface, and a Madison point. Also, in the southwest corner of 472N 354E we uncovered the continuation of a large fire pit from an adjacent unit, Feature 17-05. In the unit directly south, 470N 354E, Marsha’s group had been busy excavating and recording part of Feature 17-05 in their northeast corner. Feature 17-05 contained many culturally significant artifacts, but of most interesting to me were faunal remains that I would later get to examine in the lab. While other volunteers continued to work in 472N 354E, Hannah and I worked the last part of the second week excavating, photographing, and mapping unit 468N 354E down 28 cm BD.

Week Three saw more progress along the circular arch; first in 468N 354E we identified two features, 17-16 and 17-17, and a PPM before backfilling the unit. Hannah and I then moved to 466N 356E and bisected Features 17-18, 17-19, 17-20, along with PPM1 and PPM2. In the north half of Feature 17-18 I found a Middle Woodland Snyder point along with flakes, charcoal, and bone. Originally, we had only planned to take a flotation sample from the southern half of Feature 17-18, but when I found a Late Woodland Mixter pottery sherd, we decided to excavate the rest of the south half. Artifacts included more ceramic, charcoal, flakes, and small fragments of bone. Hannah also finished excavating the rest of the southern half of Feature 17-19. Finally,
we finished up Week Three moving to a spot on the east side of the circular anomaly, since we seemed to be getting good results from the north and west sides. Thus, I move to 477N 373E to help Rob, Don, and Brian map and excavate Features 17-26 and 17-27, which both proved positive.

We got a few brand-new volunteers the first day of the fourth week. Unlike our other resident volunteers, they had not excavated at an archaeological site before. It was then really rewarding for me to get to instruct them for the day. I showed them how excavate using a trowel in the test unit of the newly opened 475 N 373E, in addition to how to document found artifacts, screen, and map. The work was slower than usual but I enjoyed the different dynamic. We got down to 28 cm BD in the test unit by the end of their first day. For the rest of the week, and subsequently the field season, Hannah and I ended up in a unit outside the circular structure, 450N 363E, to investigate another anomaly from the magnetic survey that was a suspected earth oven. Although that was not quite what we found, this phase of the project was equally fascinating. Despite having a couple different possible features and zones, we focused all our energy in excavating Feature 17-29; a large dark area that extended from the east wall and encompassed most of the unit. When we first bisected the feature northeast to southwest, Hannah and I excavated the south quarter. This area did not yield much other than clusters of FCR. As it seemed to be going nowhere after about 40 cm BD, we decide to take a floatation sample from the east quarter. Almost exactly over the boundary that split the southern and eastern quarters we find a pretty substantial piece of bone, later identified as part of a deer femur. Hannah and I started paying close attention to the area and I noticed a color change from dark brown to reddish brown in middle of our bisected area about 30 cm BD. We ended up excavating all quarters of Feature 17-29 to expose the reddish clay ring that Hannah and I affectionately called the “fire
In hindsight, we determined that it was likely that the bone was located on top of it, and in association to a slate spall found in the north quarter. It was unclear to everyone what this ring was, and with the last days of the field season upon us, we ended up removing our “fire donut” to examine it in the lab.

The latter four weeks of my internship were spent in the archaeology lab at the Cleveland Museum of Natural History. The first couple of days I spent learning cataloging procedures, reading and brushing up on my zooarchaeological skills for my research project. I would be doing preliminary analysis of faunal bones recovered from our previous weeks at Heckelman that summer and the 2016 field season from another site, Burrell Orchard (33Ln15); a Late Archaic site located in Sheffield Village, Lorain County, Ohio. My goals for the research were to identify the species, element, and side of the body the bone was from as well as any burning, cultural markings, or signs of utilization on the fragments. Since there were no complete (and therefore easily identifiable) elements from either sample, I accomplished this task by using the comparative bone sample of native Ohio animal species housed in the laboratory. From Heckelman, I looked specifically at fragments from the first fire feature found, Feature 17-05. As for Burrell Orchard, fragments came from three units, 494N 516E, 493.5N 515E, and 494N 516E, in a buried midden. Identifying fragments proved difficult, as many were smaller than a few millimeters. In addition, the fragments from Heckelman had not preserved well, even as single elements. For example, a single deer astragalus found mostly intact in the field arrived at the lab in multiple pieces. In the end, I looked at 1,220 fragments from Burrell Orchard and 1,150 fragments from Heckelman.

Of the elements that could be identified, the species that was most abundant at both sites was white tailed deer. At Heckelman, there were additionally raccoon and gray fox. Even more
impressively, at Burrell Orchard there were racoon, fox, squirrel, woodchuck, beaver, dog, turtle, fish, and bird bone present. Another interesting aspect of the faunal deer remains at Burrell Orchard was evidence of both adult and juvenile individuals. Although faunal remains from both sites were highly fragmented, because Burrell Orchard seemed to preserve bone well, I was able to produce a theory for bone processing at the site. I am extremely grateful for this last aspect of my internship. It was not only fulfilling as a student to apply my professional knowledge, but also rewarding to contribute to the site investigations of Heckelman and Burrell Orchard.

I would like to extend my greatest thanks to Dr. Redmond, Brian Scanlan, and Ann DuFresne for their continual support and guidance throughout this entire experience. I would also like to thank the wonderful and caring museum volunteers—Ann, Rich, Stuart, Marsha, Emily, Rob, Don, Ron, Char, Alison, Lee, Julie, Katie, and so many others—who made every day of hard work inspirational with their passion and unmatched enthusiasm. Additionally, thank you to my fellow intern, Hannah Matulek, for your companionship, insightful conversation and memorable banter. Finally, I would like to thank the Cleveland Archaeology Society for this invaluable experience; I have grown both as a researcher and field archaeologist and gotten to see firsthand the benefits of having an engaged community involved in an archaeological project.