

SIUE 2013 FIELD SCHOOL

INVESTIGATIONS

AT 11MS99

Interim Report

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CONTENTS

List of tables.....	3
List of figures.....	4
List of photographs.....	5
Abstract.....	6
Acknowledgments.....	7
Introduction.....	8
Setting and prior research.....	10
Surface collection: field methods and results.....	16
Excavation: field methods and results.....	18
Conclusion.....	49
References cited.....	52

LIST OF TABLES

Table 1. Surface collection summary.....	16
Table 2. Site datum coordinates.....	18
Table 3. Unit coordinates.....	19
Table 4. Plowzone artifact summary.....	20
Table 5. Feature data.....	21
Table 6. Feature artifact summary.....	21
Table 7. Feature 205 measurements.....	30
Table 8. Feature 215 measurements.....	47

LIST OF FIGURES

Figure 1. 1815 GLO map.....	10
Figure 2. Location of previously recorded sites.....	11
Figure 3. Surface collection results	17
Figure 4. Features 200-202, plan view.....	23
Figure 5. Features 102-104, 203-205, 208, and 214, plan view.....	25
Figure 6. Feature 203, profile.....	26
Figure 7. Features 204 and 214, profile.....	29
Figure 8. Feature 205, profiles.....	31
Figure 9. Features 206-207, 209-213, and 215, plan view.....	34
Figure 10. Feature 206, profile	35
Figure 11. Features 207 and 209, profile.....	36
Figure 12. Feature 208, profile.....	37
Figure 13. Features 210 and 211, profile.....	42
Figure 14. Feature 212, profile.....	46
Figure 15. Feature 215, profiles.....	48

LIST OF PHOTOGRAPHS

Photo 1. Feature 200, plan view.....	22
Photo 2. Feature 201, plan view.....	22
Photo 3. Feature 201, profile.....	22
Photo 4. Feature 202, plan view.....	23
Photo 5. Feature 202, profile.....	23
Photo 6. Feature 203, plan view.....	24
Photo 7. Feature 203, profile.....	26
Photo 8. Baked clay figurine from Feature 203.....	27
Photo 9. Figure 204, plan view.....	28
Photo 10. Figure 204, profile.....	28
Photo 11. Feature 205.2, profile	30
Photo 12. Feature 205.3, profile	30
Photo 13. Feature 205, plan view.....	32
Photo 14. Feature 206, plan view.....	33
Photo 15. Feature 206, profile.....	35
Photo 16. Feature 207, plan view.....	36
Photo 17. Feature 207, profile.....	37
Photo 18. Feature 208, plan view.....	38
Photo 19. Feature 208, profile.....	38
Photo 20. Feature 209, plan view.....	39
Photo 21. Feature 209, profile.....	40
Photo 22. Feature 210, plan view.....	41
Photo 23. Feature 210, plan view.....	41
Photo 24. Feature 210, profile.....	42
Photo 25. Feature 211, plan view.....	43
Photo 26. Feature 211, profile.....	43
Photo 27. Feature 212, south wall plan view.....	45
Photo 28. Feature 213, east wall plan view.....	45
Photo 29. Feature 212, southwest corner plan view.....	45
Photo 30. Feature 213, northeast corner plan view.....	45
Photo 31. Feature 212, profile.....	46
Photo 32. Feature 213, structure basin profile.....	46
Photo 33. Feature 215.1, profile.....	47
Photo 34. Feature 215.2, profile.....	47
Photo 35. Features 203, 204, and 205, plan view.....	50
Photo 36. Features 206, 207, 209, 210, 211, 212, and 213, plan view.....	51

ABSTRACT

The SIUE archaeology field school took place on the SIUE campus in the summer of 2013. Surface survey of approximately 16 acres west and southwest of the southern end of 11MS99 yielded both prehistoric and historic artifacts. Excavations were focused on an area at the southern end of 11MS99 where field school excavations in 2009 had revealed two Middle Woodland pit features and posts presumed to be Middle Woodland. The 2013 field school excavations removed 60 square meters of plowzone, exposing seven pit features, part of a wall trench structure, and multiple post molds. The two deepest pit features excavated date to the Middle Woodland period, two pit features of moderate depth and light color probably date to the Late Archaic period, and three shallow pit features probably date to the Mississippian period. The wall trench structure presumably also dates to the Mississippian period. While one post excavated is thought to date to the Middle Woodland period, a semicircle of smaller posts is superimposed by two Middle Woodland pit features and is therefore earlier.

ACKNOWLEDGMENTS

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INTRODUCTION

The Anthropology Department of Southern Illinois University Edwardsville (SIUE) conducted an archaeological field school on the SIUE campus in Edwardsville Township, Madison County, Illinois, between May 13 and July 5, 2013. Field school investigations included surface survey west and southwest of the south end of 11MS99 and excavations on the south end of 11MS99. Julie Zimmermann Holt acted as field director and instructor of record, with Henry Holt directing the first week of investigation. Two students, Paul Barber and Kathryn Chapman, who had both completed the 2012 field school with Dr. Gregory Vogel, acted as undergraduate assistants for course credit. Ten students (Ryan Anderson, Whitney Bechtel, David Boudreau, Sandy Dalzotto, Steven Hanlin, Caleb Klingler, Kyle Potter, Jacob Province, Courtney Reiter, and Kenneth Strickland) enrolled full-time in the course and acted as field crew.

The primary goal of the SIUE archaeology field school is to teach students standard archaeological field methods. In addition, the field school offers research opportunities to SIUE anthropology faculty and also students, who are encouraged to do original research for their senior projects. Perhaps most importantly, the field school provides a means for recording endangered archaeological sites, which are rapidly disappearing due to development in Madison County. 11MS99, for example, has been severely impacted by deep plowing and illegal collection of artifacts. The field school provides us with the opportunity to document archaeological resources on campus with the goal of protecting them, or excavating them if deemed necessary.

The field school achieved all of these goals. All students completed the course successfully and received experience in archaeological survey and excavation. In terms of research, the data recovered from 11MS99 provide information about the Middle Woodland and Mississippian occupations at the Gehring site. As of this writing, three senior projects that utilize data recovered during the 2013 field school investigations are planned for the 2012-13 school year. In terms of the third goal, we are happy to report that 11MS99 has been removed from agricultural production as a result of our field school research.

This report summarizes results of the SIUE field school undertaken on the SIUE campus in the summer of 2013. Surface survey of approximately 16 acres west and southwest of the southern portion of 11MS99 yielded historic and prehistoric artifacts. Excavations on 11MS99 were focused on an area at the southern end of the site where Middle Woodland features (two pits, a posthole, and probable post molds) were excavated by the 2009 field school. Our 2013 excavations removed 60 square meters of plowzone, revealing six pit features, multiple posts and possible post molds, and a wall trench structure. The two deepest pit features date to the Middle Woodland period, two pits of moderate depth were especially light in color and probably date to the Late Archaic period, and three shallow pits probably date to the Mississippian period. One posthole might date to the Middle Woodland period, but a nearby semicircle of smaller post molds were superimposed by (and therefore predate) the two Middle Woodland pits. The wall trench structure is assumed to be Mississippian.

This report will begin with a description of the site setting and a summary of previous investigations in the area. We will then detail our field methods and results. As of this writing, analysis of the artifacts collected 11MS99 is still ongoing. When the analysis of these artifacts is complete, a final report will be written which will compare our findings with data from the greater American Bottom. Certainly, our preliminary results show that the people who inhabited

11MS99 from the Late Archaic period through the Mississippian period were engaged in the social arena of the greater American Bottom.

SETTING AND PRIOR RESEACH

The archaeological record of the American Bottom is rich. Although best known as home to Cahokia, largest archaeological site north of Mexico, many thousands of archaeological sites have been recorded in the American Bottom and in the adjacent uplands. In the uplands, these include sites dating from the Paleoindian period through the historic period; in the floodplain, sites are known dating from the Early Archaic through historic periods. The region was attractive to prehistoric and historic settlers alike for its rich resources in both floodplain and uplands, including both forest and prairie habitats (e.g., see White et al. 1984).

The area located around modern Edwardsville, including the SIUE campus, exemplifies the American Bottom in the richness of its natural resources and in the concomitant richness of its archaeological record. The SIUE campus is situated along the bluff edge and bluff base of the northern American Bottom, just south of where Cahokia and Indian Creeks exit the uplands and then merge. Cahokia Creek would have meandered along the base of the bluff on the western edge of campus on its way south to Cahokia, a distance of just ten miles (16 km), and from there on to the Mississippi River beyond. The gentle slope of the bluff here would have given inhabitants easy access to resources of both floodplain and upland. The 1815 GLO map shows that most of what is now the SIUE campus was forested at that time, although prairie was located nearby on both the floodplain and in the uplands (Illinois Secretary of State 2009; see Figure 1). In the early 1800s a backwater lake was located in the American Bottom just 3.5 miles (six km) west of the bluff that crosscuts the campus, and the Mississippi River itself was approximately twice that distance. Through time the exact boundaries of forest and prairie would have shifted, the river and creeks would have meandered, and floodplain lakes would have swelled and shrunk, but local resources would have been rich regardless of these fluctuations.



Figure 1. 1815 GLO map (Illinois Secretary of State 2009).

The richness of the local natural resources has produced an equally rich archaeological record. Munson and Harn (1971) surveyed portions of the SIUE campus as part of a larger archaeological survey of the American Bottoms and Wood River terrace in 1963. Sites reported on campus by Munson included 11MS94, 11MS95, and 11MS96 on the bluff; and 11MS99 in the floodplain below (Figure 2). Archaic period components were recorded at 11MS96 and (albeit with a question mark) at 11MS95. Middle Woodland components were recorded at 11MS94 and 11MS99. A Late Woodland component was reported at 11MS95, and Mississippian components were recorded at 11MS94 and 11MS99.

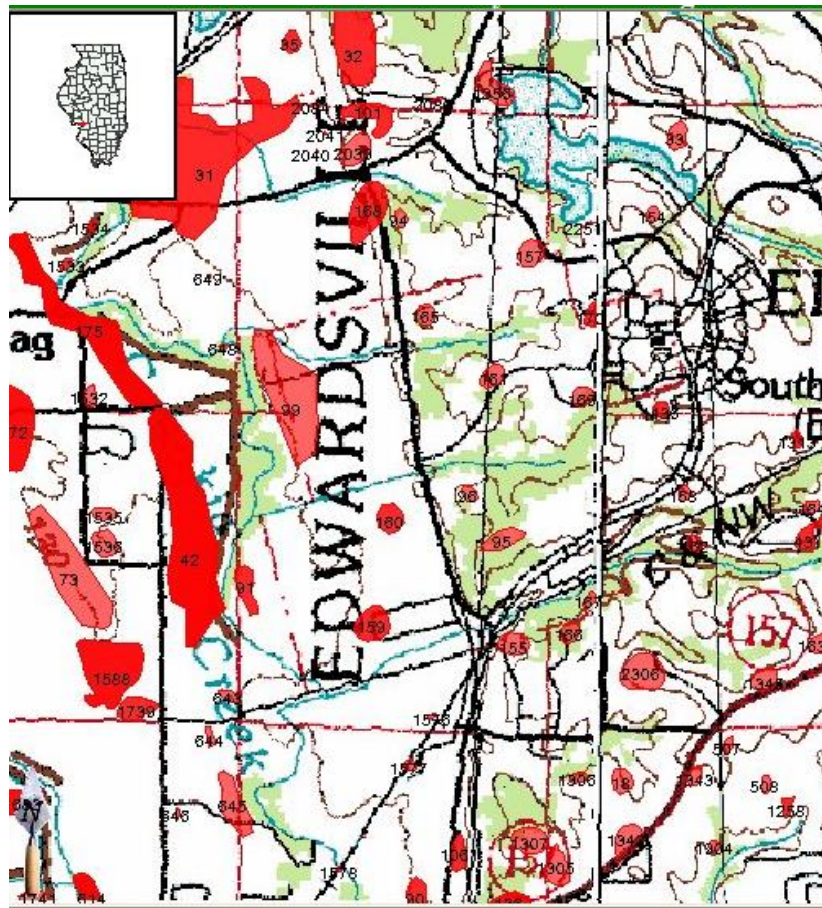


Figure 2. Location of previously recorded sites on the SIUE campus (<http://arch.museum.state.il.us/archsites/>).

Of these, 11MS99 on the floodplain near the base of the bluff and just east of Cahokia Creek was clearly the largest site, covering at least four acres, and it seems to have had the densest concentration of artifacts. Munson named 11MS99 the Gehring site after Wilbur Gehring, then a tenant farmer of SIUE but formerly owner of the site. Munson described 11MS99 as a Havana village (Ms^V266) and mound (Ms^O267) and also a Bluff camp yielding Late Bluff rim sherds (Munson and Harn 1971:7, 13). On the IAS site form Munson also indicates a Mississippian presence at the site; other artifacts he collected included one Marion Thick sherd, and both straight and expanding stemmed points. On the site form Munson further indicates that his surface collection of 11MS99 was “arbitrarily” divided into three parts. The

northern part apparently lay to the north of an old street car trace that is referred to as a levee on a sketch of the site included with the site files. Today this street car trace or “levee” is used as a field road to access utilities which probably have destroyed most of the northern part of the site. The central and southern parts of the site lay to the south of the street car trace in a cultivated field. The central part of the site was highest in elevation, a relatively broad terrace closest to Cahokia Creek; the southern part of the site appears on the sketch map as a narrow finger ridge extending to the south. On the site form Munson noted that Middle Woodland artifacts were found on all parts of the site, whereas Late Woodland and Mississippian artifacts were found only in the central part of the site. Munson’s artifact counts indicate that the greatest number of artifacts was collected in the central part of the site, which is not surprising giving that this relatively high and broad part of the site was used repeatedly throughout its history.

Review of Illinois Archaeological Survey (IAS) site files indicates that additional surveys were conducted on campus by Ken Williams and Ernest Evans in 1969. They reported a number of new sites on campus, including 11MS157, 11MS161, 11MS169, and 11MS170 in the uplands; 11MS165 on the bluff edge; 11MS168 on the slope of the bluff; and 11MS159 and 11MS160 on the floodplain. Most of these sites seem to have been small with light artifact densities, except for 11MS159, which was recorded as a possible village dating to the Woodland period. Woodland components were also reported at several other sites (11MS160, 11MS165, 11MS168, and 11MS170). No Archaic or Mississippian components were recorded by Williams and Evans.

In the early 1970s, SIUE professor Sid Denny conducted field school excavations at 11MS99 for two or three seasons. He referred to the site as the Keller Site because it was farmed by Vernon Keller at that time. Apparently no report of Denny’s excavation was ever written. Maher (1996) interviewed Denny in March of 1994 and reports that all of Denny’s excavation notes and maps were lost at that time, although he was able to examine some of Denny’s artifacts. In July of 2003 Holt transferred nine boxes of artifacts labeled MSV-99 from the SIUE Anthropology Lab to the SIUE University Museum. Presumably, these were artifacts from the Denny excavation. At that time the ISM declined to accept the collection for curation because no field notes could be found to accompany them. More recently, we have received an inventory of documents given by Denny to the SIUE Lovejoy Library Archives. This inventory lists documents from “MS99 Kellar Site.” The documents are excavation forms from the 1970 excavation; these have been copied and are currently on file in the SIUE Anthropology Department. Four sheets of color slides from Denny’s excavations have remained on file in the SIUE Anthropology Department and have been digitally scanned. These slides also appear to be from the 1970 excavation, and show excavation of trenches with a road grader.

In an interview with Denny conducted on-site on May 20 of 2009, he indicated that in his first field season or two, he excavated test units on 11MS99. In his last field season he excavated two or three trenches with a road grader in the central part of the site. These trenches were perhaps 100 m long running north to south with perhaps 10 m between the trenches; the road grader and trenches were approximately 3 m wide.

In one trench, probably the one located farthest to the west, Denny observed a structure at the base of the plowzone which he described as a “small brush structure” (personal communication, May 2009). The structure was roughly rectangular and approximately 5 x 12 feet in plan view with a basin approximately 2.5 feet deep. (Note that Denny described the trenches in metric measurements and the structure in English; I am using his terminology here.) He said the structure contained no wall trenches, but randomly placed posts were noted, and few artifacts were recovered. At first Denny thought this was a Middle Woodland structure, but his

later discussions with personnel at Cahokia Mounds State Historic Site made him think that the structure dated to the Mississippian period. In the middle trench Denny observed a cluster of three or four pits (personal communication, May 2009). One of these contained Havana artifacts, while the others contained Mississippian artifacts such as Powell Plain and Ramey incised jars (which Denny described as “Fairmount Phase”). The trench farthest to the east contained no features.

The completed forms from Denny’s excavation are difficult to decipher since they don’t include an overall site map. (One slide shows a student drawing a large map, but no site maps were found among the notes.) The notes suggest the presence of one or two living surfaces below the plowzone. For example, one form (labeled 24 in the upper right hand corner) contains the comments, “Plow depth ranged from 25 to 40 cm. Under plow depth black band of undisturbed loamy soil grading into a lighter sandy brown soil. 2 possible occupation levels. Artifacts found in both soil types under plow zone. All pottery identified from both soil types (levels) as Mississippian.” Another sheet (labeled 25 in the upper right hand corner) contains the comments, “Black soil band under plowzone extended through all four pits on the walls. Possible depressed area where people threw refuse, not a midden, span of time used probably short.” It is not clear in these comments if “pits” refers to pit features or excavation units.

Although feature descriptions in these notes are very brief, they might provide some context to the artifacts recovered. It is also possible to identify several of the features in the slides. Feature 11 appears to have been a shallow pit feature, and about 2 m northeast of Feature 11, Feature 9 was labeled as a burnt corn concentration (sheet 15). Feature 8 was a shallow pit (sheets 16 and 62). Feature 4 was a bell-shaped pit (sheet 74). Feature 7 was circular in plan view, and was presumably a pit (sheet 77). Its surface was “covered w/large quantities of shell temp pottery(Cahokia Red shell temp plain and Ramey Incised), 1 reworked proj point drill, burned clay & rock” with “very little charcoal” (sheet 77). A sketch suggests it was found in association with a line of posts.

Maher (1996) examined artifacts from Denny’s excavation and surface collection, but they were without specific provenience. Maher (1996: Tables D.5 and D.6) provides a list of the Middle Woodland ceramics he identified in Denny’s collection, and he suggests that there were just as many Mississippian sherds in the assemblage (apparently dating to the late Stirling phase), as well as a “substantial collection of Early Woodland Marion Thick pottery” (1996:640). Maher (1996:640) also reports that Denny provided him with photographs from his excavation which “revealed the presence of pottery-filled pits (Figure D.15); a pit with a carbonized corn cob remains (Figure D.15), and midden-filled pits and post molds (Figure D.16) [sic].” Maher’s Figures D.15 and D.16 are included among Denny’s color slides now curated in the SIUE Anthropology Department.

As part of his dissertation investigating the “Hopewell occupation” of the American Bottom, Maher (1996) conducted limited excavations at 11MS99, focusing on the purported mound. IAS site forms indicate that this “mound” was 80 feet in diameter and 3 feet high, and as Maher notes, the IAS site forms also indicate that previous owner Wilbur (or Wilber) Gehring dug a hole in the landform “many years ago [before 1969], but never found anything.” The IAS site forms indicate that a notched hoe was found near the mound, but was not necessarily associated with it.

Maher (1996) excavated in the possible mound to determine its cultural affiliation. He notes that at the time of his excavation in 1994, the mound was only 50 cm high and difficult to locate due to decades of plowing. Maher placed two transects of “soil probe cores” across the

mound, and also excavated three 1 x 2 m units on the mound. All excavated sediments in these units were screened through half-inch mesh. No artifacts were recovered in two of the three units, and artifacts in the third were recovered from the plowzone only and were not culturally diagnostic. The stratigraphy in the excavation units was often disturbed and gave no indication of mound construction techniques (such as basket loading). Flotation samples were taken from supposed mound fill, but produced few plant remains. A hazelnut shell was submitted for radiocarbon dating and produced a date of 2475 ± 45 BP, suggesting a Late Archaic or Early Woodland affiliation (Maher 1996:659). However, Maher concludes that “the mound at Gehring remains an enigma” (1996:659). That is, the near absence of artifacts and lack of definitive evidence for mound construction could indicate that this was not a mound at all, but instead was a natural geomorphological feature, perhaps a remnant of a sand ridge.

The observations and collections of avocational archaeologist Keith Probst are equally important in understanding 11MS99. Probst collected 11MS99 and other sites in Madison County between 1967 and 1973, keeping a log of his finds in which he recorded artifact numbers, artifact descriptions, and site locations (Holt and Koldehoff 2013). In 2007 and 2008 Probst permitted Brad Koldehoff, Ken Farnsworth, and Julie Holt to examine his collection, photocopy his log, and photograph selected artifacts. In his log Probst referred to 11MS99 as a “Hopewell” site, and our examination of his collection from 11MS99 confirms that it is predominantly composed of Middle Woodland artifacts. Middle Woodland lithic artifacts he collected include blades, blade cores, Snyders points (several of which were reworked into scrapers), North points, Manker points, a Norton point, celts, and a hoe. Middle Woodland ceramic types identified in the Probst collection include Havana plain, Hopewell rocker stamped, Netler stamped, and Sisters Creek fingernail punctate. A drilled bear canine from the site is also surely Middle Woodland, and a galena fragment and a quartz crystal are probably Middle Woodland. (One Snyders points was also made of quartz; this was found in the northern part of the site.) Early Woodland and Mississippian artifacts were also common. Early Woodland artifacts included 11 Kramer points (one of which was reshaped into a drill), and a probable limestone tube pipe (broken and unfinished) also appears to be Early Woodland. Mississippian artifacts include Cahokia points, Madison points, a Cahokia cordmarked jar rim with a red-slipped interior (Moorehead phase), a celt, and a Cahokia style discoidal. Two marine shell disk beads in the Probst collection are probably also Mississippian. The Probst collection from 11MS99 also includes a Dalton point (turned into a scraper), a variety of Late Archaic point types (Matanzas, Riverton, Adena, Copena, Etley, and Motley), a Late Woodland Mund point, artifacts dating to the Terminal Late Woodland or Emergent Mississippian period (a Late Woodland arrow point and Late Bluff rim sherds), and an historic period ceramic pipe.

In visits to 11MS99 with Probst in 2008, in 2009, and again during the present excavation in 2013, Probst pointed out that the majority of Middle Woodland artifacts came to the surface only after the sand ridge in the southern part of the site was deep plowed for horseradish production. This observation suggests that prior to deep plowing, the site had been stratified. Probst also suggests that as much as five feet of sediment have been removed from this ridge (due to plowing and erosion) since the early 1970s.

We note that there are surely other artifact collections from 11MS99 that could prove informative if they could be located. Probst collected the site for a relatively brief period, and during that period he regularly observed footprints from other artifact collectors. Footprints from a collector were observed in our first visit to the site with Probst in March of 2008. Footprints of collectors were observed every time it rained during the field school in May and June of 2009.

We observed on June 1 of 2009 that a collector had been digging on site at the edge of an erosion gully. In addition, approximately 20 people actively surface collecting were observed firsthand by field school faculty and students during this period and reported to SIUE police. One collector reported that she had been told about the site by her employer, a local lawyer, who had collected the site for years with his family. A family caught collecting and stopped by SIUE police reported that they had been given permission to collect by Craig Keller (the current tenant farmer); they reported that they had collected the site for years and had seen many other collectors out there. It would be beneficial to examine the collections of these and other individuals, but unfortunately none have been forthcoming as of this writing. During our 2013 field school excavations, we did not observe any more collectors or evidence that the site had been visited by collectors. This could be in part a result of the police protection which began in 2009, and the installation of IHPA signs forbidding artifact collection in 2009. Since the site is no longer plowed (since approximately 2011), it is certainly less attractive to collectors.

Julie Holt directed the 2009 SIUE archaeology field school at the Gehring site (Holt and Belknap 2010). A surface collection was conducted over the southern and central portions of the Gehring site, as well as ca. 85 acres of the agricultural field in which the central and southern portions of the site occur. Excavations were conducted at the southern end of 11MS99, where Middle Woodland pottery had been noted in the surface collections. A Middle Woodland pit feature was excavated which contained both Havana and Hopewell pottery. Another pit feature and a posthole were excavated that probably date to the Middle Woodland period.

Gregory Vogel of the SIUE Anthropology Department directed the SIUE archaeology field school at the Gehring site in the summers of 2010, 2011, and 2012. A report is available for the 2010 field school (Vogel and Clemons 2011), and a report for the 2011 and 2012 field seasons has recently been submitted by Vogel to the IHPA. Vogel has conducted extensive remote sensing at 11MS99, and his excavations have focused on ground-proofing the remote sensing results in the central portion of the site. Pit features excavated by Vogel and students have dated to the Middle Woodland, Late Woodland, Emergent Mississippian, and Mississippian periods. Structures have been excavated dating to the Mississippian and historic periods. The presumed Mississippian structure was a wall trench structure. A Mississippian burial probably dating to the Moorehead phase was found in the summer of 2012. It was observed that the burial contained copper, a shell-tempered ceramic discoidal, and red-slipped, shell-tempered pottery (Vogel 2012). After determining that this feature was a burial, it was reported to the IHPA and reburied without further excavation.

Examination of the stratigraphy at 11MS99 has included excavation of deeper units in the southern portion of the site in 2009 and in the central portion of the site in subsequent field seasons. Vogel has also taken sediment cores across the site. Stratigraphic analysis suggests potential for deeply buried cultural deposits at 11MS99. However, our excavation in 2013 was limited in depth to investigation of features found at the base of the plowzone. If there are more deeply buried cultural deposits at the site, we don't have time in the course of a typical field school season to reach them.

SURFACE COLLECTION: FIELD METHODS AND RESULTS

In 2009 the SIUE field school conducted an intensive surface collection at 11MS99. However, we did not collect the northern portion of the site (north of the old street car trace) because it is not cultivated and active utilities are located there (Holt and Belknap 2010). In addition to the central and southern portions of 11MS99, we also surface collected the agricultural field in which the central and southern portions of the site are located. However, we were unable to collect the southwest corner of this field because it was too wet. Also, we were unable to collect the portion of the field west of the far southern end of the site because it had not been plowed due to the wet conditions. Our transects in 2009 were placed at 2.5 m intervals; that is, we walked every third horseradish row. Visibility was extremely good, ranging between 95 and 100% (Holt and Belknap 2010).

In 2013 we surface collected the portions of the farm field adjacent to the southern end of the site which we had been unable to examine in 2009. That is, we surface collected the field just west of the southern end of the site, and south of this area we surface collected the southwestern corner of the field. The surface collection was conducted on June 13, 2013, after a small plot of horseradish was harvested from the area west of the southern end of the site. After the horseradishes were harvested, the field was tilled and soybeans were planted, which gave us 100% visibility in this area. In the southwest corner of the field, corn had been planted previously; by June 13 the corn was ca. 1 foot tall, giving us ca. 75% visibility in this area. Transects were approximately 5 m apart, as recommended by the IAS. Every artifact was flagged and its location recorded with a Garmin GPS (the GPSmap 76CS) which is accurate to ± 5 m.

Artifact densities were light, which is not surprising since the area collected is outside the site boundaries (Table 1, Figure 3). Probably most artifacts collected west of 11MS99 eroded from the site when it was still under cultivation. Chert debitage was most common, but no diagnostic chert artifacts were recovered in the controlled collection. The sherds collected are body sherds and cannot be assigned to a specific period of time, although two are possibly Emergent Mississippian. One of these appears to exhibit smoothed-over cordmarking while the other appears to be made of Madison County shale. All three sherds appear to be grit and grog tempered.

Table 1. Surface Collection Summary.

Artifact type	Count
Chert	82
Sherds	3
FCR ¹	14
Ground stone tools?	1
Bone	1
Ochre/burnt clay	2
Historic	5

¹FCR weighed 592.85 g.

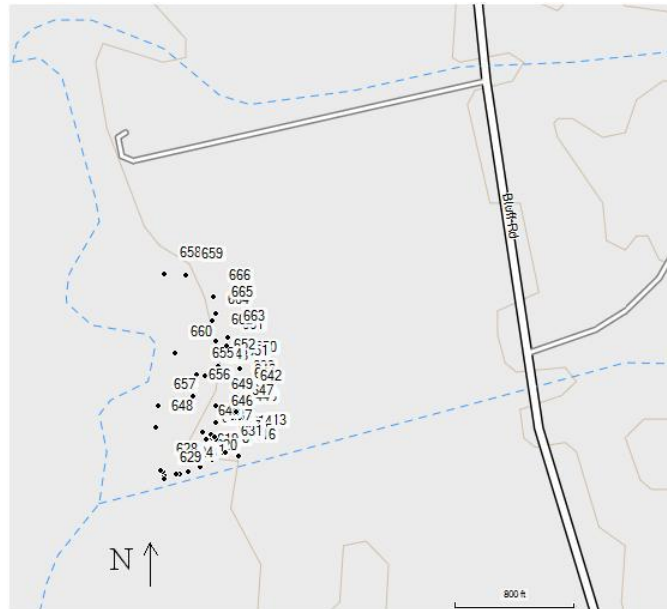


Figure 3. Controlled surface collection results.
Map by Jacob Province.

Outside of our controlled surface collection area, one complete spear point was found on the surface by a visitor to the site. It is a stemmed point, perhaps a Late Archaic Mule Road point or an Early Woodland Kramer point, and it appears to be made of low quality Burlington chert. When they were sent to collect the spear point, students also collected 11 flakes, a piece of FCR, and the base of a white ware dish in the same area. These were in association with the concentration of historic and prehistoric artifacts noted in the 2009 survey north of the ditch at the south end of the field. Because they were outside of our controlled collection area, these finds are not shown in Table 1 or Figure 3.

EXCAVATION: FIELD METHODS AND RESULTS

Our primary research interests are to better understand Middle Woodland use of the site and Middle Woodland life ways in the American Bottom. In 2009, we excavated at the southern end of the site in the vicinity of a Middle Woodland pottery concentration. Here we found a Middle Woodland pit feature (Feature 102), as well as a second pit feature (Feature 104) and a posthole (Feature 103) that probably also date to the Middle Woodland period (Holt and Belknap 2010). The Havana and Hopewell pottery recovered from Feature 102 are particularly interesting given that (to quote Ken Farnsworth) they look “just like” pottery from the Illinois Valley. However, it was our interest in finding a Middle Woodland post structure, which are rarely found in the American Bottom, that led us to excavate a 2x4 meter block immediately east of Features 102-104. Additional excavation blocks were opened up nearby to ground proof Gregory Vogel’s remote sensing data.

Our first step was to reestablish our 2009 excavation grid. We were unable to set a permanent site datum in 2009 because the site was still in agricultural production at that time. Instead, we drove rebar into the ground below the base of the plowzone in each of three excavation blocks when the 2009 excavation was complete. With the help of Bob Gibson of the IDNR Office of Mines and Minerals, who provided a metal detector, GPS, and expertise, on May 10, 2013, Henry Holt and I were able to relocate the three rebar. We found that the southernmost of the three rebar was 10 cm from where it should have been, indicating that my 2009 grid was inaccurate. However, since the southernmost excavation block (2009 Units A and B) contained no cultural materials below the plowzone, the error is not significant. Because the site is no longer in agricultural production, on May 16 Henry Holt set two permanent site datum points with aluminum nails in PVC pipe and concrete. These two datum points are located 20 m apart; SIUE grid coordinates and UTM coordinates for these points can be found in Table 2. Note that the Garmin GPS (the GPSmap 76CS) used to record the UTM coordinates is accurate to ± 5 m.

Table 2. Site Datum Coordinates (Zone 15S)

SIUE grid coordinates	X (UTM)	Y (UTM)
N419 E396	759095	4297430
N399 E396	759096	4297408

Three excavation blocks were laid in during the first week of the field school. The initial units laid in (Units BA-BF) were each 2x2 m, and they were laid in in pairs to create three 2x4 m excavation blocks. In order to look for more Middle Woodland features, the excavation block consisting of Units BC and BD was located west of Units C and H which had exposed Features 102-104 in 2009. The excavation block consisting of Units BA and BB and the excavation block consisting of Units BE and BF were located to ground proof remote sensing data. Later, Units BG-BP were added to the BE-BF excavation block to expose fully features found in those units. Units BG-BN were 2x2 m, while Units BO and BP were 1x2 m. Unit coordinates and sizes can be found in Table 3. Unit coordinates refer to the southwest corner of the unit.

Unit designations began with the letter B in order to avoid redundancy with units named by Vogel in the central part of the site during his 2010-12 excavations. Note that in his

excavations Vogel used a different site datum and thus a different coordinate system because he reports that he was unable to relocate our rebar during his 2010 excavation (Gregory Vogel, personal communication, 2013).

Table 3. Unit Coordinates.

Unit name	SIUE grid coordinates	Unit size
BA	N408 E390	2x2 m
BB	N408 E392	2x2 m
BC	N408 E398	2x2 m
BD	N410 E398	2x2 m
BE	N416 E404	2x2 m
BF	N418 E404	2x2 m
BG	N420 E404	2x2 m
BH	N420 E406	2x2 m
BI	N418 E406	2x2 m
BJ	N416 E406	2x2 m
BK	N414 E406	2x2 m
BL	N414 E404	2x2 m
BM	N422 E406	2x2 m
BN	N424 E406	2x2 m
BO	N421 E402	1x2 m
BP	N421 E401	1x2 m

Excavation began on Tuesday, May 14. All sediments were removed by hand (shovel and trowel), screened through ¼ inch mesh, and described using standard nomenclature (Munsell colors and USDA textures). The plowzone was removed in one natural level. At the base of the plowzone, the subsoil was troweled to look for possible features. The subsoil itself was not excavated due to lack of time. However, when we excavated subsoil in 1x1 meter samples in 2009, we found it to be culturally sterile to a depth of 130 cm. Greg Vogel has also cored the site extensively. While he suggests that it is possible that living surfaces could be deeply buried on the site, there is no evidence of living surfaces within 1 meter of the current ground surface. Thus, any deeply buried surfaces at the site will not be easily reached by a summer field school.

All possible cultural features identified at the base of the plow zone were drawn and photographed in plan view and then bisected. The first half of each feature was excavated as a single stratum. The profile was then photographed and drawn. Any distinct strata visible in profile were excavated separately in the second half of the feature, with flotation samples taken from each. Flotation samples were 10 l, unless the stratum was not large enough to yield a 10 l sample. All feature sediments not saved for flotation were screened using ¼ inch mesh.

The plowzone was found to range between 20 and 30 cm deep, and was described as a 10YR 3/3 dark brown sandy loam. According to the USDA (2009), the soil is classified as Onarga sandy loam. The subsoil immediately beneath the plowzone is typically a 10YR 4/6 dark yellowish brown clay loam.

The most common artifacts found in the plowzone included chert, ceramics, and FCR (Table 4). The highest concentrations of chert were found in Units BM and BN; these units contained the east trench of the wall trench structure (Feature 213) at the base of the plowzone.

Diagnostic chert artifacts recovered from the plowzone included a spear point from Unit BC (probably a Steuben point of Cobden chert), a point base from Unit BF (possibly a Snyders point of Cobden chert), a Cahokia point of Burlington chert from Unit BH, and a spear tip of unknown chert from Unit BN. One or a few hoe flakes were found in the plowzone of most units; lamellar blades were found in the plowzone in Units BG, BI, and BN.

The highest concentrations of pottery in the plowzone were found in Units BH and BI (Table 4); these units contained the eastern sides of pit Features 207 and 209. Cord-marked, grit-and-grog tempered sherds seem most common; clearly these include Middle Woodland types and probably Late Woodland as well. Mississippian shell-tempered sherds were also recovered from the plowzone.

Table 4. Plowzone Artifact Summary.

Unit	Chert	Sherds	FCR	FCR (g)	Pebbles	LS ¹	SS ²	Bone	Burnt clay	Ochre	Ground stone tool?	Historic
BA	139	351	119	722	111	4	1	10	79	0	0	9
BB	101	153	76	391	77	3	0	2	58	0	0	5
BC	220	389	171	798	175	12	0	30	136	0	0	1
BD	164	275	84	556	103	5	0	17	53	3	1	0
BE	272	747	74	217	202	23	0	21	295	0	0	0
BF	243	434	301	1166	160	18	0	9	361	0	0	2
BG	192	438	139	756	100	14	1	4	134	1	1	0
BH	299	869	249	882	193	21	9	49	302	0	0	0
BI	261	875	142	613	361	22	0	21	347	0	0	2
BJ	297	782	227	578	154	30	0	27	376	0	0	1
BK	308	657	176	743	297	47	0	34	389	0	0	1
BL	237	700	199	680	290	34	1	33	228	0	1	0
BM	362	858	322	850	414	41	1	19	368	1	0	1
BN	312	511	226	1146	468	21	0	11	255	0	0	1
BO	101	124	86	522	42	10	0	2	100	0	0	0
BP	97	198	92	330	90	0	0	0	39	0	0	0

¹LS = Limestone

²SS = Sandstone

Next we will describe the features encountered below the base of the plowzone in numeric order. A summary of feature dimensions, shape, and interpretations can be found in Table 5. A summary of artifacts found in each feature can be found in Table 6.

Table 5. Feature Data.

Feature	Length (cm)	Width (cm)	Depth (cm)	Plan	Profile	Interpretation
200	7	7	10	circular	irregular	bioturbation
201	90	45	10	oval	undulating	lamellae
202	100	90	10	amorphous	undulating	lamellae
203	106	80	48	oval	belled	pit
204	75	73	75	circular	vertical/belled	pit
205	varies	varies	varies	circular	varies	posts/bioturbation
206	162	128	30	circular	vertical/belled	pit
207	107	95	17.5	circular	belled	pit
208	17	11	33.5	circular?	vertical	posthole
209	129	119	11	circular	vertical	pit
210	117	100	39	circular	basin	pit
211	97	86	24	circular	basin	pit
212	530	30	unknown	linear	vertical	wall trench
213	400	50	unknown	linear	unknown	double wall trench
214	22.5	10	16.5	amorphous	inslanting	unknown
215	varies	varies	varies	circular	varies	posts/bioturbation

Table 6. Feature Artifact Summary, Screened Sample.

Feature	Stratum	Chert	Sherds	FCR	FCR (g)	LS	SS	Mica	Stone tools?	Ochre/ Hematite?	Bone	Burnt clay
200	A	1	0	0	0	0	0	0	0	0	0	0
203	A	70	58	15	216	1	0	1	0	0	P	19
203	B	28	25	4	730	0	0	0	0	0	35	10
203	C	26	3	3	93	1	0	1	0	0	1	6
204	A & B	154	66	40	616	28	2	0	0	0	252	263
206	A	166	361	11	300	5	0	0	0	0	42	296
207	A	41	80	20	23	0	0	0	0	1	10	45
209	A	23	49	32	22	0	0	0	0	0	14	51
210	A	8	13	2	34	2	0	0	0	0	0	5
211	A	6	9	2	3	0	0	0	0	0	0	10
212	A	12	23	3	30	0	0	0	0	0	0	6
213	A	23	44	7	28	0	0	0	0	0	1	16
214	A	0	0	0	0	0	0	0	0	0	0	0

In excavation block BA-BB, Feature 200 was a small circular stain (a 10YR 3/3 sandy loam), ca. 7 cm in diameter, which was initially identified as a possible post mold (Photo 1,

Figure 4). However, with bisection it was determined to be bioturbation because its profile was irregular. It contained no cultural materials other than a single flake (Table 6).



Photo 1. Feature 200, plan view.

Also in excavation block BA-BB, Feature 201 was an oval stain (a 7.5YR 4/4 brown sandy loam), ca. 90 x 45 cm in diameter (Figure 4). Excavation showed that this was probably a lamellae, given that it was difficult to distinguish from the subsoil in plan and profile (Photos 2 and 3). The profile suggested an undulating surface and the feature yielded no artifacts (Table 6).



Photo 2. Feature 201, plan view.



Photo 3. Feature 201, profile.

The final possible feature in excavation block BA-BB, Feature 202 was a stain similar in appearance to Feature 201 (it was also a 7.5 YR 4/4 brown sandy loam), except that it was larger and amorphous in plan view (Figure 4). This was also determined to be a lamellae, given that it was difficult to distinguish from the subsoil (Photos 4 and 5). Like Feature 201, the profile of Feature 202 suggested an undulating surface and it yielded no artifacts (Table 6).



Photo 4. Feature 202, plan view.



Photo 5. Feature 202, profile.

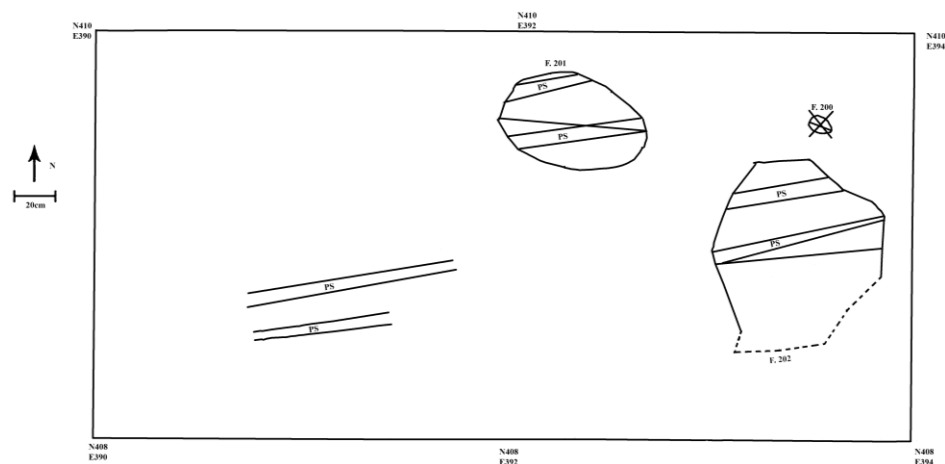


Figure 4. Features 200, 201, and 202, plan view.

In Unit BD, Feature 203 was a pit, oval in plan view and belled in profile, of moderate depth (Table 5). At surface, the feature was a 10YR 3/3.5 dark brown/dark yellowish brown sandy loam, organic and easily distinguished from the subsoil in color and texture (Figure 5, Photo 6). Its profile suggested two or three episodes of deposition (Figure 6, Photo 7). At bottom, there was a pocket of very dark and loose feature fill, a 10YR 2/1 black sandy loam (Strat C). Above this were two strata (Strata A and B) essentially similar in color and texture (a 10YR 3/3.5 dark brown/dark yellowish brown sandy loam), but with a probable lamellae separating them. The photo of the profile also suggests another lamellae toward the top of the feature. Feature 203 contained a rich assemblage of Middle Woodland artifacts (Table 6), most notably including a clay human figurine (Photo 8). Although the figurine is in the simple “Casper the Ghost” style (e.g., Fortier et al. 1989:266) from the waist up, it is very detailed from the waist down, with well defined feet and buttocks. The feature also contained perhaps 25% of a Hopewell jar, as well as Havana pottery, two miniature vessels, blades, exotic chert, mica, bone, turtle shell, and mud dauber nests. All strata were artifact rich, but the density of artifacts was highest at the base of the feature. Mica was found at the bottom of the feature, in both Strata B and C. The figurine was also found near the bottom of the feature, in Strat B.



Photo 6. Feature 203, plan view.

Figure 5 shows the plan view of Feature 203 and other features in Unit BD and adjacent Unit BC. In addition, Figure 5 shows Units C, D, and H to the west, which were excavated in 2009. The 2009 excavation units contained Middle Woodland Feature 102 and probable Middle Woodland Features 103 and 104. Small crossed out circles were investigated as posts but found to be bioturbation because they meandered in profile and/or plan view.

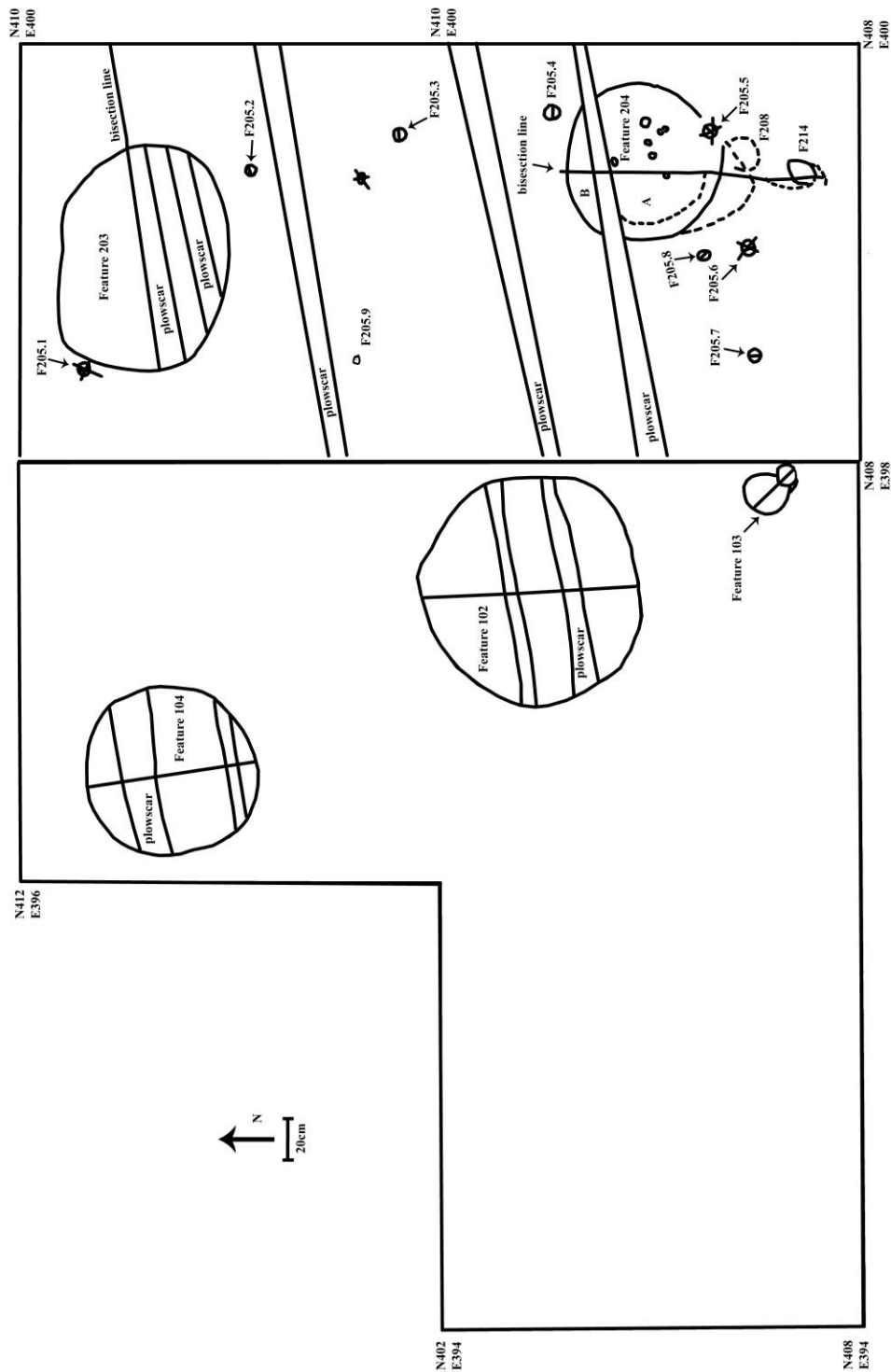


Figure 5. Features 102-104, 203-205, 208, and 214, plan view.



Photo 7. Feature 203, profile facing north by northwest.

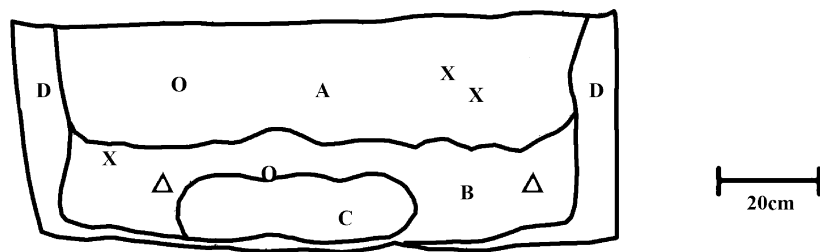


Figure 6. Feature 203, profile facing north by northwest.

A = feature fill (10YR 3/3.5 dark brown-dark yellowish brown sandy loam)

B = feature fill (10YR 3/3.5 dark brown-dark yellowish brown sandy loam)

C = feature fill (10YR 2/1 black sandy loam)

D = subsoil (10YR 3.5/6 dark yellowish brown clay loam)

Δ = bone

X = charcoal

O = burnt clay



Photo 8. Baked clay figurine from Feature 203.

In adjacent Unit BC, Feature 204 was a deeper pit (Table 5), circular in plan view (Figure 5, Photo 9) , with a profile that was belled in some wall sections and vertical in others (Figure 7, Photo 10). The profile suggested two depositional episodes. At the top of the feature was a pocket of sediment, Strat A, that was somewhat redder (a 7.5YR 4/4 brown silt loam) than Strat B (a 10YR 3/3.5 dark brown-dark yellowish brown silt loam). Strat B extended from the top to the bottom of the feature, and lamellae cut through Strat B into the subsoil matrix. Both strata contained notable amounts of burnt earth or clay and bone, but these were especially concentrated in Strat A. (Although the difference was noted during excavation, it is difficult to quantify precisely because it appears that materials screened from Strats A and B were accidentally combined. Flotation samples were kept separate but haven't been tabulated as of this writing.) Strat A could have been a hearth intrusive into the pit, but more likely contained hearth contents dumped into a depression at the top of the pit. The bone recovered from Feature 204 included a human toe bone (a middle phalanx from digit 2, 3, or 4). The human bone seemed well preserved compared to non-human bone from Feature 204. (The human bone was reported to Dawn Cobb, IHPA Human Skeletal Remains Protection Act Coordinator, on June 27, 2013, when it was discovered while washing artifacts in the lab.) Other materials recovered from Feature 204 included pottery and chert artifacts. The pottery seemed to increase in quantity toward the bottom of the pit, with thin-walled pottery noted near the top of the pit, and thicker-walled pottery noted toward the bottom of the pit. Most pottery appears to be Middle Woodland Havana or perhaps Holding cordmarked, but two sherds appear to be Early Woodland Marion thick. Exotic cherts were recovered from the pit, as well as an apparent hoe flake *not* of Mill

Creek chert. Two spear points also appear to be made of exotic chert; one is tentatively identified as a Gibson point and the other is tentatively identified as a Manker point. The pottery and spear points together indicate a Middle Woodland age, but probably somewhat younger than Middle Woodland pit Feature 203, which lies 1.65 m north-northwest of Feature 204, and Middle Woodland pit Feature 102, which was excavated in 2009 and lay some 1.1 m west-northwest of Feature 204 (see Figure 5).



Photo 9. Figure 204, plan view.



Photo 10. Figure 204, profile facing west.

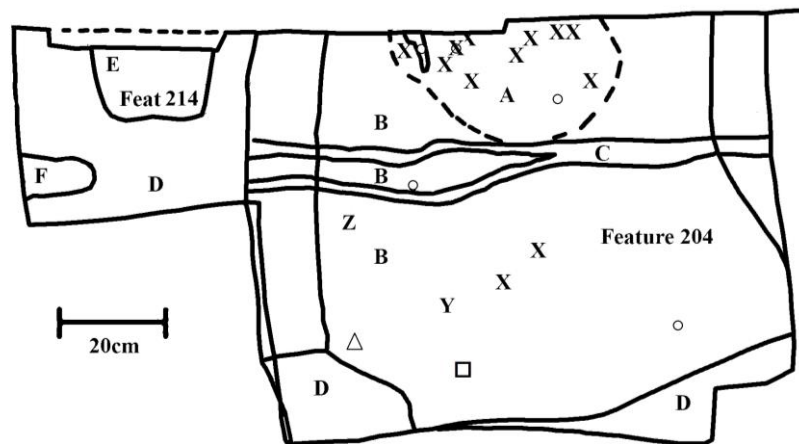


Figure 7. Features 204 and 214, profiles facing west.

- A = Feature 204 Strat A (7.5YR 4/4 brown silt loam)
- B = Feature 204 Strat B (10YR 3/3.5 dark brown-dark yellowish brown silt loam)
- C = lamellae
- D = subsoil (10YR 4/6 dark yellowish brown clay loam)
- E = Feature 214 (7.5YR 3/4 dark brown clay loam)
- F = bioturbation

- X = burnt clay
- Y = fire cracked rock
- Z = charcoal
- △ = chert
- = ceramic
- = bone

Also located in excavation block BC-BD, Feature 205 was a semicircle of post molds which appear to be superimposed by Features 203 and 204 (Figures 5 and 8; Photos 11, 12, and 13). Although a possible post, 205.5, was noted at the top of Feature 204, upon excavation this appeared to be bioturbation. All possible posts were bisected; those which were determined to be posts (205.2, 205.3, 205.4, 205.7, and 205.8) were ca. 5 cm in diameter and ranged between 3 and 12 cm deep below the plowzone (Table 7; Figure 8; Photos 11 and 12). Other possible posts (205.1, 205.5, and 205.6) were thought to be bioturbation because they meandered during excavation. Possible post 205.9 was not within the post alignment, although the profile did appear to indicate a post. Small crossed out circles on Figure 5 indicate soil stains that were investigated but determined not to be posts.

Assuming Feature 205 is the east half of a circular post structure, the west half of Feature 205 was missed during the 2009 excavation. One probable small post was mapped in plan view and in profile as a disturbance attached to a larger post, Feature 103 (Holt and Belknap 2010: Figure 5, Figure 7). The original map drawn in the field and photographs from 2009 show two small circular stains at the top of pit Feature 102, but these were not profiled and were erased from the published map (contrast Holt and Belknap 2010: Figure 5 with Holt and Belknap 2010:

Photo 7). Other possible posts can be imagined when examining the subsoil in Holt and Belknap 2010: Figure 5. If these stains were posts, they were not excavated and were reburied upon completion of the Feature 102 excavation. Thus, they should still be intact below the plowzone, and therefore they could be excavated and properly recorded at a future date.

Determining the age of Feature 205 is problematic, given that the posts did not contain artifacts. Because Middle Woodland Features 203 and 204, and probable Middle Woodland Feature 103, appear to superimpose Feature 205, Feature 205 might predate the Middle Woodland period. Alternatively, given that Feature 205 was found in association with this cluster of Middle Woodland features, it might date to earlier in the Middle Woodland period.

Table 7. Feature 205 Measurements.

Post number	Diameter (cm)	Depth (cm)
205.2	4	5
205.3	5	3
205.4	4	12
205.7	7	3
205.8	5	4
205.9	5	5



Photo 11. Feature 205.2, profile facing north.



Photo 12. Feature 205.3, profile facing southeast.

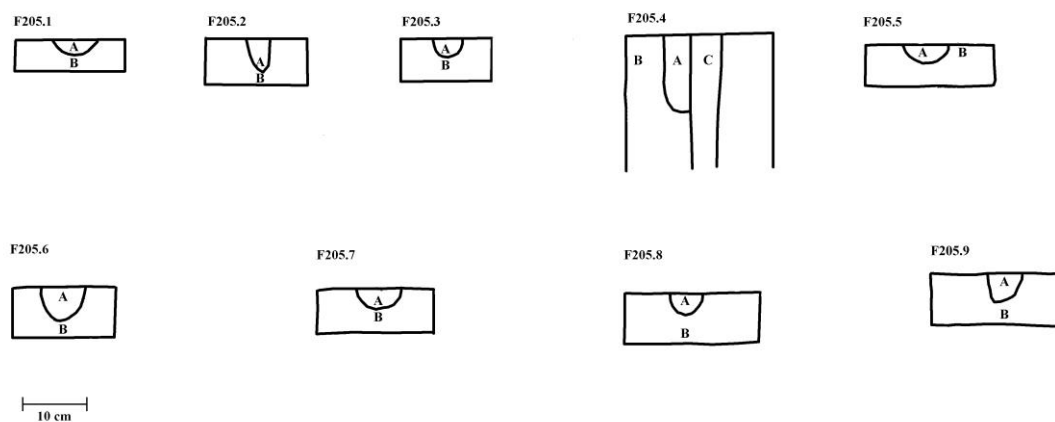


Figure 8. Feature 205, profiles.

F 205.1

A = post mold; 10YR 2/1
B = subsoil; 10YR 3/4

F 205.2

A = post mold; 10YR 3/1
B = subsoil; 10YR 3/4

F 205.3

A = post mold; 10YR 3/2
B = subsoil; 10YR 3/4

F 205.4

A = post mold; 7.5YR 2.5/3
B = subsoil; 7.5YR 3/3
C = root disturbance; 7.5YR 3/1

F 205.5

A = post mold; 10YR 2/1
B = subsoil; 7.5YR 3/3

F 205.6

A = post mold; 10YR 2/1
B = subsoil; 7.5YR 3/3

F 205.7

A = post mold; 7.5YR 2.5/2
B = subsoil; 7.5YR 3/3

F 205.8

A = post mold; 10YR 2/1
B = subsoil; 7.5YR 3/3

F 205.9

A = post mold; 10YR 3/3
B = subsoil; 10YR 5/5



Photo 13. Feature 205 plan view.

Moving to the third excavation block, Feature 206 was a circular pit feature mostly contained within Unit BE that was broad but shallow, with walls that belled in some sections and were vertical in others (Table 5, Figures 9 and 10, Photos 14 and 15). The profile indicates a

floor with two levels; the lower level was excavated separately as Strat A Level 2 in case this was an older feature superimposed by a younger feature, Strat A Level 1. Although the two strata looked extremely similar (both were described as a 10YR 3/3 dark brown sandy loam with charcoal), Strat A1 did appear more homogenous than Strat A2 (which contained mottling of 10YR 4/4 dark yellow brown clay loam, presumably inclusions of subsoil). Strat A1 contained more pottery, chert, and bone, whereas Strat A2 contained more FCR and burnt clay. Compared to other features excavated, Feature 206 contained the high densities of pottery, chert, and burnt earth or clay (Table 6). However, the pottery mostly consisted of small sherds, suggestive of sheet refuse or trash sweepings. This interpretation is supported by the variety of pottery noted in Feature 206: the pottery includes a small number of probable Mississippian types (shell-tempered body sherds and two rim sherds from a possible cup), a small number of Middle Woodland types (one rocker stamped body sherd and one sloppy cross-hatched rim sherd with ovoid stamping), and other probable Woodland sherds (a mini-vessel rim with vertical incising, a vertical rim with cord-wrapped stick impression, and an abundance of cordmarked body sherds). Chert artifacts included several lamellar blades, and exotic cherts seem common. The presence of the Mississippian sherds suggests that this is a Mississippian period pit. The earlier artifacts (such as Middle Woodland pottery and lamellar blades) could have been introduced when old trash was swept into the pit. Alternatively, the pit could have superimposed a Middle Woodland midden or living surface when it was initially created. The shallow depth of the pit suggests that it has been heavily truncated by plowing and erosion; the Mississippian living surface and Middle Woodland living surface or midden have also been plowed and washed away.



Photo 14. Feature 206, plan view.

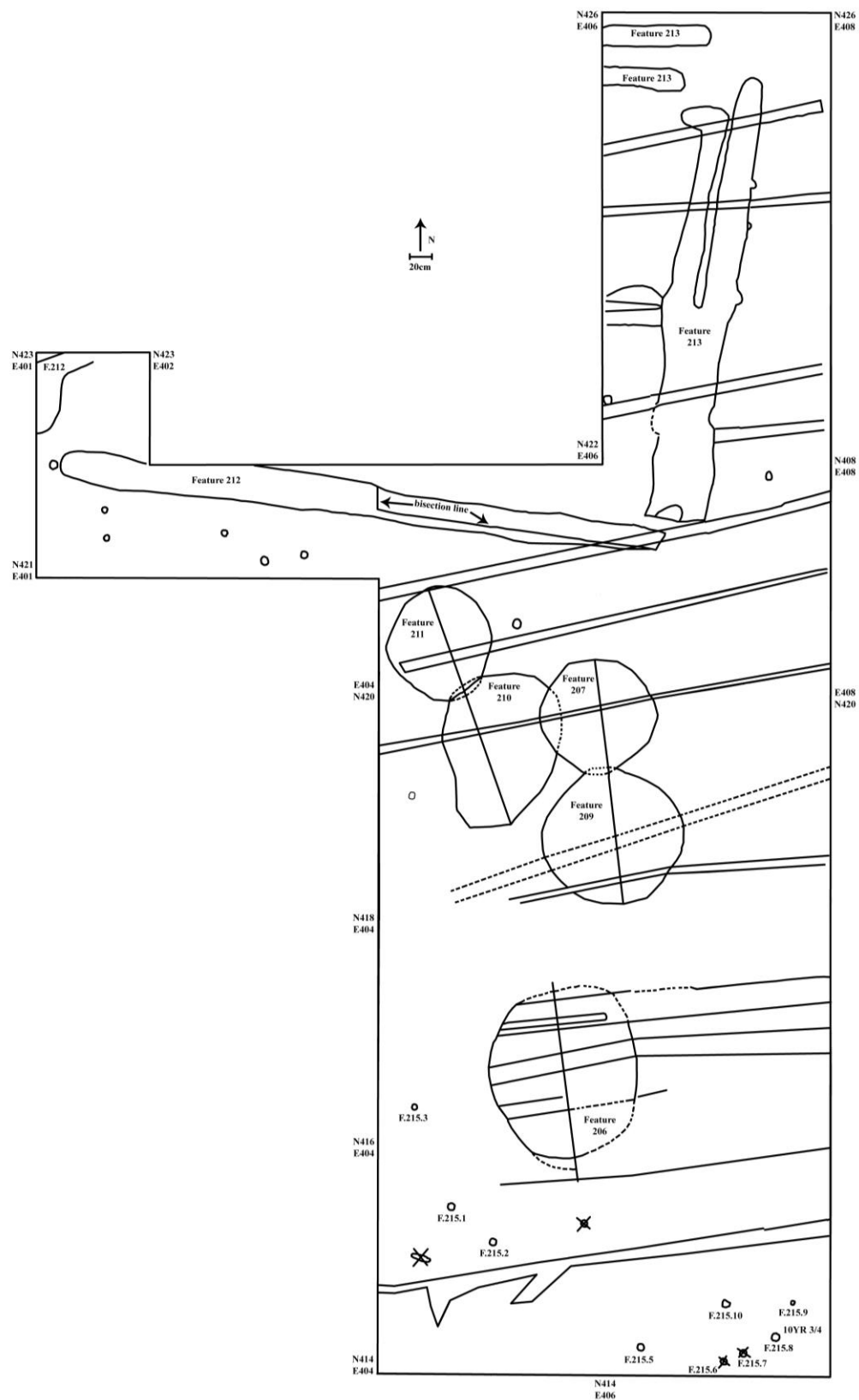


Figure 9. Features 206-207, 209-213, and 215.



Photo 15. Feature 206, profile facing west.

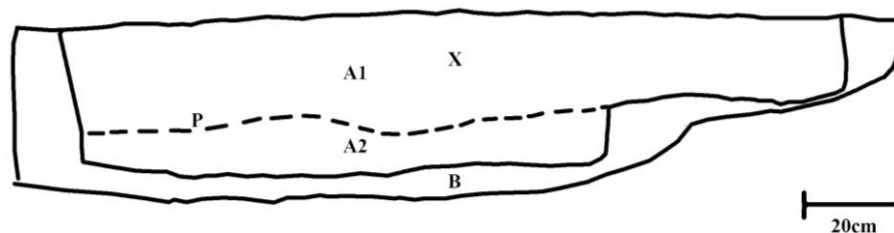


Figure 10. Feature 206, profile facing west.

A1 = Strat A Lev 1 (10YR 3/3 dark brown sandy loam with charcoal)
 A2 = Strat A Lev 2 (10YR3/3 dark brown sand loam w/ charcoal mottled w/ 10YR4/4 dark yellow brown clay loam)
 B = subsoil (10YR 4/8 dark brown clay loam)

P = pottery
 X = burnt earth

Mostly contained within Units BF and BI, Feature 207 was a circular pit with walls that belled in profile (Figures 9 and 11, Photos 16 and 17). Like Feature 206, Feature 207 was wide but shallow (Table 5), containing small pottery fragments indicative of sheet refuse or trash sweeping; again, a Mississippian age is suggested. One depositional episode was suggested by the profile, which consisted of one stratum (a 10YR 3/3.5 dark brown-dark yellowish brown

sandy loam), but this is unsurprising given that the pit was so shallow. Pottery recovered included one shell-tempered rim sherd. Body sherds included some shell-tempered sherds, but mostly grit-and-grog tempered sherds; some of which were cordmarked, and some plain. At least one cordmarked shell-tempered body sherd was observed. Exotic cherts were observed among the debitage, and a broken lamellar blade was recovered. Feature 207 superimposed Feature 209, which also appears to be Mississippian in age. Feature 207 also superimposed Feature 210, which probably dates to the Late Archaic period.

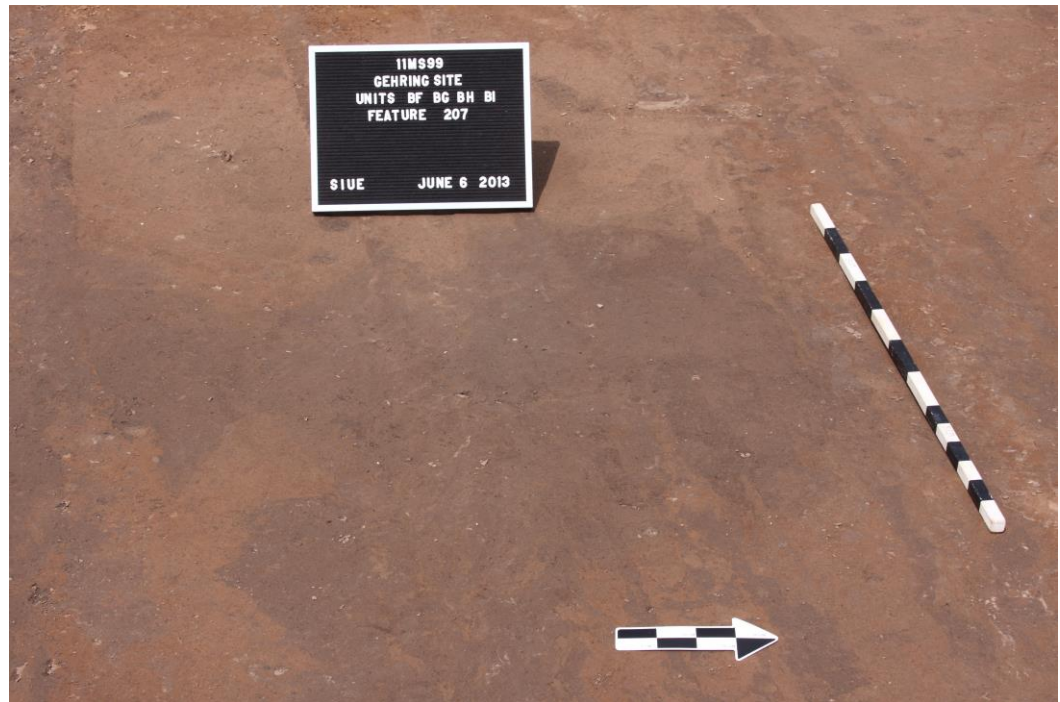


Photo 16. Feature 207, plan view.

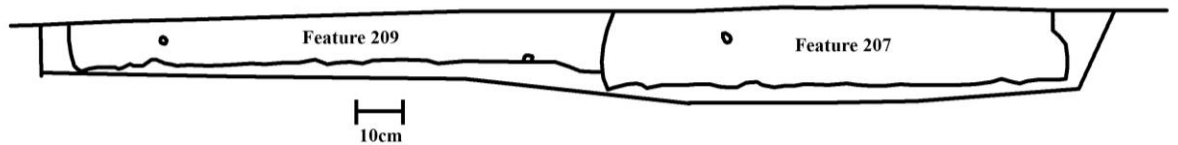


Figure 11. Features 207 and 209, profile facing west.

Feature 207 = 10YR 3/3.5 dark brown-dark yellowish brown sandy loam
 Feature 209 = 10YR 3/3 dark brown sandy loam
 subsoil = 10YR 4/6 dark yellowish brown clay loam



Photo 17. Feature 207, profile facing west.

Feature 208 was a posthole found in Unit BC immediately south of pit Feature 204 (see Figures 5 and 13, Photos 18 and 19). Unfortunately, it was not defined until its profile was noticed during excavation of Feature 204. Feature 208 indicates a post larger than the posts identified as part of Feature 205 (see Table 5). Feature 208 is closer in size to post Feature 103 identified in 2009, but even deeper (by about 12 cm). Its plan view is assumed to be circular, and its horizontal dimensions are estimated, because it was not observed until after it was partially excavated. It contained no artifacts, but like Feature 103 it is thought to be Middle Woodland because of its association with Middle Woodland features. Feature 208 was approximately 1.5 m east by northeast of Feature 103; perhaps they were posts in a Middle Woodland post structure.

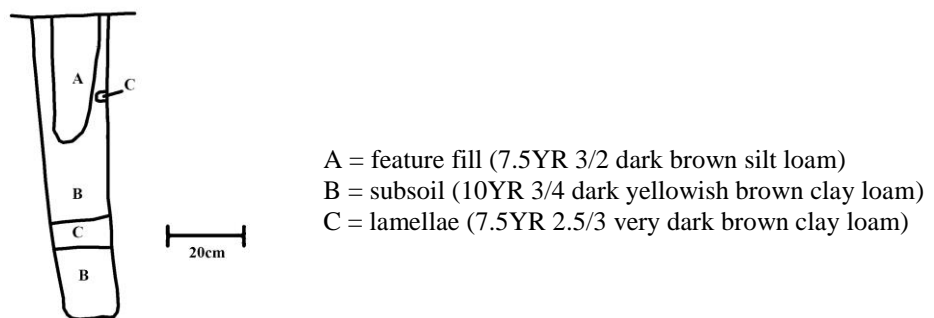


Figure 12. Feature 208, profile facing south.



Photo 18. Feature 208, plan view.



Photo 19. Feature 208, profile facing south.

Feature 209 was mostly contained within Unit BI. Similar to Features 206 and 207, Feature 209 was a circular pit that was broad but shallow (Table 5, Figures 9 and 11, Photos 20 and 21). Its profile suggests vertical walls with a single episode of deposition (a 10YR 3/3 dark brown sandy loam), but surely this is just the very bottom of a deeper pit that has been mostly removed by plowing and erosion. The floor of the pit was noticeably deeper at the edges (see Figure 11, Photo 21). Feature 209 contained very few artifacts (Table 6); these indicate that the pit dates to the Emergent Mississippian or Mississippian period. One rim sherd was recovered; it was incised and cordmarked, possibly made of Madison County Shale. Most body sherds also appear to be Madison County shale with grit and grog temper and cordmarking. One cordmarked body sherd with shell temper was noted. Feature 209 contained few flakes, but these included a few exotic cherts. Feature 209 was superimposed by Feature 207 and lay approximately 75 cm north of Feature 206 (Figure 9).

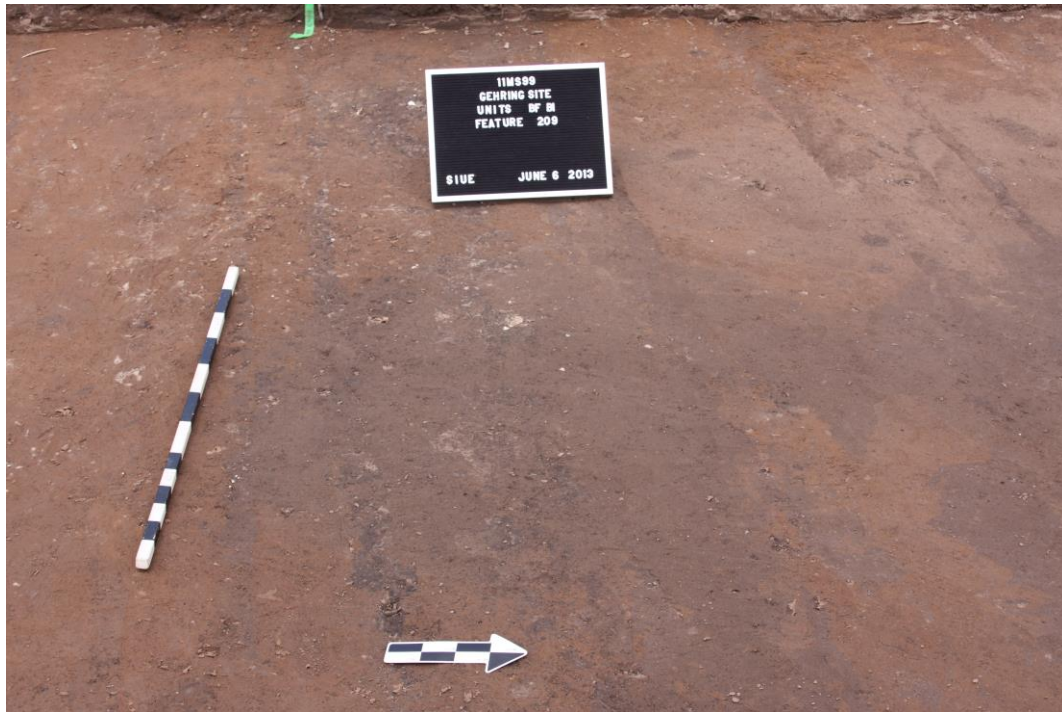


Photo 20. Feature 209, plan view.



Photo 21. Feature 209, profile facing west.

Feature 210 was identified in Unit BF; it was a circular pit of moderate depth and basin shaped in profile (Table 5, Figures 9 and 13, Photos 22-24). It was difficult to see at its surface, given that it was pale in color (a 10YR 4.5/4 dark yellowish brown-yellowish brown), but its texture was noticeably sandier (a sandy loam) than the subsoil matrix (a clay loam). Feature 210 contained very few artifacts. These included seven flakes and the base of a stemmed spear point, which is possibly Late Archaic in age and might be made of Avon chert. Thirteen small sherds seem to have come from the very top of the feature, where evidence of bioturbation was apparent during excavation and apparent in the profile (see Figure 24). Most of those sherds appear to be Emergent Mississippian (they are made of Madison County Shale with grit and grog temper), but a particularly small probable Mississippian sherd (red-slipped and shell-tempered) was also noted. It was very clear at its surface that Feature 210 was superimposed by Feature 207 (Photo 22). At the base of Feature 207, Feature 210 was clearly visible in plan view because it extended deeper than Feature 207 (Photo 23). The profiles of Feature 210 and 211 suggest that Feature 211 superimposed Feature 210, but given the similarity between these two pits, they were surely more or less contemporaneous (Figure 13).



Photo 22. Feature 210, plan view.



Photo 23. Feature 210, plan view visible at base of Feature 207.



Photo 24. Feature 210, profile facing northeast.

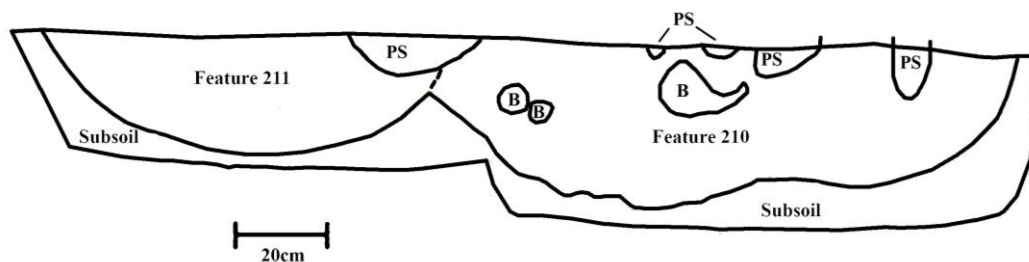


Figure 13. Features 210 and 211, profiles facing northeast.

Feature 210 = 10YR 4.5/4 dark yellowish brown-yellowish brown sandy loam

Feature 211 = 10YR 4.5/4 dark yellowish brown-yellowish brown sandy loam

subsoil = 10YR 3.5/4 clay loam

PS = plowscar

B = bioturbation)

Feature 211 was mostly contained within Unit BG and was essentially identical to adjacent Feature 210 in color, texture, and contents (Tables 5 and 6; Figures 9 and 13; Photos 25 and 26). It too was a circular pit of moderate depth and basin-shaped in profile, a 10YR 4.5/4 dark yellowish brown-yellowish brown sandy loam. Feature 211 contained even fewer artifacts than Feature 210, namely nine small sherds and six flakes. As noted above, the profiles of Feature 210 and 211 suggest that Feature 211 superimposed Feature 210, but given the similarity between these two pits, they were surely more or less contemporaneous.



Photo 25. Feature 211, plan view.

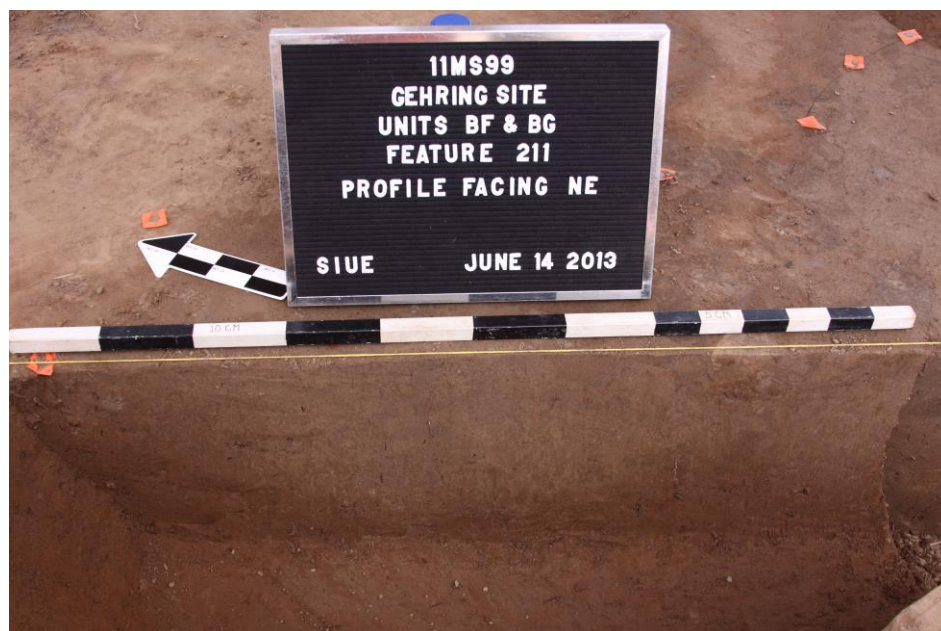


Photo 26. Feature 211, profile facing northeast.

Although pit Features 210 and 211 were roughly contemporary, their age is unclear. They were filled with mostly sterile sand which probably washed in during a flood. The few artifacts they contained are small and could have been brought in by flooding when the pits were filled or they could have been brought in by bioturbation later in time. Features 210 and 211 are not as deep as Middle Woodland pit Features 203 and 204, but they are deeper than Mississippian pit Features 207, 207, and 209. It is possible that Features 210 and 211 date to the Late Archaic period, as suggested by the presence of the stemmed point in Feature 210. The ground surface was probably lower during the Late Archaic period than during the Middle Woodland period; in this scenario, Late Archaic pit Features 210 and 211 are not as deep as Middle Woodland pit Features 203 and 204 because Late Archaic pits tend to be shallow. Alternatively, Features 210 and 211 could be Emergent Mississippian in age, as suggested by the pottery found in them; in this scenario, they are deeper than Mississippian pit Features 206, 207, and 209 because the ground surface was lower during the Emergent Mississippian period than it was during the Mississippian period. Comparing the two scenarios, we think Features 210 and 211 are most likely Late Archaic given the few small artifacts they contained.

Feature 212 is a linear feature found in Units BG, BH, BO, and BP, presumably the south wall of a wall trench structure (Photo 27). Feature 213 is a linear feature found in Units BH, BM, and BN, and is presumably the east wall of the same wall trench structure (Photo 28). They were given separate feature numbers because when they were first identified in Units BG and BH, Feature 212 appeared to be linear and unattached to Feature 213, while Feature 213 looked like a pit extending into the north wall of Unit BH. The excavation was first expanded north from Unit BH with Units BM and BN to define Feature 213, and then expanded east from Unit BG with Units BO and BP to determine the size of the structure (Photos 29 and 30). The portion of Feature 212 initially found in Units BG and BH was bisected and the north half was excavated to 28 cm below the plowzone before it was realized that Feature 212 continued into the west wall of Unit BG (Photo 27). (Feature 212 was still visible in the floor of Units BG and BH when excavation was stopped. However, rain eroded the excavation before we could backfill, so little is now left of Feature 212 in Units BG and BH.) The profile of Feature 212 in the west wall of Unit BG was photographed and drawn (Photo 31 and Figure 14) before opening Units BO and BP. The wall trenches were mapped once we defined the ends of Features 212 and 213, then the units were backfilled so that in the future the entire structure can be excavated and mapped at once.

Feature 212 is apparently a single wall trench approximately 5.3 m long, and Feature 313 is a double wall trench approximately 4 m long (Table 5). The east end of the north wall of the structure was uncovered in Unit BN; it is also a double wall trench. The south end of the west wall was uncovered in Unit BP, but too little of it was exposed to determine if it were a single or double wall trench. At first it appeared as if the basin of the house were entirely removed by plowing, but then it was noted while excavating the southwest quadrant of Unit BN that approximately 13 cm of house basin was still visible below the plowzone (Photo 32). Unfortunately, the house basin in Unit BM and in the northwest quadrant of Unit BN was removed with the plowzone before this observation. The 1 x 1 m square of house basin excavated as Feature 213B and the section of the Feature 212 wall trench excavated (the north side of the wall trench in Units BG and BH) contained small sherds that were predominantly cordmarked, grit and grog tempered, and made of Madison County Shale (Table 6). At least one sherd from the Feature 212 wall trench was shell-tempered. The pottery could suggest an

Emergent Mississippian date for the structure; alternatively, it could represent old trash swept in as the structure was built during the Mississippian period. Features 212 and 213 also contained a small number of flakes. One flake from Feature 212 looked like Cobden-Dongola chert, while several flakes from Feature 213 appeared to be exotic.



Photo 27. Feature 212, south wall, looking west.



Photo 28. Feature 213, east wall, looking north.



Photo 29. Feature 212, southwest corner.



Photo 30. Feature 213, northeast corner.



Photo 31. Feature 212 profile, facing west at E 404.



Photo 32. Feature 213, structure basin profile.

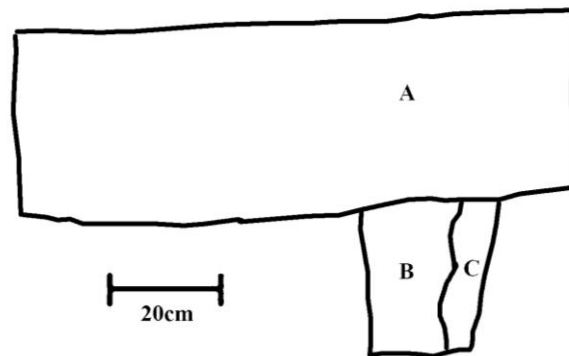


Figure 14. Feature 212, profile facing west at E 404.

A = plowzone (10YR 3/4 dark yellowish brown sandy loam)
 B = Feature 212 (10YR 2/2 very dark brown loamy sand)
 C = subsoil (10YR 3/6 dark yellowish brown sandy clay loam)

Feature 214 was a small anomaly ca. 32 cm south of Feature 204 (Figure 5 and Photo 18) that contained fill similar to Feature 204 (a 7.5YR 3/4 dark brown clay loam). While the profile of this feature might suggest a small pit (Figure 7), it was more likely a rodent hole or other form of bioturbation given that it meandered in plan view. Probably a rodent burrowed through Feature 204, and Feature 214 is the bottom of its burrow. Feature 214 contained no artifacts.

Ten possible posts were bisected and excavated in Units BK and BL; these were labeled Features 215.1 through 215.10 (see Figure 9). Of these, five were profiled (Figure 15, Photos 33 and 34). Those not profiled either were determined to be obvious bioturbation, or they were shallow and disappeared when troweled, leaving nothing to profile. The dimensions of those that were not clearly bioturbation are listed in Table 8. Possible posts identified in the northern half of this excavation block, mostly in the vicinity of Features 212 and 213, have not yet been investigated and so are not labeled with feature numbers on Figure 9. We intend to bisect and profile these when we reopen excavation of Features 212 and 213.

Table 8. Feature 215 Measurements.

Post number	Diameter (cm)	Depth (cm)
215.1	7	4
215.2	6	12
205.3	5	0
205.5	5	4
205.8	7	6
205.9	5	0
205.10	7	11



Photo 33. Feature 215.1, profile facing northeast.



Photo 34. Feature 215.2, profile facing east.

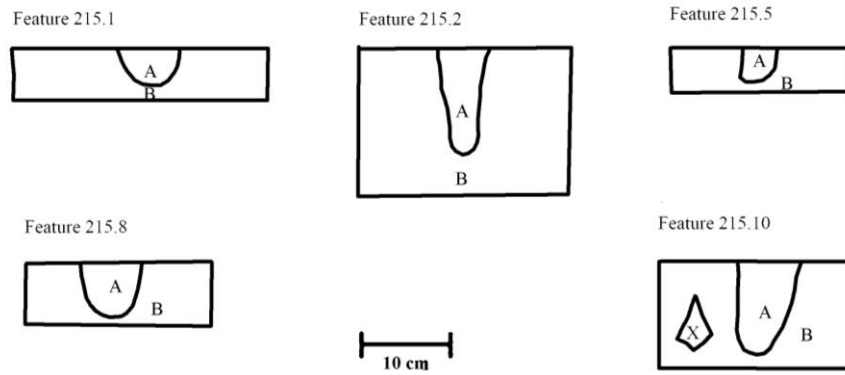


Figure 15. Feature 215, profiles.

F 215.1

A = post mold (10YR 2/2)
B = subsoil (10YR 3/4)

F 215.2

A = post mold (10YR 3/3)
B = subsoil (10YR 3/4)

F 215.5

A = post mold (10YR 3/2)
B = subsoil (10YR 3/4)

F 215.8

A = post mold (10YR 3/2)
B = subsoil (10YR 3/4)

F 215.10

A = post mold (10YR 3/2)
B = subsoil (10YR 3/4)
X = FCR

CONCLUSION

The primary research objective of the 2013 SIUE archaeology field school at the Gehring Site (11MS99) was to explore further the Middle Woodland occupation of the site. Although analysis of artifacts and flotation samples is not yet complete, we have clearly gathered data that will help us to achieve this goal. A cluster of Middle Woodland features has been found, including pit Features 102, 203, 204, and probably 104 (see Figure 5, Photo 35). The presence of Havana pottery and animal bones in these features might imply everyday activities, but the presence of Hopewell pottery in Features 102 and 203, and a figurine and mica in Feature 203, suggest that ritual activities also took place at the site. The presence of mud dauber nests in Feature 203 suggests that there were Middle Woodland structures at the site.

Two relatively large posts (ca. 20 cm in diameter), Features 103 and 208, have been identified in the vicinity of these Middle Woodland pit features (Figure 5). They are ca. 1 m apart, and could be part of a Middle Woodland post structure. Also located in the vicinity of these Middle Woodland features, Feature 205 is a semi-circle of smaller posts (ca. 5 cm in diameter). If these were part of a small circular post structure, we might estimate that this structure would have been approximately 3 m in diameter. This would be smaller than a typical Middle Woodland structure (e.g., Fortier et al. 1989), and the principle of superposition also suggests that Feature 205 predates Features 103, 203, and 204. The structure could, however, date to earlier in the Middle Woodland period. As Fortier 1993 notes, no early Middle Woodland structures have been identified in the American Bottom. Alternatively, perhaps Feature 205 dates to the Late Archaic period, given that it lies some 10 m from Features 210 and 211, which probably date to the Late Archaic period.

A cluster of probable Mississippian features was also identified (Figure 9). These include a wall trench structure (Features 212 and 213) and three pits (Features 206, 207, and 209). Unfortunately, these Mississippian features are heavily truncated by plowing and erosion. It is believed that 4-5 feet of topsoil has eroded from the south end Gehring site since it was deep-plowed for horseradish cultivation in the 1970s (see Holt and Belknap 2010). The shallow depth of the Mississippian features supplies further evidence in support of this argument; only the very bottom of these features remains intact. We can make a plan view of Mississippian activities in this area, but unfortunately, most artifacts associated with those activities have washed away. It is clear, based on the wall trench structure we encountered (Features 212/213) and another identified by Vogel in the central part of the site (Vogel and Clemmons 2011), that Mississippian occupants lived here on a long term basis. Mississippian people also died here, as indicated by the Mississippian burial found in the central part of the site during the 2012 excavation (Vogel 2012). However, the density of Mississippian occupation does not appear to have been great; these structures probably represent farmsteads rather than a Mississippian village.

Finally, the age of Features 210 and 211 is less certain, but these are most likely Late Archaic features. The preponderance of evidence from SIUE excavations at 11MS99 thus far, as well as data collected by Munson and Harn (1971), indicates that the site was used repeatedly throughout the millennia. Its location afforded residents access to floodplain and upland resources, forest and prairie resources. The proximity of Cahokia Creek gave easy access to the Mississippi River. Our continuing analysis of the artifacts, plant remains, and animal remains collected will give us better understanding of the dynamic role that 11MS99 played in the social landscape of the American Bottom through time.



Photo 35. Middle Woodland pit features 203 and 204 and post feature 205.



Photo 36. Probable Mississippian features (206, 207, 209, 212, and 213) and probable Late Archaic features (210 and 211).

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